



CASE STUDY

Driving Innovation and New Revenue Opportunities in the Digital World with an API First Approach

LTIMindtree conceptualised and built a scalable, cost-effective OpenAPI solution for a major European airline group. We further advanced the client's OpenAPI initiative by integrating the booking functionality for richer travel experiences, which in turn, strengthened their direct distribution strategy.

Business Benefits

- 10% savings in license cost.
- Growth in sales through increased brand visibility, with ability to target new markets by the addition of a completely new revenue channel.
- Improved booking experience for the airline customers.
- Positioned the client as a tech savvy innovative organization in their industry.

The Client

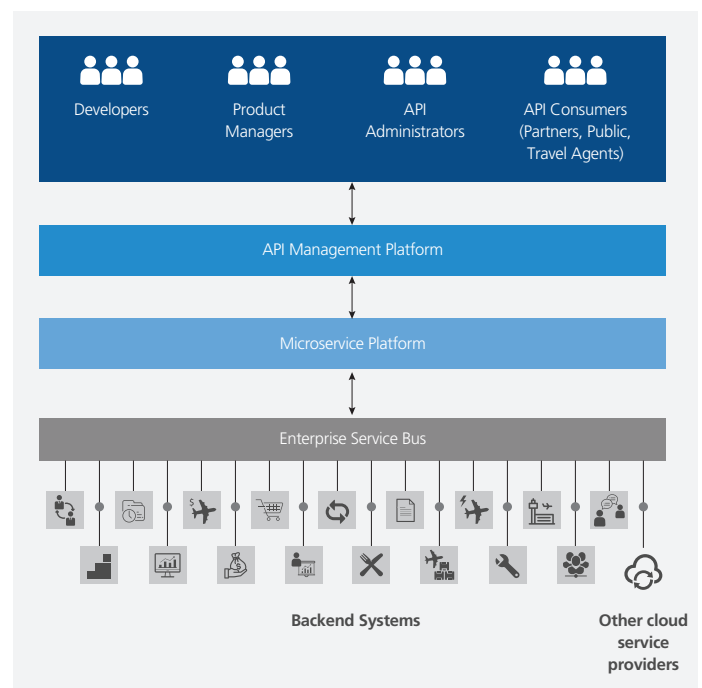
Our client is a major European aviation group comprising several member airlines and aviation services.

The Challenge

The client wanted to build a solution for partners, travel agents and public to make data available more widely, in effect, creating a new revenue channel for themselves. The product's core feature would be to expose the airline's data to travel agents, public and partners, who can register (self-service API registration) to integrate either mobile apps, web or any media of usage.

The client decided to create an Open Application Programming Interface (API) which exposes their data and functions to developers in the outside world, via the internet. This OpenAPI would also be available to their own service providers and departments as well, to develop internal services.

The customer was looking for a technology partner who could conceptualize and build a highly scalable new Open API architecture, in a cost-effective manner. The solution should allow public, partners & travel agents to consume services for their requirements.



LTIMindtree Solution

The initial goals that were set out for the OpenAPI initiative were to provide controlled access, connect easily to consume APIs, provide external reachability and leverage internet standards.

LTIMindtree transitioned from an existing vendor and completely reviewed the existing OpenAPI solution proposed by them, which was not scalable & involved high licensing cost. LTIMindtree proposed a revamped solution, aligned with the client's long-term strategy of a preferred technology stack and cost effectiveness. The high-level solution architecture is depicted above. LTIMindtree engineered the solution development in three phases:

Phase 1: Design and prototyping

- Architecture, design, development, and testing using various proprietary and open source technologies, that align with the client's technology guidelines.
- Deliver the prototype to understand client feedback and revisit if there are any open points to be addressed.

Phase 2: Incremental product development using Agile Methodology

- Contract first approach to support new development of APIs allowing the public/partners to consume mock services for their developments.
- Microservice-oriented architecture that easily integrates with existing backend systems and provides re-usable services.
- Scalable design that can support product growth for the next 5 years.

Phase 3: Production deployment support working in close collaboration with client and solution hosting provider.

Solution Highlights

- Just 12 hours after onboarding of the new OpenAPI, the first booking from an individual was registered.
- High availability system (99.95%) without performance degradation.
- Self-service API registration and documentation to integrate with client APIs.
- Integration with multiple security models.
- Migration proposed to decommission the expensive software components as well as reduce operational costs.
- Contract first approach (swagger & mock services) for all new API development, which led to quicker turnaround for new API development & hosting.
- Standard RESTful APIs using HTTPs/HTTP over JSON & XML, with Swagger Integrated/ enabled for every API.
- Adopting the DevOps approach for solution delivery.
- Hosting on cloud platform supporting containers.

LTIMindtree is a global technology consulting and digital solutions company that enables enterprises across industries to reimagine business models, accelerate innovation, and maximize growth by harnessing digital technologies. As a digital transformation partner to more than 700 clients, LTIMindtree brings extensive domain and technology expertise to help drive superior competitive differentiation, customer experiences, and business outcomes in a converging world. Powered by 82,000+ talented and entrepreneurial professionals across more than 30 countries, LTIMindtree — a Larsen & Toubro Group company — combines the industry-acclaimed strengths of erstwhile Larsen and Toubro Infotech and Mindtree in solving the most complex business challenges and delivering transformation at scale. For more information, please visit <https://www.ltimindtree.com/>