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APIs for better efficiencies in
DIGITAL LENDING

Application
Programming
Interface

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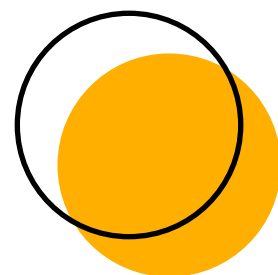
Overview

APIs or application programming interfaces have opened up a whole new world to access siloed data thus enabling businesses to draw better insights and also personalize their offering to the market within the regulatory frameworks. .

According to the Fourth State of API Integration Report , 83% participants find API integration "critical" to their businesses and IT infrastructures

In the United States, the Consumer Financial Protection Bureau (CFPB) Advanced Notice of Proposed Rulemaking (ANPR) on Dodd-Frank Section 1033 reiterated that consumer control is central to a data sharing ecosystem. FinTech's and established financial institutions can build jointly-designed solutions that take into consideration each of their specific perspectives and needs, while ensuring that these solutions and standards are good for consumers.

The wide use of APIs by the digital lending industry has now opened up a new challenge for decision makers to select the API that works for a company's specific business need and understand how to effectively use them within regulatory limits. APIs enable agile risk-free digitization for the lending services for better business expansion.

New and interconnected financial services ecosystem through Web APIs, the most commonly used class of API, provide machine readable data transfer between web based systems. Most businesses use multiple API to connect applications and provide seamless customer experience.

Advantages of an API based system are:

Orchestrate Offerings

The industry standard use of Representational State Transfer (REST) APIs provided through sandbox, developer portal or software development kits (SDKs) helps use APIs to innovate and automate processes.

Legacy systems lack agility, but new age Fintech and Digital Lending businesses are nimble and can swiftly respond to the market needs using appropriate API's. The APIs enable an architecture supporting multiple integrations from customer facing channels (to enable multiple channels for customer onboarding) to custom workflow for process automation to best-in-class data enrichment from data providers to payment gateways for easy funding and repayments.

Get Secured

Since access is limited to APIs, the system becomes significantly more secure with no manual or file based interfaces. Access controls can also be easily implemented.

Automated Data Driven Decisioning

The best-in-class data providers can be used as Third Party services to combine and cover critical decision points. APIs enable real time data enrichment, automate data driven decision making and reduce turnaround time and thus improve customer experience.

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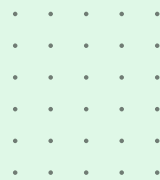
Plug into the Ecosystem

APIs allow to easily integrate with other partners and thus expand revenue streams. In case, an applicant does not qualify to your current underwriting model, the application data can be effortlessly passed on to partners who might be a better fit for the applicant and thus opening a new stream of revenue.

