



# Enabling Healthcare's digital transformation

- Mindtree Cloud Services

# ■ Introduction

Despite the reluctance among certain segments in healthcare, Gartner reports that by 2023, more than one-third of all healthcare workloads will be in the cloud. The adoption of cloud requires the creation of compelling use-cases that drive business value. The key use cases being:

- Accelerate growth and deliver superior consumer experience through personalized omnichannel experience.
- Better health outcomes by integrating and sharing data and interoperability of systems.
- Reduce overall cost of care by offering new and expanded access to care.
- **Digitally optimized** operations delivered through connectivity and automation.

In the face of the Covid-19 pandemic, legacy systems, fragmented data, and a lack of digital tools highlight the need for rapid digitalization and enhanced data access. Mindtree believes that digital transformation of healthcare is only possible by embracing and adopting the cloud.



### Healthcare cloud strategy to achieve business strategy

The role of data, drawn from disparate sources is essential to achieve the business objectives of attracting and retaining consumers, to shift from volume-based to value-based models, and to collaborate across the ecosystem. This is where the cloud can excel in managing scalability and security along with opening doors for data monetization through the value of AI/ML driven insights, great customer experience, and interoperability.





#### Redefine business

Focus on top-line revenue growth



#### Reimagine business

Focus on existing customer retention



#### Redesign business

Focus on enhancing profitability

#### End-to-end holistic partner in cloud journey

Growth path led by newer products, revenue streams, business models etc.

Retaining existing customers with contextualized engagement

Experience-centric models to counter revenue being challenged by new entrants

A "do more with less" approach focused on enhancing business resiliency and profitability

Payers, providers, pharma and MedTech companies are at various stages of the cloud adoption journey and with due consideration of the major drivers to cloud, Mindtree will partner, consult, manage, and take you ahead in the journey.



# Security – Driver or hindrance

This industry has arduous security and regulatory requirements. Standardization of security and risk requirements are essential to remove barriers associated with cloud migration. Mindtree suggests a robust cloud migration roadmap coupled with security at each stage.

#### Drivers to a robust security on cloud

#### Security and privacy concerns

Sensitive patient data

Skepticism to move data to cloud specially from the healthcare providers

#### Regulatory hurdles

Stringent regulations viz. HIPAA Cyber risk to patient data Geo-specific regulatory requirements

# Solution

# Security and

### Cloud security advisory services Cloud threat detection and response •Cloud IDAM as a service Cloud security testing service

Cloud data protection and Governance, Risk, and Compliance (GRC) services



#### Accelerate growth and deliver superior consumer experience

- Sales and marketing, campaign management, broker portal and smart contact center.
- Data-driven personalization and next-best action engine.
- Digital Front Door, member, patient and provider portals.
- Consumer Relationship Management, engagement, sentiment analysis, and mobility solutions.
- Consumer and product 360 platforms, Direct-to-Consumer sales, community, and advocacy group engagement.
- Medical affairs management.

#### Better health outcomes and increased interoperability

- Population health and value-based care analytics.
- Easy and secure sharing of data amongst payers, providers, health services & tech, pharma, and med tech organizations.
- FHIR-based APIs for integrating internal and external systems.
- Insights from connected machines, materials, processes, and workers.
- Cloud-based modern platforms for:
  - Enrolment, membership, advice and guidance, claims, billing, & med management.
  - EMR, Patient scheduling, and lab (LIS), Radiology (RIS), Cardiology (CIS), PACS and Revenue Cycle Management (RCM).
  - Drug Discovery, Clinical development, pharmacovigilance, and drug safety.

#### Reduce cost of care

- IoT based care such as telehealth and telemedicine.
- Business Intelligence (BI) and data visualization tools to better understand utilization, cost, and trends.
- Connected Factory, supply chain, quality and worker solution, manufacturing safety solutions, paperless factory operations through digital floor sheets and checklists.
- Device behavior and usage analytics for product improvements and operational enhancements.
- Target identification, RWE, demand, capacity and logistics management and optimization, fraud analytics, ADE reporting, signal detection, sales forecasting, etc.



#### **Digitally Optimized Operations**

- Process simulation and automation.
- Deploy and integrate modern, best-in-class enterprise apps such as ERP, HRM, ITSM, time tracking and payroll.
- Enterprise digital asset, content, and document management systems.
- Identity, access, and endpoint management.
- Systems to track and manage all compliance and regulatory activities.
- Knowledge and project management solutions.



