



A GLOBAL MEMBERSHIP-BASED TOUR OPERATOR

## Transformed technology capabilities to address travel ecosystem needs

Using Sonata's Platformation™ approach

### Summary

Digital technologies have revolutionized many industries and raised the expectations of convenience among consumers, especially when it comes to workflows such as product search and purchase. In the travel and tourism industry, commerce workflows become more complex with a plethora of players – travel service providers, tour operators, and agents – selling, reselling, and aggregating core travel offerings. Furthermore, certain organizations adopt models such as Multi-Level Marketing (MLM) where a dynamic ecosystem encourages participants to don multiple roles and consumers to become resellers and marketers.

A client of Sonata operates in this unique cusp of travel and MLM across the globe. Without a platform mindset supporting their legacy technology framework, the organization found it challenging to support the ecosystem, both in terms of relevant workflows and scalability.

Sonata's Platformation™ helped the tour operator solve the technical complexity of their ecosystem's interactions with a structured approach. With Platformation™, the organization was able to convert their technology systems into a full-fledged platform serving their ecosystem of travel enthusiasts, agents, and service providers.

# Context & Challenges

An international membership-based tour operator had identified the opportunity to grow memberships and enhance user engagement with a next-generation social travel platform. Equipped with a diverse set of product offerings, the organization operates in a multi-level marketing model with members, sponsor members, suppliers as the key participants of the platform. In this model, travel enthusiasts and tourists would form the ecosystem's members, i.e. the primary consumers. Sponsor members would be those with entrepreneurial ambitions to initiate a direct-selling business by reselling the services of suppliers. In turn, suppliers would offer air, hotel, and cruise services to the global network of members through the peer-to-peer nature of the platform.

Although the company's business model intended to address the needs of this ecosystem, the underlying technology systems were not geared up to serve all participants effectively.

In addition to the above functional challenges, the organization also incurred a higher cost for customization of solutions and integration with new systems.

The tour operator turned to Sonata's Platformation™ approach to address these issues and revamp the technology platform to support the operator's ecosystem. For an organization with many seemingly independent players, this approach enabled distributed decision-making by the ecosystem participants.

*Some of the key challenges being faced by the organization were:*

## Participant behavior

- Inability to on-board non-travel product suppliers
- Slow and cumbersome onboarding of new suppliers
- Inability of suppliers to enhance product presentation to members
- Disparate systems for customer engagement and organization's operations

## Lack of intelligent decision making

- Complexity in purchases for members due to a large number of deal attributes
- Lack of real-time guidance in choosing deals

## Ineffectiveness in handling commerce transactions

- Inability to handle sales during event flash sales and bookings surges
- Limited number of channels (only web) for user engagement with poor scalability



# Solution

## Sonata's Platformation™ Framework

Platformation™ is Sonata's unique approach to digital transformation and helps build open, connected, intelligent and infinitely scalable digital businesses.

With Platformation™, organizations can support a connected ecosystem of customers, business, partners, and vendors and enable value exchange between these participants.

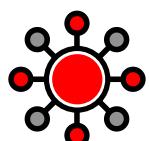


## Platformation™ Principles



### OPEN

Easily accessible for users, ecosystem partners, and businesses to participate in



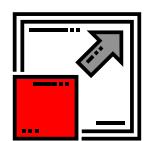
### CONNECTED

So they are always-on, always connected



### INTELLIGENT

To use the data generated in the platform to enable more efficient and meaningful transactions



### SCALABLE

It gives the business the power to scale the platform by number of users, segments, & geography, easily

## Applying Platformation™

With the Platformation™ approach, Sonata helped the tour operator make strategic choices up-front on the technologies and design patterns to build an open, connected, intelligent, and scalable platform. The Sonata team applied the Technology Design Canvas, a 16-point technology enablers framework, to evolving the client's platform capabilities in an iterative and incremental model.

Sonata firstly implemented API-based integration and micro-services architecture to achieve the following functionalities:

- Faster on-boarding of travel and non-travel suppliers, insurance firms, and other service providers; integration with GDS
- Integrated operational systems leading to better interconnectivity and automated processes
- Selective scaling of all activities across the travel booking lifecycle and platform services

To improve member engagement and interaction, Sonata enabled the following functionalities through a combination of data analytics, intelligent customer experience, and CUI & Bots which led to:

- Expedited Booking Decisions: Rich product info, Training, Contextual notifications & alerts of deals & event flash sales, unified ‘cart, content & payment’, and simplified products presentation
- Real-time Booking Assistance: Experience sharing; Product recommendations; Bot-based customer service

By addressing cloud-enablement, scalability, and security & compliance, the Sonata team enabled:

