Reimagining Cloud Operations for Media-Enterprises

A Mindtree Media Industry Group Point of View

Mindtree
A Larsen & Toubro Group Company

Enabling media companies to manage cloud operations efficiently

Media enterprises like publishers, broadcasters and new media companies are serving content to millions of viewers on different devices and platforms across geographies. In order to cater to growing viewer demands both at global and regional levels, many companies are moving to cloud-based technologies to take advantages of its scalability, flexibility and security services.

As per IABM*, more than 39% of media companies have already adopted cloud based solutions and another 30% are very likely to follow suit. Media companies like broadcasters are keen to move various content workflows like ingestion, management, quality assurance, editing and playout to cloud. In fact, media asset management, which sits at the center of content workflows, is a top area of application for cloud.

Through cloud adoption, media companies can onboard, engage and retain millions of viewers by providing great quality content on multiple devices. They can manage huge content volumes across the content pipeline from ingest to delivery and maintain 24X7 availability across geographies and devices.

Mindtree's broadcast ops on cloud offering enables media companies to build and manage their entire content operations on cloud (Please refer *'broadcast operations on cloud'* service offering for more details).In this point of view, we will focus on how Mindtree enables media companies to efficiently manage their cloud operations who have already adopted cloud based solutions.

Managing cloud environments

As media companies implement cloud-based solutions, they need to efficiently manage cloud environments to get its full value. More often than not, companies adopt a multi-cloud strategy to leverage best-of-breed solution from different cloud partners. Such multi-cloud and hybrid environments can become very complex and costlier to maintain if not properly managed.

Mindtree suggests having the below approach for effective cloud operations:
- **Cloud management and operating models:** standardize cloud management and optimize operating models in a multi-cloud environment
- **Cohesive ecosystem:** build a team of cloud resources internally and through partners who can understand and operate media workflows in cloud
- **Managing cloud spend and usage:** do regular cloud assessment, oversee cloud spend, and enable cloud resource optimization as offloading multiple services to cloud can result in higher costs
- **Data & security:** protect cloud infrastructure from threats on data and security

Mindtree's cloud operations offering

Mindtree's cloud operations offering enables media companies to run their day-to-day media and enterprise operations smoothly and efficiently in the cloud.
Mindtree's offering clearly defines three aspects namely cloud adoption, cloud operation and cloud modernization in an enterprise's cloud journey as described below

1. **Cloud adoption:** Mindtree has a 'Seven Stage Cloud Transformation Journey' methodology which is a holistic approach for cloud advisory, build, migration, management and transformation to drive innovation & efficiency in media enterprises. Cloud operations largely focuses on the last two stages which are cloud governance and cloud management.
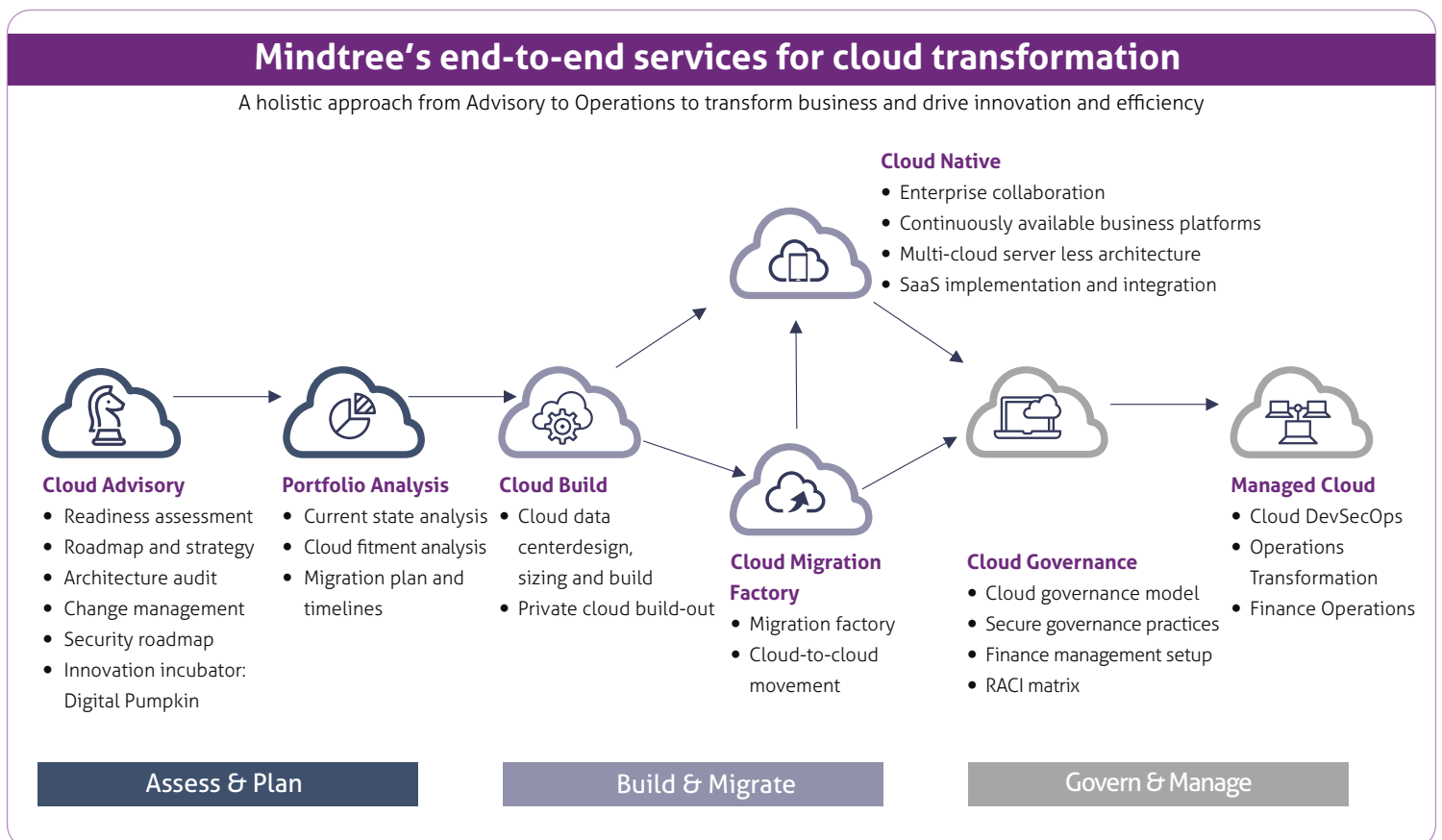