Go Agile

APIs support easy customization or innovation for different business scenarios. Be it regulatory requirements or changing business requirements the capability to personalize and build something new is best supported via APIs.
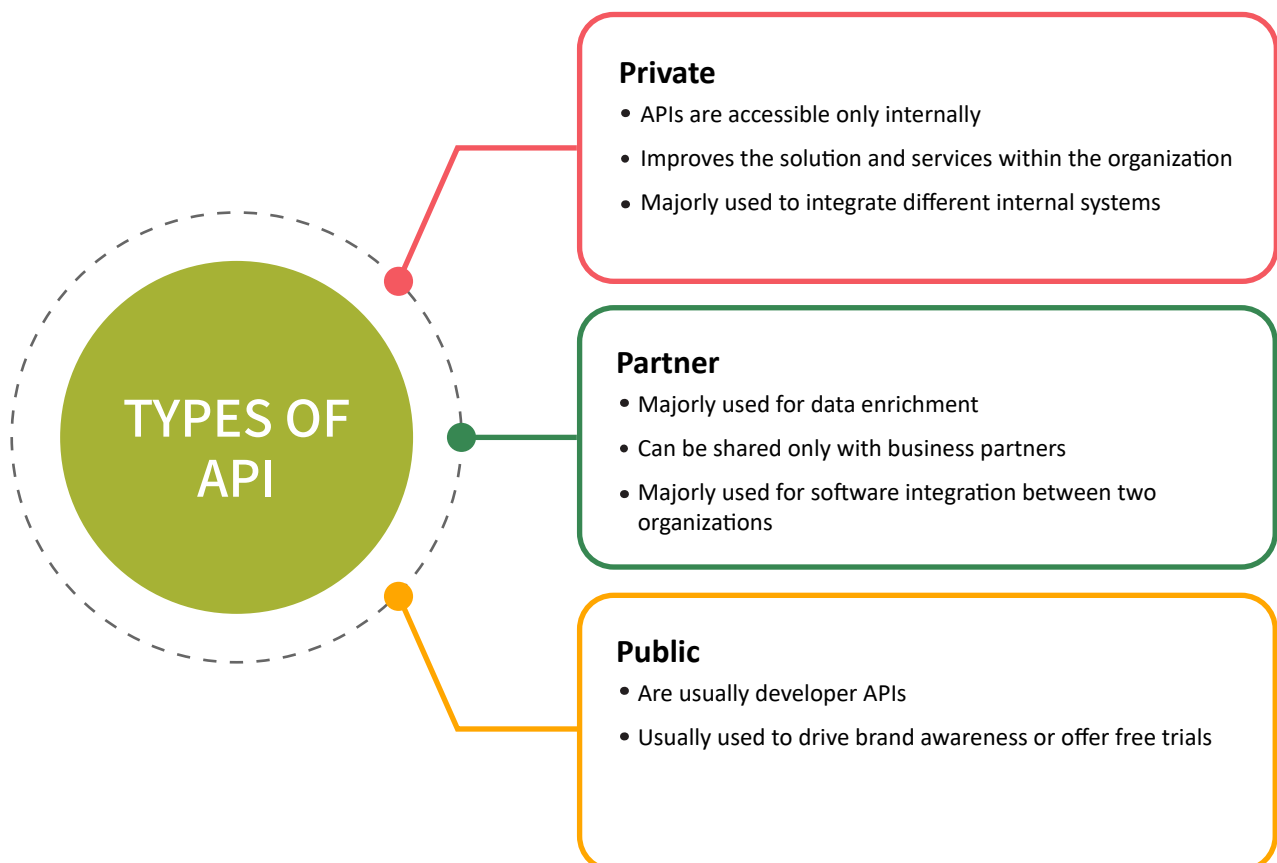
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Types of API

There are three different types of APIs which are majorly used by businesses while designing and implementing an end-to-end Loan Management System

Private APIs: These APIs are accessible only internally and are designed for improving the solution and services within the organization. They are majorly used to integrate different internal systems like CRM with the Loan Origination System or Loan Origination System with the Loan Servicing System or LMS to the collections system etc.

Partner APIs: These are the majorly used for data enrichment where APIs are openly promoted but shared only with business partners who have a signed agreement with the API publisher. It is majorly used for software integration between two organizations.

Public APIs: These are usually developer APIs and can be open (free of cost) or commercial (pay as you use). Public APIs are usually used to drive brand awareness or offer free trials to test before subscription.

TYPES OF API

Private
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- Improves the solution and services within the organization
- Majorly used to integrate different internal systems

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How do APIs work

Having seen the importance of APIs in delivering a superior customer experience in a unified ecosystem, it is also necessary to understand how APIs work.

Most APIs use a process which can be broken into 4 steps: permission, request, receive, and transmit which happens real time within a secured connection.

