

# LotusFlare DNO™ Cloud

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## Overview

Experience  
Services

Commerce &  
Monetization

Digital  
Engagement

Data Hub

GenAI  
Services

Infrastructure

 LotusFlare DNO<sup>TM</sup> Cloud

## Challenges for Communications and Media Services Providers



The telecommunications and media services industry is undergoing major changes driven by 5G network deployments, convergence among wireless, broadband and media and consumers rapidly shifting to a zero-touch, digital-first sales and support model.

These changes present communication services providers (CSPs) with a great opportunity to create new business models and product lines to enhance the customer experience with personalized, convenient and friction-free digital services.

Current business support system (BSS) stacks often consist of hundreds of different systems, applications, associated processes and databases that have grown over decades, both organically and through acquisitions. These complex systems and their associated processes take time to upgrade and scale. More importantly, legacy BSS stacks lack the agility to let CSP business leaders innovate in today's marketplace.

*How can CSPs innovate when the very systems that are supposed to enable innovation are not built to deliver the outcomes required by customers in the digital age?*

LotusFlare designed, built and continuously advances LotusFlare Digital Network Operator® (DNO™) Cloud to address the business innovation challenges of CSPs. LotusFlare DNO Cloud is a cloud-native commerce and monetization platform that provides an all-digital BSS to deliver valuable business outcomes to CSPs. LotusFlare DNO Cloud is composable, scalable and multitenant, giving you the all-important business agility while cutting costs and providing an outstanding digital customer experience.

## ■ Experience driven

Developed “from customer experience down”, LotusFlare DNO Cloud features the Experience Layer supporting all common customer journeys. This customizable collection of services orchestrates BSS APIs, making LotusFlare DNO Cloud instantly ready to deliver a consistent omnichannel experience.

## ● Cloud native

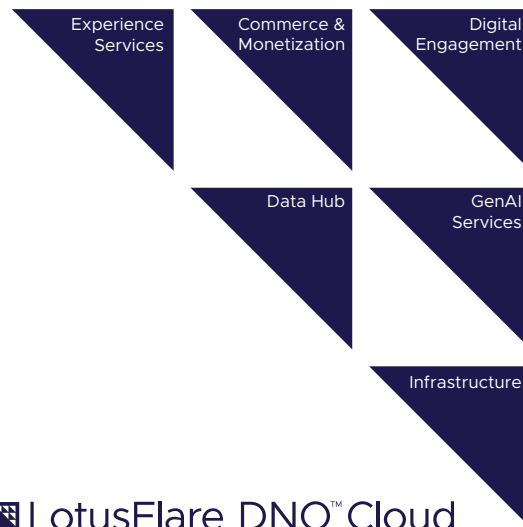
Truly cloud-native, LotusFlare DNO Cloud is designed to run on the public cloud at a fraction of the cost of traditional legacy stacks. Composed of microservices, it enables secure management, reliability and hyper-scalability.

## ▲ Open and highly configurable

LotusFlare DNO Cloud is open architecture and allows for simple self-customization via the code-generating LotusFlare Petal Engine, preventing vendor lock-in and enabling easier integration with other systems.

## ■ Standards based

Building upon the knowledge of thousands of industry experts, LotusFlare DNO Cloud is conformant to TM Forum Open API v5.0 and Open Digital Architecture (ODA) v2 specifications.



 **LotusFlare DNO™ Cloud**

# Built to deliver valuable business outcomes

## OUTCOME

### Create API marketplace

T-Mobile US employed LotusFlare DNO Cloud to create DevEdge, a digital API marketplace for developers. From conception to launch, the project was delivered in 5 months.

## OUTCOME

### Replatform Legacy BSS

Globe moved their premier brand GOMO to LotusFlare DNO Cloud hosted on AWS public cloud, migrating 3 million customers in under 5 hours, reducing the time to launch new offers from 6 weeks to minutes and achieving a 40% cost reduction.

## OUTCOME

### Offer eSIM Customer Experience

re:do is one the first communications service providers in Europe to fully embrace eSIM for customer experience, enabled by LotusFlare DNO Cloud eSIM SaaS component. To date, over 70% of re:do customer acquisition is fulfilled by eSIM.

## OUTCOME

### Launch Digital Telco Brands

A1 Group, a European provider of digital services and communication solutions, used LotusFlare DNO Cloud as the cloud-native foundation to launch re:do, a new stand-alone digital network service brand. Digi launched the tapp, a digital telco brand for Malaysia using DNO Cloud.