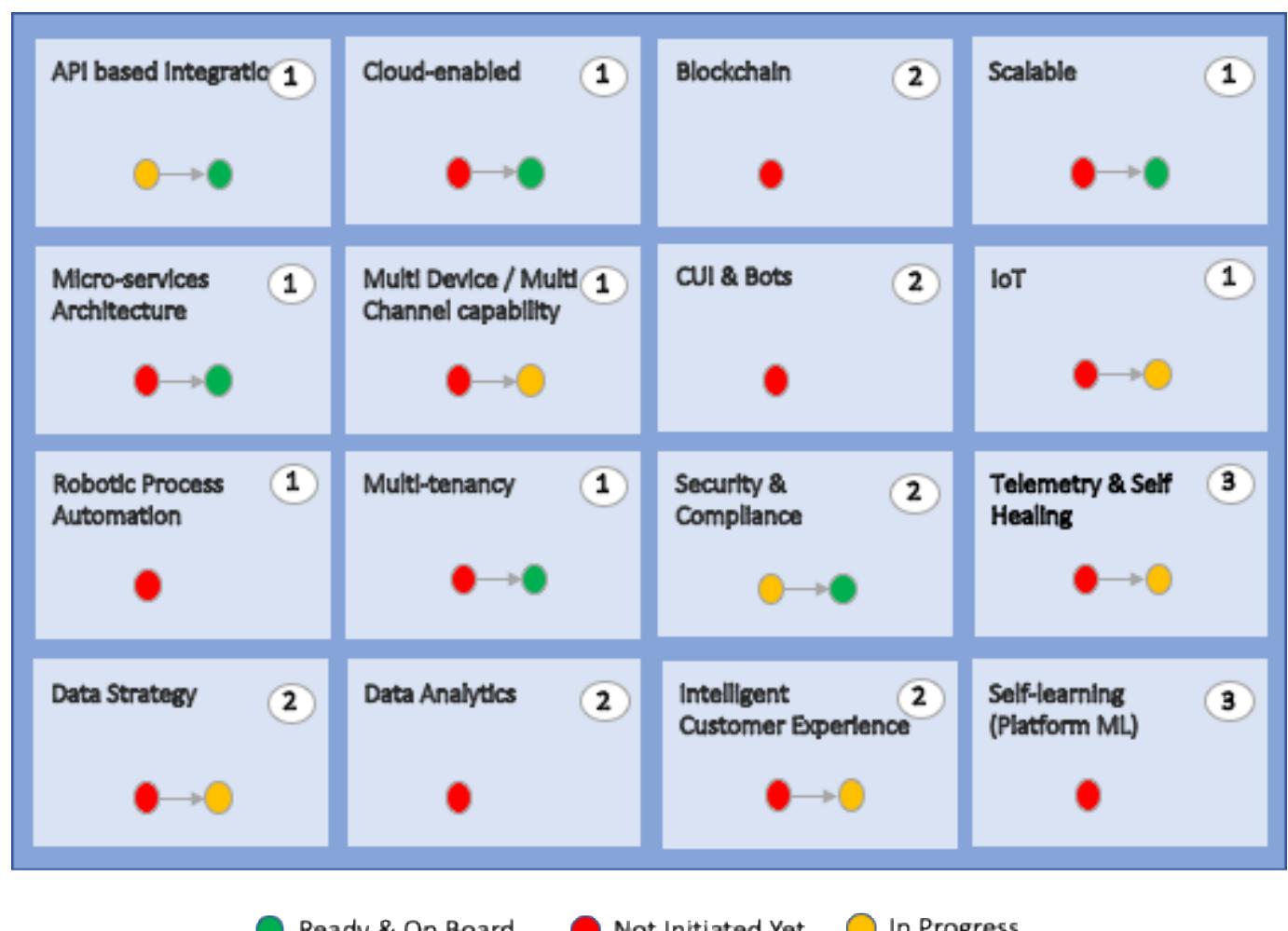
- Maximized availability: High availability with clustered architecture on Amazon AWS

- Support for higher Loads: Support for large user base and peak transactions, namely events & flash sale booking surges; Micro-services and cloud for service level auto-scale

- Improved compliance & privacy: SSL for sensitive data & PCI DSS compliance

Sonata also applied multi-device / multi-channel capabilities to increase and enhance the channels, including web & native mobile apps, B2C travel e-commerce, call center, group chats & messaging, sponsor member sites, country marketing sites, and B2C non-travel e-commerce.

