



LEVERAGING

EMBEDDED FINANCE

TO MAXIMIZE EXPERIENCES FOR YOUR TEAMS AND YOUR CUSTOMERS

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LEARNING OBJECTIVES



Review the embedded finance industry landscape



Understand how embedded finance can help you offer your customers great experiences while also developing new revenue streams



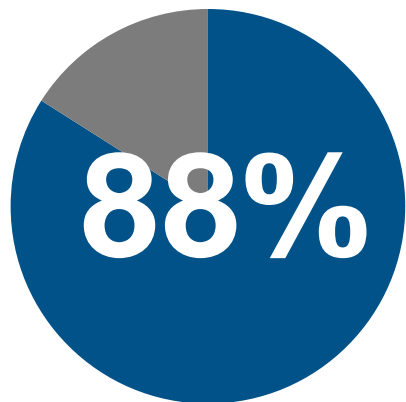
Explore how embedded finance can help transform your organization's treasury functions, leading to increased operational efficiencies

Embedded Finance

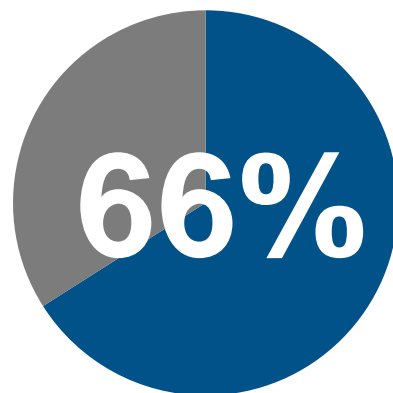
Review the Embedded Finance Industry Landscape

CUSTOMERS AND EMPLOYEES ARE DEMANDING MORE INTEGRATED, CONNECTED EXPERIENCES

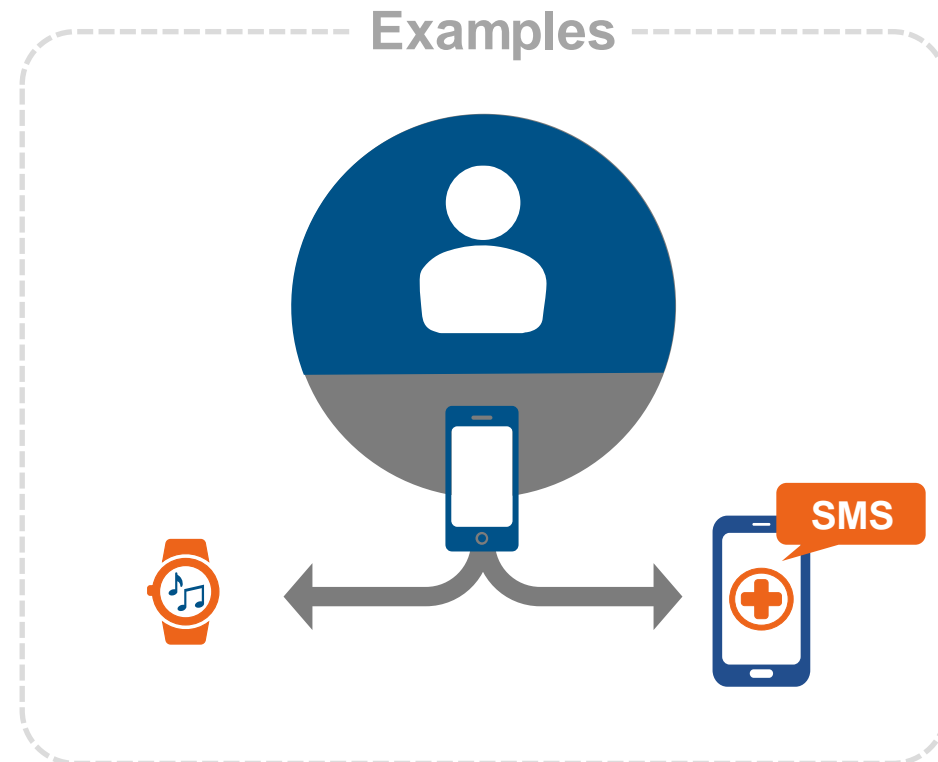
ARE YOU READY TO DELIVER?



of customers expect companies to accelerate digital initiatives¹



of organizations that make employee experience a high priority see a positive impact on profitability²



1: Salesforce 4th Edition State of the Connected Customer 2: Harvard Business Review Marketing Technology an Integral Part of your Employee Experience Strategy

EMBEDDED FINANCE DEFINITION



What Is Embedded Finance?

Embedded finance refers to the integration of financial services – such as banking, payments processing, and/or lending – into non-financial digital experiences with the goal of streamlining processes and placing banking services directly where and when they are needed.



Who Is Offering Embedded Financial Services?

Companies of all types and levels of maturity are offering financial services integrated in their offerings through digital wallets, integrated payments and immediate lending opportunities aimed at retaining customers and increasing customer lifetime value.

