

# **VolPay** Global Validation Services

A single global API platform for creating and validating payment instructions at every stage of the payment lifecycle, from capture to clearing.

# **The Customer Experience Challenge**

The payment channel landscape has increased in complexity over the past two decades. Mobile, tablet and voice have joined online banking and host-to-host as ways of sending payment instructions to banks. Open banking will only further add to this complexity, as consumers and corporations start to transact with their banks over third-party channels powered by APIs.

At the same time, banks are dealing with rising back office complexity: real-time payments, distributed ledger technology, alternate payment methods, ISO 20022 migration, and the need to expand country clearing options to remain competitive.

These twin trends pose a challenge: how can banks bringing new clearing and settlement capabilities to their clients quickly, while providing consistent and compelling customer experiences for payment initiation and validation across all channels?

#### Payment **Engines** Payment Processing Validation API VolPav Source Clearing Channels Global Validation Channel Services Clearing Web Validation Gateway Validation API Gateway Mobile

# Why Traditional Architectures Are No Longer Effective

Traditionally, the business logic required to initiate and validate a payment has been implemented in different silos of a bank's processing infrastructure. Channels, middleware processors, legacy payment hubs and engines, and clearing gateways each have their own initiation user interface and validation rules.

These are independent components, either bank-built or vendor-provided, each with its own roadmap and methodology.

This type of architecture is very difficult to adapt to the current landscape of rapidly proliferating channels and clearing and settlement options. Bringing new services to market quickly means having to update all of these different systems at the same time—an expensive and time-consuming process.

## **VolPay Global Validation Services**

Volante's VolPay Global Validation Services solution offers a distinctive API-centric approach to addressing this problem, unlike legacy channel, hub or gateway solutions. VolPay Global Validation Services incorporates context-aware user-interface generation, initiation, and transformation services which can be accessed by any application involved in the payment lifecycle, through a wide range of API protocols.

All services are available either as REST APIs or embeddable Java components in two main categories:

- Payment Rules, allowing retrieval of metadata defining all fields for a payment method, and the rules for those fields—from simple syntactical parameters such as required/optional status, length and character set, to complex semantic rules such as conditional validation and checksum / directory matching
- Payment Validation, allowing validation of a payment instruction based on context (channel initiation, payment processing, gateway etc.) and the rule set appropriate for the payment method

Both XML and JSON are supported for maximum interoperability. The APIs are simple to use, requiring only a few input fields—for example, payment rules can usually be retrieved by specifying just the payment method, and/ or the debit and credit currencies. Validation APIs return meaningful responses in case of failed validations, to optimize customer experience and eliminate errors.

The platform also incorporates AngularJS components for quickly generating custom user experiences that are fully scheme and business rule compliant.

All APIs return information in a context-appropriate way, based on the same metadata used by clearing gateway applications, ensuring that that payment fields and validations are applied consistently and correctly across channels.

## **Key Benefits**

- Once the platform is operational, banks can accommodate new country clearing and settlement mechanisms entirely through configuration, and without modifying front-end channels
- Context-aware configuration by channel, for example, specifying that certain fields or rules be available in a mobile channel and others available in online channels
- Upfront validation eliminates repair, increases straight-through processing rates, and increases customer satisfaction with the payment experience
- Single API for any incoming source provides uniform validation across multiple sources and eliminates duplicate efforts and inconsistent validations
- Banks can streamline channel development to focus on customer experience rather than business logic - validation UI forms expedite development for any channel

# **VolPay Global Validation Services Component Summary**

- Validation components for individual country clearings, available on an a la carte basis
- Over one hundred different clearing and settlement systems and message standards libraries globally
- Validation Framework
- Validation API Enabler allowing creation of validations for any country
- · API access for all services REST, JAVA
- Angular.js components allowing the rapid creation of consistently compelling user experiences across multiple channels
- Capability for banks to define the fields which should be exposed and validated during payment initiation