1. First the interface asks for permission from the data source

2. Once permission is given the API starts working

3. Usually at this step the authentication takes place, and the security is verified

4. Post authentication the automated request is sent according to configured data points

5. The data source returns the requested data via API

6. The requesting system then receives the transmitted data from the data source


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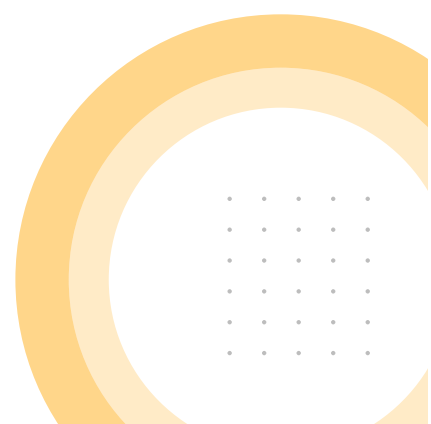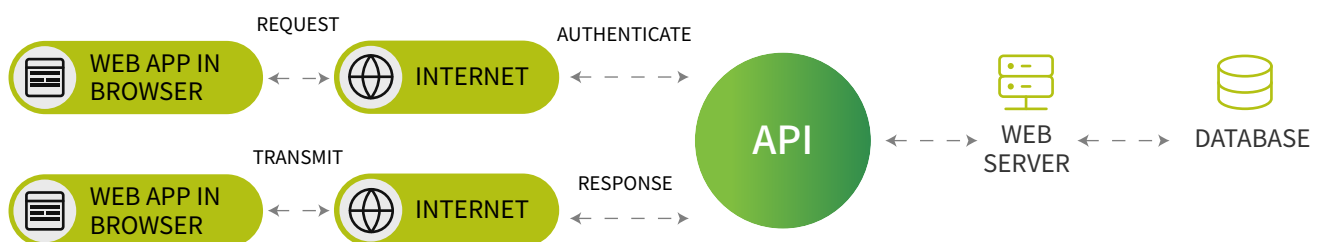
Digital Lending has to adapt to the use of APIs throughout the lifecycle of an application and the loan thereof. The APIs used in Digital Lending can be subdivided into three categories

Experience APIs: Partner APIs like eSignature, omnichannel onboarding, communication with borrowers, etc. enhance the Customer Experience manyfold by opening multiple channels for borrower experience. The Experience APIs also help in backend operations and the partner ecosystem to seamlessly integrate with the business.

Process APIs: Private APIs to search loan details, modify loans, collect loan repayment etc. automate backend operations to drive optimized processes.

System APIs: API driven Third Party Data connectors, Document storage and retrieval, workflow connectors etc help in accessing siloed data and taking better decisions within a centralized console.
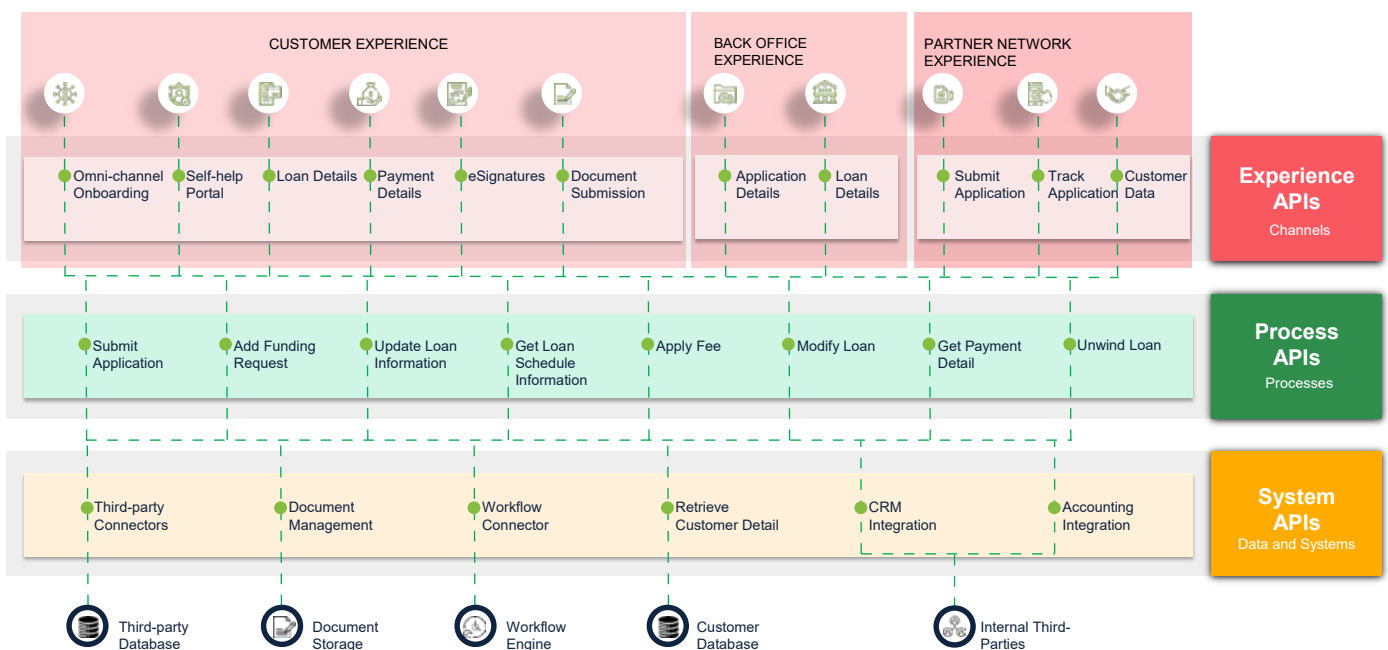
API Protocols