# Mindtree – Your strategic partner



Mindtree can support an accelerated migration to cloud using its state-of-the-art cloud migration factory to enable automated and accelerated build using our proven methodology, accelerators, and expertise. An integrated operating model establishes a delivery model for future business needs and enhanced customer experience. We provide an 8-week, no obligation tech modernization assessment i.e. CloudValuate, that provides roadmap to agile, scalable & efficient Cloud. Mindtree can be your transformation partner for innovation and consulting to align with your healthcare business strategy.

## Success stories



45% reduction in build & migration timeline and more than 35% reduction in transformation & migration effort for a medical device company



100% platform availability and 25% savings in operational spending for a CPG company



50% reduction in time to market for a multi-national packaged food manufacturer



# Cloud migration and modernization with secured operations ...

The healthcare context

	Phase	Healthcare perspective	Value proposition
G	<ul> <li>Assessment and planning</li> <li>Readiness assessment</li> <li>Cloud fitment analysis</li> <li>Security roadmap &amp; change management</li> </ul>	<ul> <li>HIPAA compliant cloud service provider, technology &amp; service down selection</li> <li>Medical Records – digitization &amp; integration with SaaS services</li> </ul>	<ul> <li>Most critical and important phase</li> <li>Assessment of security and regulatory needs</li> <li>Determine correct cloud env (hybrid, multi) and its management</li> </ul>
	<ul> <li>Cloud foundation set-up</li> <li>Cloud design, sizing &amp; build</li> <li>Private &amp; hybrid cloud build</li> <li>Pilot testing</li> </ul>	<ul> <li>Infrastructure &amp; service provisioning for – emails, EMR (Electronic Medical Records) &amp; fax</li> <li>Caregiver onboarding &amp; enablement</li> </ul>	<ul> <li>Standardized, optimized architecture based on discover and inventory</li> <li>Adopt and operationalize a cloud governance landing zone</li> </ul>
	<ul> <li>V2V, P2V to public &amp; hybrid cloud</li> <li>Database &amp; storage migration</li> <li>IaaS &amp; PaaS migrations</li> </ul>	<ul> <li>Data Migration: anonymized &amp; codified EHRs, medical images, notes, patient registries, pharma etc.</li> <li>Legacy application 'as is' migration</li> </ul>	<ul> <li>Defense in depth security posture for protecting the healthcare cloud environment</li> <li>Phased app and data migration (criticality based)</li> </ul>
	<ul> <li>Innovation and modernization</li> <li>Microservices &amp; serverless dev</li> <li>App &amp; DB modernization</li> <li>Cloud native DevSecOps &amp; MLOps</li> </ul>	<ul> <li>Application rationalization</li> <li>SaaS – EHRs transformation</li> <li>AppDev and IoT integration and realtime health monitoring</li> </ul>	<ul> <li>Healthcare devices</li> <li>Integrated dashboards</li> <li>IoT and healthcare BOTS</li> <li>Patient and staff engagement apps</li> <li>FHIR</li> </ul>

# **IPs and Accelerators**





# Technology & Partner Alliances



















Mindtree with its special focus on service lines – customer success, data and insights, cloud, and enterprise IT, has significant experience in defining and developing E2E applications with cloud-native technologies and tools in AWS, Azure, and GCP.

#### Excited to know more? Let's talk about your needs.

Engage with Mindtree today for an **8-week**, no obligation tech modernization assessment i.e., **CloudValuate**, that provides **roadmap to agile**, **scalable & efficient cloud**.

#### Reference:

https://www.gartner.com/en/newsroom/press-releases/2020-05-21-gartner-says-50-percent-of-us-healthcare-providers-will-invest-in-rpa-in-the-next-three-years

#### Note:

Mindtree's healthcare and health business includes provider, payer, pharma, medical device, and MedTech industries.

#### **About Mindtree**

Mindtree [NSE: MINDTREE] is a global technology consulting and services company that enables enterprises across industries to drive superior competitive advantage, customer experiences and business outcomes by harnessing digital and cloud technologies. A digital transformation partner to more than 260 of the world's most pioneering enterprises, Mindtree brings extensive domain, technology and consulting expertise to help reimagine business models, accelerate innovation and maximize growth. As a socially and environmentally responsible business, Mindtree is focused on growth as well as sustainability in building long-term stakeholder value. Powered by more than 29,700 talented and entrepreneurial professionals across 24 countries, Mindtree — a Larsen & Toubro Group company — is consistently recognized among the best places to work.

For more, please visit www.mindtree.com or @Mindtree\_Ltd.