## OUTCOME

### Launch Digital Fiber Business

Globe created a market-changing business line using LotusFlare DNO Cloud, the GlobeOne app and GCash to offer the only fully digital prepaid fiber broadband service in the Philippines.

## OUTCOME

### Elevate MVNO Revenue Opportunity

LotusFlare DNO Cloud offers an expanded set of digital capabilities and simplified onboarding for MVNO partners including eSIM, rapid offer creation and white-label self-service mobile apps.

LotusFlare DNO Cloud functionality is delivered by a set of integrated SaaS components organized into six modules described below.

# EXPERIENCE SERVICES

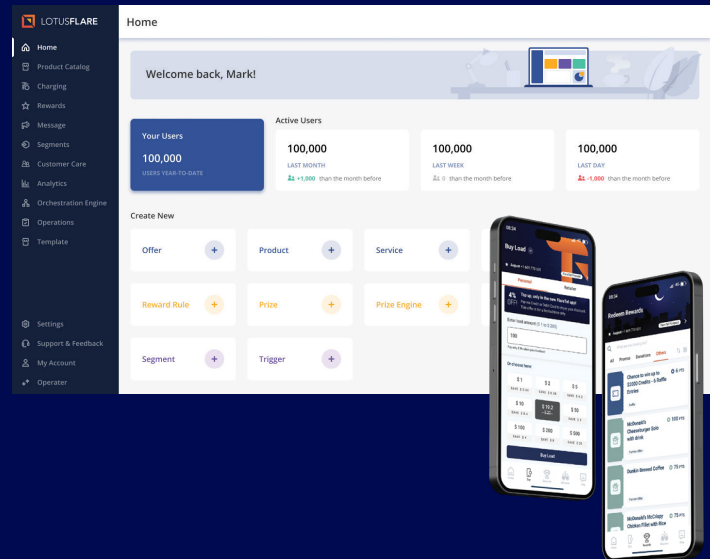
To meet the expectation of a digital-first customer experience, the Experience Services module provides the experience framework that exposes LotusFlare DNO Cloud functional capabilities to front-end customer channel applications.

DNO Cloud's Experience Services integrate with your existing infrastructure to enable a seamless customer experience across all digital channels including apps, websites, SMS, and physical shops.

Everything from in-app onboarding, eSIM activation, online billing, referrals, rewards and customer service can be managed by Experience Services. This enables you to offer a 100% digital experience to your customers.

LotusFlare DNO Cloud Experience Services include:

- LotusFlare Experience Layer
- DNO Cloud Portal
- LotusFlare Headless CMS



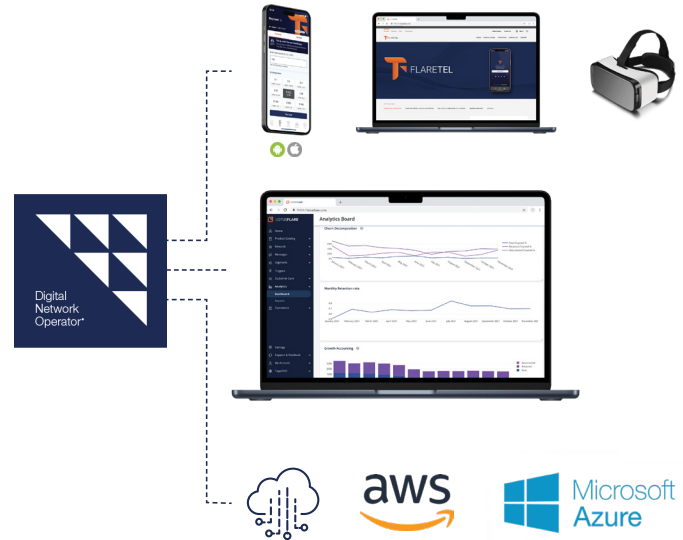
# COMMERCE & MONETIZATION

The heart of LotusFlare DNO Cloud, Commerce & Monetization is a catalog-driven set of commerce and monetization SaaS components that support lead-to-cash-to-care business processes for communications and media services providers. The Commerce & Monetization module allows you to dramatically reduce the time-to-market for new products, offer services at a lower cost and significantly simplify and improve the customer experience.