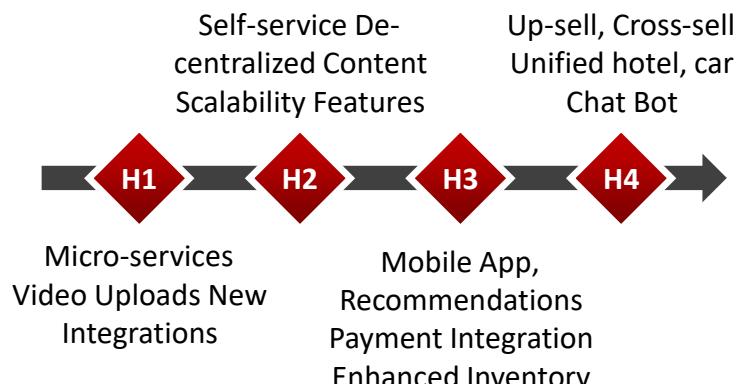
Lastly, CI/CD methods adopted helped streamline development activities and improve the speed of releases.



*Illustration 1 - Snapshot of Technology Enablers along with before and after states per enabler*

## A two-year journey

All of the above solutions were implemented in a phased manner over a period of two years. The milestones were decided based on the priorities of the transformation program and value of the functionalities implemented. On the one hand, core technology levers such as micro-services architecture was implemented up front so that all subsequent functionality implementations would be built atop this revised architecture. On the other hand, chat bots – focused only on improving the efficiency of member interactions – were implemented toward the end of the program.



## Results

With the new platform-based technology, the tour operator was able to offer a superior experience for members and partners, higher performance & scalability, and a streamlined development program.



**5X**  
**GROWTH**  
In bookings year-on-year

**50%**  
**REDUCTION**  
In effort to onboard suppliers

**30%**  
**FASTER**  
Search-to-book cycle for members

**20%**  
**CONVERSION**  
Of product recommendations into bookings

The various drivers of Platformation™ have now helped accelerate business by utilizing the various levers of the Platform Technology Canvas:

### CONNECTED

*Multi-device / Multi-channel, Integrated Systems, Data Strategy*

- Increased & Enhanced Channels for members and sponsor members with a doubling of growth within a month
- Faster onboarding of suppliers with reduced effort
- Improved platform technology with ability for simplified customizations and integration

### INTELLIGENT

- Simpler & expedited booking decisions for members and sponsor members with faster search to book flow
- Improved Booking Assistance: for members through superior recommendations
- Reduction in ticket resolution time due to bot-based customer service

### OPEN & SCALABLE

- Support for higher loads with 99.99% system availability, 10K concurrent users with over a million transactions per month
- No downtime during peak loads, especially during flash sales
- Reduction in infrastructure costs with cloud model
- Reduced time for development and lower costs for customization and integration



## Takeaways

The Platformation™ approach provides a structured framework to help organizations adopt platform-thinking into their technology landscape. The technology design canvas serves as a framework to not only analyse existing technology landscape but also to prioritize a development program based on the organization's context and needs.

By implementing the technology design canvas, organizations can achieve technology landscapes that are Open, Intelligent, Connected, and Scalable – the bedrock of modern-day platforms.

# WHY SONATA?



Our focus, depth of understanding and proven expertise in Retail Systems of Engagement make us stand out among our peers. We help retailers retain and enhance their customer base and provide personalized and consistent shopping experience across all channels through deeper business insights. Sonata's expertise stems from:

- Deep domain expertise in travel 10+ years of experience with many marquee names in the travel industry
- 600+ domain experts
- Best-fit solutions for enterprises
- Helps clients across maturity levels: from travel leaders seeking innovation to start-ups exploring disruptive ideas
- Industry ready solution assets that reduce TCO and time-to-market
- Proven large scale implementations
- Global delivery model: Reach, Quality & Cost Effective service



Sonata's platformization approach helps clients to choose a solution that best fits their needs; balancing readily available platforms and solution customization

1. Sonata READY: End-to-end, industry-specific digital business platforms
2. Sonata ACCELERATE: Deploy popular horizontal platforms adding required functionality
3. Sonata CUSTOM: Engineer custom platforms that deliver unique digital capability and scalability

Sonata Software is a global IT solutions firm focused on enabling platform based digital business and technology transformation for enterprises in the Travel, Retail, Distribution and Software industries. Sonata's products and platforms, anchored on its proprietary Platformization methodology, reflect the company's commitment to enable connected, intelligent, open and scalable business systems.

Sonata's portfolio of products and platforms include Rezopia Digital Travel Platform, Brick & Click Retail Platform, Modern Distribution Platform, Kartopia E-Commerce Platform, Halosys Unified Enterprise Mobility Platform and RAPID DevOps, CloudOps and Testing Platform. These platforms have been deployed by leading enterprises across the globe to achieve future ready digital businesses.



USA | Dallas · Fremont · Bridgewater · Redmond · Atlanta · Chicago

UK & Europe | Brentford · Frankfurt · Amsterdam · Paris · Copenhagen

Asia | Bangalore · Hyderabad · Singapore · Dubai · Doha

ANZ | Sydney · Melbourne