Figure 1. Mindtree's end-to-end services for cloud transformation

2. **Cloud operations:** This is based on three core guiding principles which are:

- **No Ops:** Mindtree enables media enterprises in achieving a 'No Operations Model' in their cloud journey, which is an ideal state of operations that is characterized by the attainment of maximum efficient IT operations, driven by the highest level of automation maturity and self-service using bots and robotic process automation

- **Platform-led Delivery:** Mindtree will leverage its toolsets and frameworks which help to execute tasks & activities, and manage cloud operations with the highest degree of consistency and uniformity, aimed at driving standardization and efficiency

- **Metrics-driven:** Mindtree will offer a robust framework for measuring the right metrics and KPIs which are critical to ensuring health, adoption and success of cloud engagement. Mindtree will measure KPIs across transition, operations, and transformation phases, covering various dimensions like user experience, people, processes, security & operations
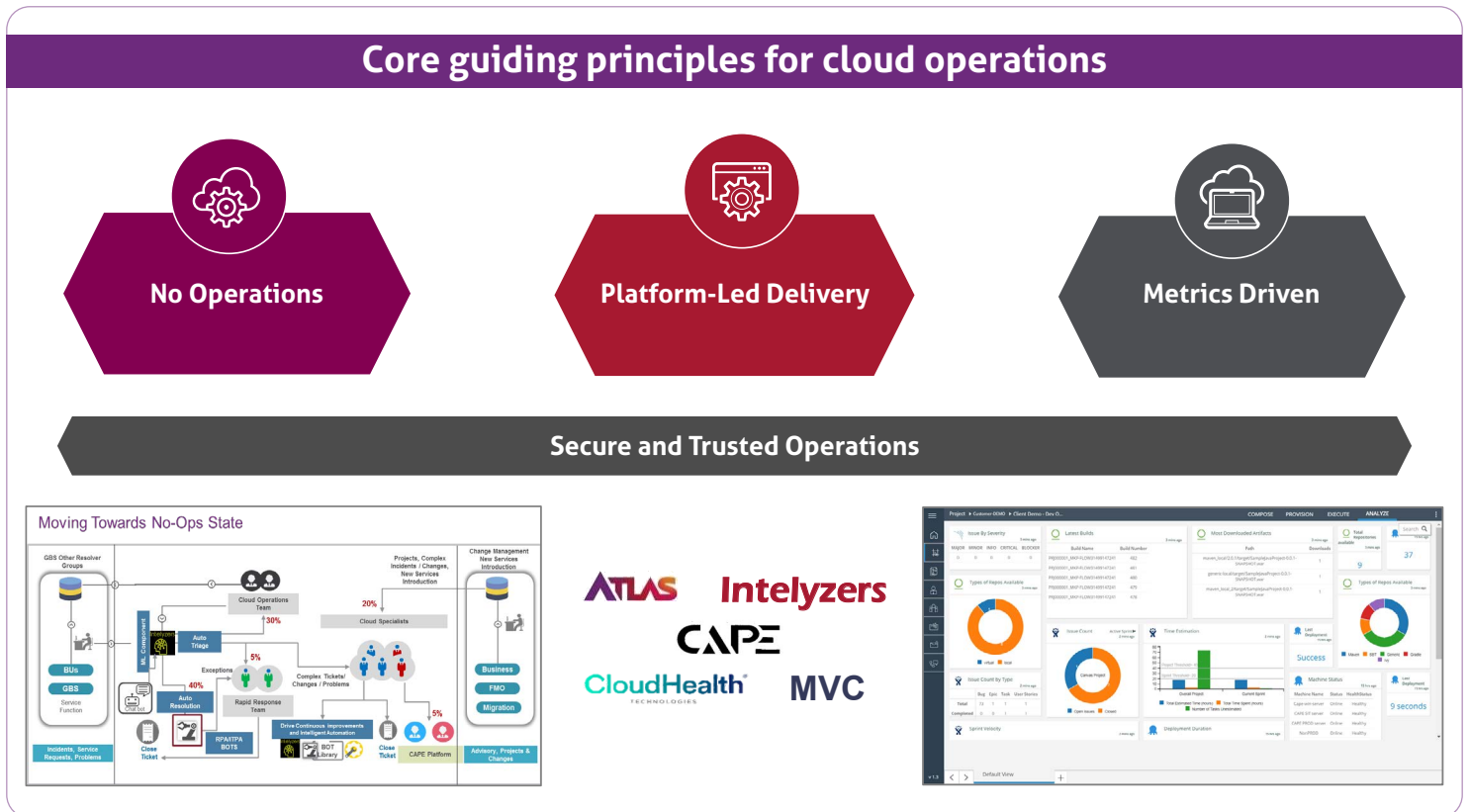