At the same time, you lower deployment and operating costs when you no longer have to maintain and upgrade legacy systems. Using micro-service APIs, Commerce & Monetization integrates with provisioning, ERP and OSS to create a robust end-to-end system that addresses everything from product and offer creation to order management, eSIM deployment, charging and billing.

LotusFlare DNO Cloud Commerce & Monetization SaaS components include:

- LotusFlare Party Management
- LotusFlare Product Catalog
- LotusFlare CPQ
- LotusFlare Converged Charging
- LotusFlare eSIM
- LotusFlare Order Management
- LotusFlare Orchestration Engine
- LotusFlare Resource Management
- LotusFlare Billing & Invoices
- LotusFlare Payments
- LotusFlare Pricing & Promotions
- LotusFlare Customer Care



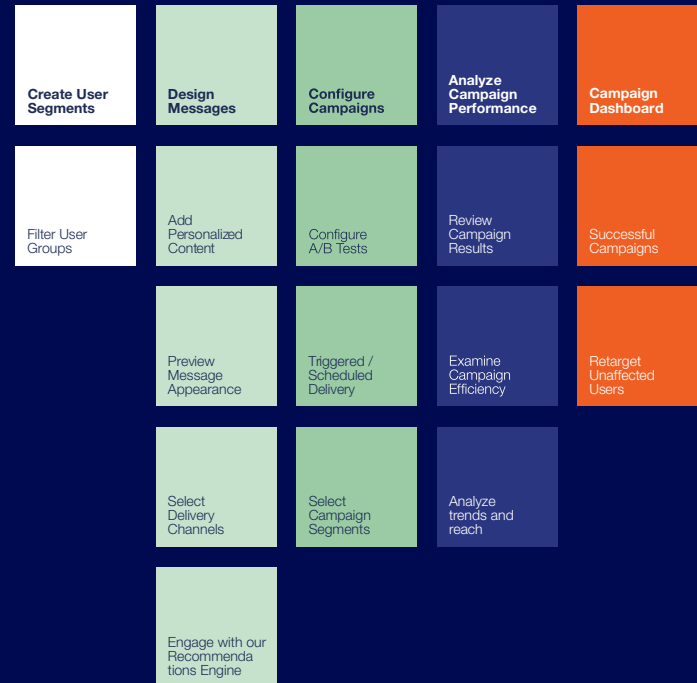
# DIGITAL ENGAGEMENT

LotusFlare Digital Engagement is an integrated set of AI-enhanced tools that create campaigns of personally targeted messages to customers, schedule or trigger an interaction event and track and measure the impact via delivery and conversion tactics.

Digital Engagement components enable you to create customer segments, set trigger events, track campaigns, communicate with customers via all channels and track responses. To increase overall engagement, you can launch, track and analyze loyalty and rewards programs in a unified user interface and manage relationships with current and prospective customers through sales and support.

LotusFlare Digital Engagement SaaS Components include:

- LotusFlare Contextual Engagement
- LotusFlare Notifications
- LotusFlare Rewards & Loyalty
- LotusFlare User Management





# DATA HUB

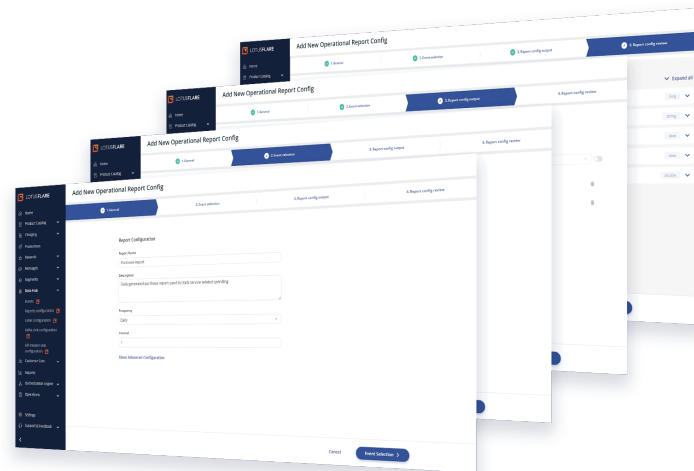
Data Hub is the central point within LotusFlare DNO Cloud where you can configure and manage the definition, processing and storage of all DNO Cloud data related to user activity and operations.

Data Hub SaaS components enable you to organize and define data sources, have a holistic view of customers and identify actionable insights into customer behavior. You can define customer segments to target for engagement and quickly gather data on conversion and outcomes by comparing product features, value propositions, calls to action and offers.

