SUCCESS STORY





India's leading NBFC launches personalized products & services at pace of business with Indium

Technology Stack

Java, Dot Net, PHP, Python, AngularJS, PostgreSQL

Team Size

1 Project Manager, 1 Lead Data Engineer, 6 Developers (for .NET, Java, Angular, Node, PHP & Python)

Delivery model

Offshore

Project Duration

1 month

CHALLENGE:

NBFCs is a key pillar of the Indian government's mission to turn into \$5 trillion economy by 2024. Non-banking Financial Companies (NBFC) in India have showed resilience in 2021 despite the liquidity challenges from previous years, increased regulatory oversight, and double whammy from the IL & FS default followed by COVID-19 pandemic. Much of this recovery can be attributed to the sufficient capital buffers, revival of the Indian economy at large from pent-up demand, and investment in technology that helped NBFCs to lower operational costs, widen customer base at lower customer acquisition cost.

Our client is India's leading NBFC that offers extensive range of loans and insurance products to help meet the financial needs of over 6 million customers from the unorganized sector, typically underserved or unserved by banks. The client harnesses technology throughout the customer value chain – lead generation through loan disbursement and collection. One such system is the API framework leveraged to build e-KYC ecosystem that helps to verify identity of customers and business entities, reduce fraud resulting in stronger decision making and effective loan disbursals. "

Regulations for NBFCs have become stricter in recent times, the cost of borrowing has increased and NBFCs are focusing on niche markets and personalised products and services. In such a scenario, NBFCs are adopting business and operational models powered by technologies that seamlessly facilitate the design, launch, implementation and execution of tailored products and services.

- PwC : Breaking new ground: How emerging technologies are helping NBFCs evolve.

With the increasing number of tailored products and services offered through partner ecosystems, the client faced below challenges with their API framework intended for integration with partner ecosystems – banks, payment gateways, e-commerce portals among others.

- Longer API integration time Disparate programming languages leveraged by partners mandated additional code change and testing to integrate newer client APIs and API changes.
- **Delayed product launches** With API Integration taking longer than intended the launch of new tailored products across partner portals got delayed.

Indium Software was chosen by the client for its well-rounded Digital Engineering capabilities that includes Application Modernization and Digital Assurance. The goal was to address these challenges and help accelerate launch and integration of new products and services through strategic partner ecosystems.

SOLUTION:

After thorough analysis of the existing code base, programming languages used, quantum of code change required across partner ecosystem to integrate new APIs, Indium recommended Partner Integration library – a configurable standalone code library that enables seamless integration between business entities. Given below are key highlights of the solution delivered.

- The aspirational goal was to enable partner development teams achieve 100% integration of latest APIs and newer versions with less than 5 lines of code change. The scope was to achieve this goal for 6 APIs.
- Indium devised a solution that offers class libraries in different languages and can be reused by the partner development team, involving minimal or no code change.

- Newtonsoft.Json from NuGet package was used for high performing JSON serialization and de-serialization. Newtonsoft.Json was chosen over System.Text.Json after internal benchmarking exercise.
- A base class (API Wrapper) with common functionalities, that completely abstracts the implementation of the sequence of steps of API call was developed.
- This base class can be instantiated from the partner code by supplying the defined API name(s) as a string parameter to the API Wrapper.
- To cut down testing effort, SDKs were developed for each API and used for testing by Indium's Digital Assurance team.

- For new APIs, partner code needs a new JSON file following the nomenclature and pass the new API name as parameter to the API Wrapper constructor.
- For new API versions, all it takes to integrate the API is a change in the respective JSON file.
- Partner can now integrate and test APIs in less than an hour, just by knowing the API name. No more considerations to formatting, validation, and encryption overheads.



Your API documentation portal for partner integration for our company is a benchmark standard !! keep it up !!

- Deputy National Lead - IT Leading Indian Non-Banking Financial Corporation (NBFC)

BENEFITS:

- Low-code API integration Partners can now achieve 100% integration of client's latest APIs and newer versions with just 3 lines of code change, much lesser than the aspirational target of 5 lines of code change.
- **10x faster time-to-market** With quantum of code change required to integrate APIs drastically reduced through SDKs, client can now release new products and services 10x faster.

About Indium:

Indium is a Digital Engineering Services leader and Full Spectrum Integrator that helps customers embrace and navigate the Cloud-native world with Certainty. With deep expertise across Applications, Data & Analytics, AI, DevOps, Security and Digital Assurance we "Make technology work" and accelerate business value, while adding scale and velocity to customer's digital journey on AWS.



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