Figure 2. Core guiding principles for cloud operations

3. **Cloud modernization:** Mindtree's minimum viable cloud architecture provides the cloud modernization approach for enterprises, defining the multiple tiers which include setting up the foundation of cloud account creation, connectivity and network isolation, cloud operations, DevSecOps for security driven operations, application tier for request routing, APIs and serverless computing and a supporting ecosystem that has Mindtree's accelerators and tools to maintain the cloud environment.
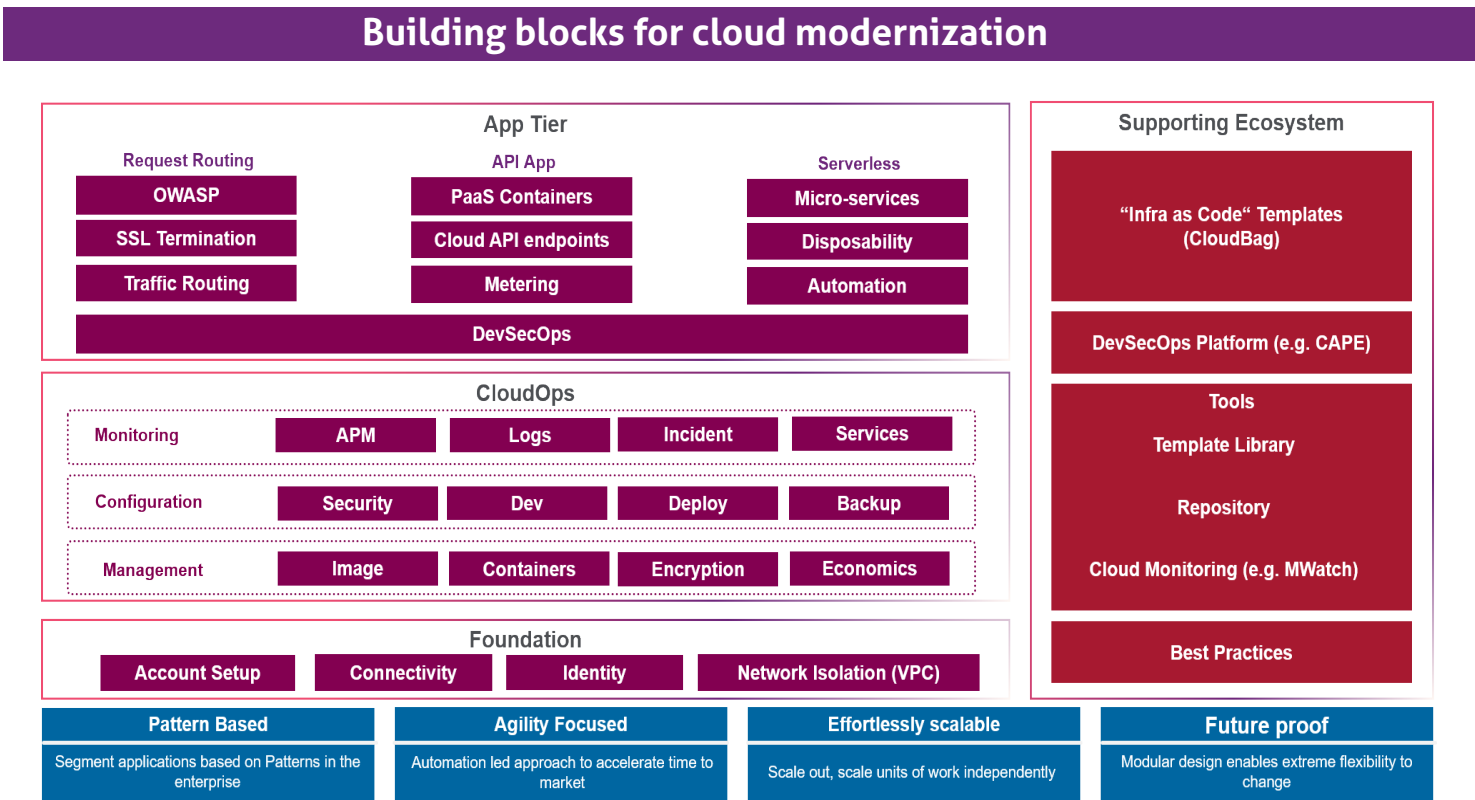
Building blocks for cloud modernization