Two independent applications need an intermediary to talk to each other. APIs allow one system to access the information or functionality of another system.

In order to integrate applications quickly and at scale, specifications to define the semantics and syntax of the messages make up the API specification, protocol or architecture.

In fintech and Digital Lending the most prevalent Protocols are:

Service Object Access Protocol (SOAP)

SOAP is an XML-formatted, highly standardized web communication protocol. Being complex and heavy they quickly lost out to REST. The digital lending industry still has to use SOAP on certain occasions as it is used by many enterprise web based partners to ensure high security and many payment gateways, identity management and CRM solutions still use the legacy system.

Representational State Transfer (REST)

REST is a self-explanatory API architectural style intended for wide adoption with API consumers. It makes server-side data available in simple formats like JSON, YAML or XML. Web APIs that adhere with REST architectural constraints are called RESTful APIs. These APIs use HTTP methods like GET, PUT, HEAD, POST, PATCH, CONNECT, TRACE, OPTIONS and DELETE and are widely used in the Digital Lending landscape to get data from Third Party systems.organizations.

gRPC

In gRPC the client application directly calls methods from a server application as if it was a local system. This makes it easier to create applications and developers can define function calls rather than selecting from predefined options as in REST.

GraphQL

The need for faster and efficient data loading on multiple devices and a variety of clients has created the need of GraphQL to be developed as a query language for APIs. It helps to detail the exact data and simplifies aggregation from multiple sources so that a single API can request all data needed. This has provided flexibility in creating wrappers for faster data enrichment from multiple sources.

Conclusion

It is thus imperative that Digital Lending solutions are built on an 'API Framework' that enables multiple things to happen.

First, it should move to channel agnostic onboarding to open up multiple funnels for application intake to drive business growth.

Second, it should enrich applicant data through the Third Party data ecosystem to substantially mitigate the and also to present the best product/offer to a borrower. With very few inputs and a consent-based application approach, a holistic picture is generated via enriched data through APIs, and a paper-heavy application process is reduced to a completely digital journey of a few steps.

Third, it should enhance the experience of the borrower by directly integrating and providing system data to the borrower without the need for modification.

Fourth, the internal workflows can be automated, systems updated real time and operational efficiencies increased. On the Servicing side APIs help automate schedule tasks and escalations thus reducing manual intervention and chances of error therein.

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