CSPs use Data Hub SaaS components to carry out detailed analysis and generate reports to improve business operations and increase revenue by leveraging data to identify opportunities to optimize their offerings and upsell their customers.

LotusFlare Data Hub SaaS components include:

- LotusFlare Central Data
- LotusFlare Analytics & Reporting
- LotusFlare Segments & Triggers
- LotusFlare Growth Tools





# INFRASTRUCTURE

LotusFlare's Infrastructure is an advanced, cloud-native foundation to enable secure management, continuous integration and continuous deployment (CI/CD), reliability and hyper-scalability.

Over the years, CSP infrastructures have grown incredibly complex, costly to maintain and difficult to scale. Outsourcing the management and maintenance of the enterprise BSS to LotusFlare's cloud-native platform can significantly lower OPEX and CAPEX.

By taking the burden of scaling systems, managing system performance and system upgrades off your shoulders, LotusFlare Infrastructure leaves you free to focus on your business and create a business innovation engine. You can roll out new products with increased speed, monitor your success, and pivot quickly if necessary.

Dynamic deployment means experimenting with new technology at lower risk and on demand. LotusFlare also helps you increase efficiency and improve cost management by dynamically managing systems and resources depending on use. Because LotusFlare Infrastructure was built to simplify the end-user experience, end users will experience your products and services in a simple and rewarding all-digital manner across all channels.



## Truly Cloud Native

LotusFlare DNO Cloud has been built from the ground up to be cloud-native (public or private) with the performance and cost advantages of cloud hosting. LotusFlare is a preferred partner to both AWS and Microsoft Azure. In contrast, solutions from legacy vendors have often been migrated from dedicated, on-prem hardware to a cloud environment, and do not deliver the benefits of a true cloud-native solution.



## Continuous Delivery

Telco-grade reliability combined with Internet-grade scalability and speed makes LotusFlare DNO Cloud a unique solution. The continuous improvement and canary release process allows innovation at unmatched speed without compromising the quality of the charging core. Dark launch capabilities enable LotusFlare teams to identify performance and functional regressions and quantify improvements before new code goes into production.



## Connectivity Between Core and DNO

Concerns regarding the availability and reliability of cloud environments have been eliminated using the following cloud-native architecture design:

- Stateless microservices
- Hyperscale persistence layers
- Intelligent workload monitoring
- Orchestration of microservices

In partnership with the leading cloud providers, LotusFlare deployment teams have engineered redundantly connected cloud and traffic classes required to run a real-time Digital Network Operator out of a cloud environment.



## Observability

All nodes, processes and databases are monitored and managed using the DNO Cloud Portal Dashboard, a graphical representation of real-time system performance. Real-time insights on key performance metrics like throughput, latency or error rates provide visibility into service health and user experience KPIs.



# GenAI SERVICES

LotusFlare DNO Cloud optionally includes advanced GenAI components so you can better serve your customers. In addition to speeding up the development and delivery processes, LotusFlare is using AI to improve existing applications to deliver outstanding business outcomes.

## Supercharging key functionalities:

### Customer care

- Intelligent virtual assistant (IVA)
- Intelligent voice assistant
- Care agent copilot

### Marketing operations

- Marketing campaign generation
- Content generation
- Marketing analytics
- Marketing tasks automation

### Business operations

- Analytics assistant
- Promotional campaign configuration and testing

### Sales operations

- Digital sales assistant

## LotusFlare GenAI Services include the following submodules to empower your insights and productivity in a data-safe way:

### Privacy layer

A layer to prevent sensitive customer information from leaking to public large language models (LLMs).

### Model evaluator

A framework to evaluate the performance of LLMs on specific tasks.

### Fine-tuning

Tailoring the LLMs to perform better on specific tasks by training them on your datasets.

### LLM hosting

Reducing the cost of using LLMs by hosting your model.

### Retrieval-Augmented Generation (RAG)

A framework to enhance the reliability and accuracy of your LLMs by linking them to external up-to-date data sources.

# LotusFlare Professional Services

LotusFlare provides optional managed services to ensure the successful design, implementation, configuration, testing, operation and ongoing support of LotusFlare DNO Cloud. LotusFlare systems architects can design and lead the integration of third-party software solutions included in the overall solution.