App Tier

Request Routing
- OWASP
- SSL Termination
- Traffic Routing

API App
- PaaS Containers
- Cloud API endpoints
- Metering

Serverless
- Micro-services
- Disposability
- Automation

DevSecOps

CloudOps

Monitoring	APM	Logs	Incident	Services
Configuration	Security	Dev	Deploy	Backup
Management	Image	Containers	Encryption	Economics

Foundation
- Account Setup
- Connectivity
- Identity
- Network Isolation (VPC)

Supporting Ecosystem

"Infra as Code" Templates (CloudBag)

DevSecOps Platform (e.g. CAPE)

Tools
Template Library

Repository

Cloud Monitoring (e.g. MWatch)

Best Practices

Pattern Based	Agility Focused	Effortlessly scalable	Future proof
Segment applications based on Patterns in the enterprise	Automation led approach to accelerate time to market	Scale out, scale units of work independently	Modular design enables extreme flexibility to change

Figure 3. Building blocks for cloud modernization

The Mindtree advantage

Mindtree, through its 1500+ cloud experts, platforms and industry partnerships, helps media enterprises with accelerated and efficient cloud onboarding, operations and transformation with a 'Seven Stage Cloud Transformation Journey' methodology. Mindtree has multiple proprietary platforms and partnerships to enable media enterprises in their cloud journey. For instance, ATLAS for metrics-driven engagement transition, ComPass for cloud migration, Intelyzer for intelligent and automated cloud operations, MVC for accelerating development and deployment of cloud applications, CloudHealth for cloud cost management, CAPE for IT lifecycle & DevSecOps automation and MWatch for infrastructure management & operations.

Mindtree has delivered great outcomes for its clients

- Monitoring and support of online media streaming to multiple devices like desktops & mobile platforms on Azure for the 2014 Sochi Olympics across 21 countries for a peak of 1M concurrent users

- Cloud modernization leading to revenue uplift in digital & services, driving operational efficiencies and bringing business value realization of 30-35% for a leading information services company

- Dedicated team to support 24X7 cloud operations of 750+ digital properties on Microsoft Azure cloud, leveraging DevSecOps and automation, leading to 50% reduction in time to market for a leading consumer goods company

Mindtree's industry recognition

- ISG Provider Lens (2019) – rising star in global cloud transformation/operation services
- ISG Provider Lens (2019) – leader in legacy transformation and cloud first transformation
- Zinnov Zones (2019) – leader across digital services including legacy modernization

The Mindtree Media Industry Group

Established in 2006, Mindtree's Media Industry Group has 1000+ employees more commonly known as Mindtree Minds. Within Media, Mindtree works with broadcasters, cable networks, publishers, advertisers, business information services, new media and gaming companies. Mindtree has executed 100+ projects for over 50 media clients across North America, Europe, Middle-East and Asia Pacific regions. Mindtree is serving 6 of the top 10 media & publishing companies with more than 50% of its revenue coming from digital services. Mindtree is positioned in Leadership Zone for Publishing, Broadcasting and Education in Zinnov Zones 2017 report.