LotusFlare Professional Services include:

## Design, Configuration & Deployment

LotusFlare experts work directly with your teams to configure LotusFlare DNO Cloud SaaS components to support the exact requirements of the project.

## Operation, Maintenance & Support

24x7 customer support, dedicated account management, training resources and documentation.

## Growth Services

LotusFlare Growth Services provide an Internet playbook to build core product values and drive user acquisition, engagement, retention and monetization.

## Integration

LotusFlare provides integration services – from CRM systems and chatbots to network provisioning systems.

## Experience Design & Development

LotusFlare offers services to design and develop customer experience on all channels, eliminating the need for separate suppliers for creating websites and mobile apps.

## Third-Party Solutions

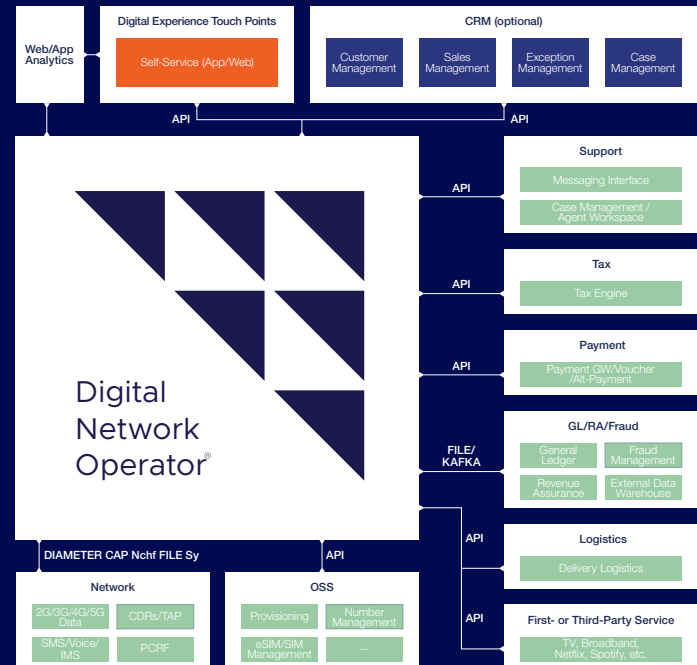
Services offered include the management of third-party solutions that you may choose as part of the overall solution.

# Integration

LotusFlare DNO Cloud is pre-integrated with supporting functions such as Tax, Accounting, Payments, Support, Logistics and App/Web Analytics platforms. The only integration required is with a specific provisioning back-end layer for wireless, wireline or partner networks.

LotusFlare DNO Cloud also supports non-wireless services (first- or third-party) such as broadband, TV and other digital services. This enables double- or triple-play offerings powered by a single IT stack. The integration between LotusFlare DNO Cloud and the network is via 3GPP standard interfaces.

The integration points with other systems are via RESTful APIs or standard file exchange protocols.



# LotusFlare DNO™ Cloud Partners

LotusFlare partners with solution providers that enable valuable business outcomes when integrated with and supporting LotusFlare DNO Cloud.



## Amazon Web Services (AWS)

Cloud platform supporting LotusFlare DNO Cloud.



## Microsoft Azure

Cloud platform supporting LotusFlare DNO Cloud.



## SugarCRM

Create an outstanding customer experience and streamline customer processes.



## Jumio

Identity verification, eKYC, and transaction monitoring by artificial intelligence.



## VCTI

Accelerate broadband expansion, automation of operations, and innovation.



## Liveperson

Conversational AI for customer care, conversational commerce, voice solutions and more.



## TrustCloud

Orchestrate and shield digital transactions carried out between companies and users.

# LotusFlare Difference.

Having come from serving the leading internet and OTT players in the market, LotusFlare fosters a startup mindset and an experience-first approach. We deliver valuable business outcomes, fast and simple.



From Customer  
Experience Down



Deliver Simple to  
Deliver Fast



Open and  
Self-Customizable



Cloud Native,  
Public Cloud



Based in the heart of Silicon Valley, LotusFlare's mission is to design, build and continuously advance a digital commerce and monetization platform that simplifies technology and customer experience to deliver valuable outcomes to enterprises. Developed from "customer experience down", LotusFlare DNO™ Cloud is a cloud-native, all digital BSS that delivers valuable business outcomes to consumer and enterprise customers of CSPs.

Learn more at [lotusflare.com](https://lotusflare.com)



Globe

T Mobile



re:do



Singtel



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