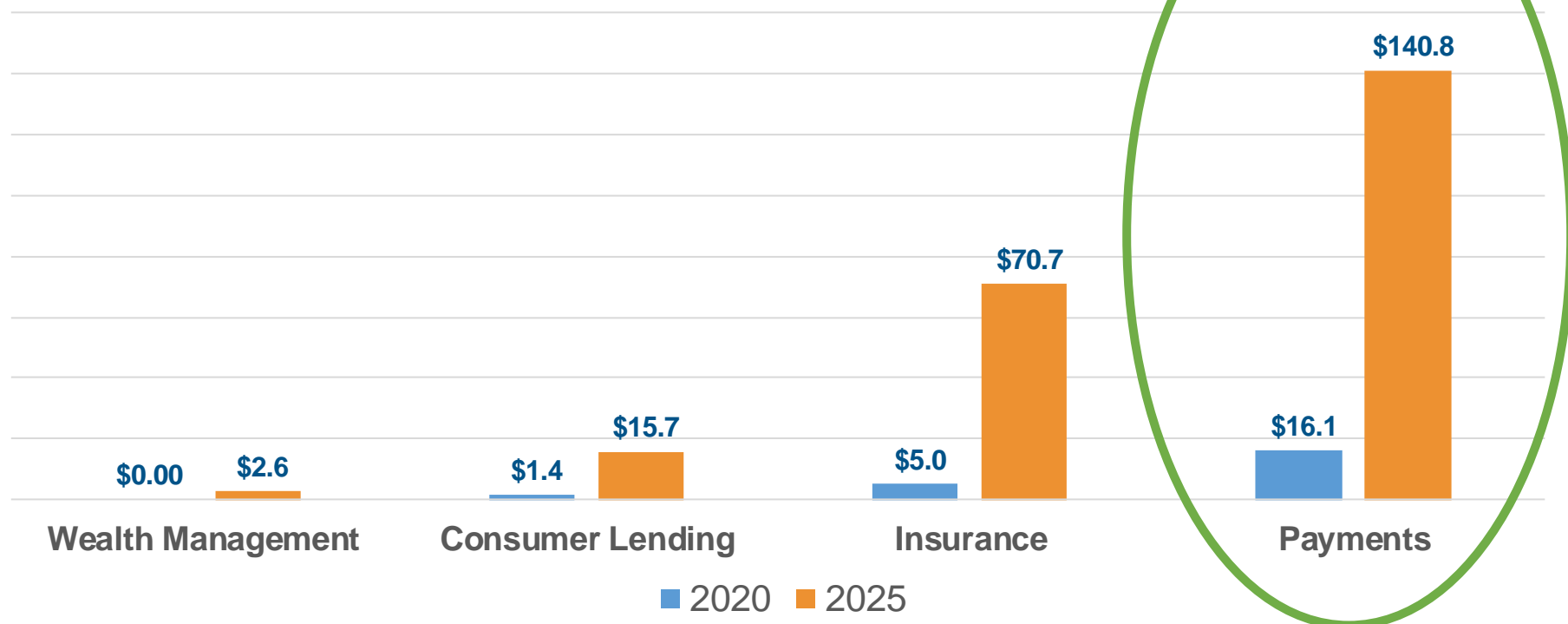
EMBEDDED FINANCE

POTENTIAL MARKET OPPORTUNITY

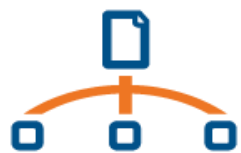
FORECAST: Embedded Finance Market Value (US)

Generated revenues, billions

**\$230B Embedded
Finance market by 2025
– 10x increase from 2020!**



EMBEDDED FINANCE MARKET DRIVERS¹



**Demand for
integrated
experiences**



**Rise of
openness**



**Fintech
threat**



**New revenue
models**



**Adoption of
technology
capabilities**



**Growing trust in
'other' financial
companies**

1: Adopted from 'What the embedded-finance and banking-as-a service trends mean for financial services', McKinsey & Company, March 1, 2021

EMBEDDED FINANCE

WHERE TO START?

What do my customers want?

How can financial services remove friction?

Digital Platforms

**E-Commerce
Payment
Platforms**

**Cloud-based
Accounting
Software**

POS Solutions

**Buy Now, Pay
Later (BNPL)**

**Merchant
Marketplaces**

**Alternative
Lending
Solutions**

APIs AND CONNECTORS

FINANCIAL INSTITUTIONS APPROACH TO EMBEDDED FINANCE

APIs

Allow clients to create custom experiences for their teams or customers

Receivables

Payables

Verification Services

Reporting

- APIs facilitate the sharing of data and functionality between different applications, enabling powerful combinations of services to deliver innovative experiences
- Imagine new experiences and build your own platform using bank APIs

CONNECTORS

Provide clients with pre-built connections that make their platforms more efficient

ERPs, Treasury Workstations and Accounting Systems

Industry-Specific Financial Systems

Other Financial Applications

- Connectors allow you to work seamlessly and conveniently while operating within your own ERP/Application environment
- Getting started with an integration can be as easy as running a plug-in that takes 20-30 minutes to configure

Transforming Your Customers' Experiences

Understand How Embedded Finance Can Help You Offer Your Customers Great Experiences While Also Developing New Revenue Streams



TRANSFORMING YOUR CUSTOMERS' EXPERIENCES

INTEGRATING BANK SOLUTIONS

INTO YOUR CUSTOMERS' EXPERIENCES WITH APIs

Benefits of APIs

Highly Reliable

APIs are built once and used by many. This approach eliminates the need for client specific APIs, providing high quality products for all to integrate with.

Open Standards

APIs are standards-based. Allowing a standard adopted by many allows for interoperability with systems.

Clear Specifications

APIs provide a framework for clear inputs and outputs to allow developers to code efficiently.

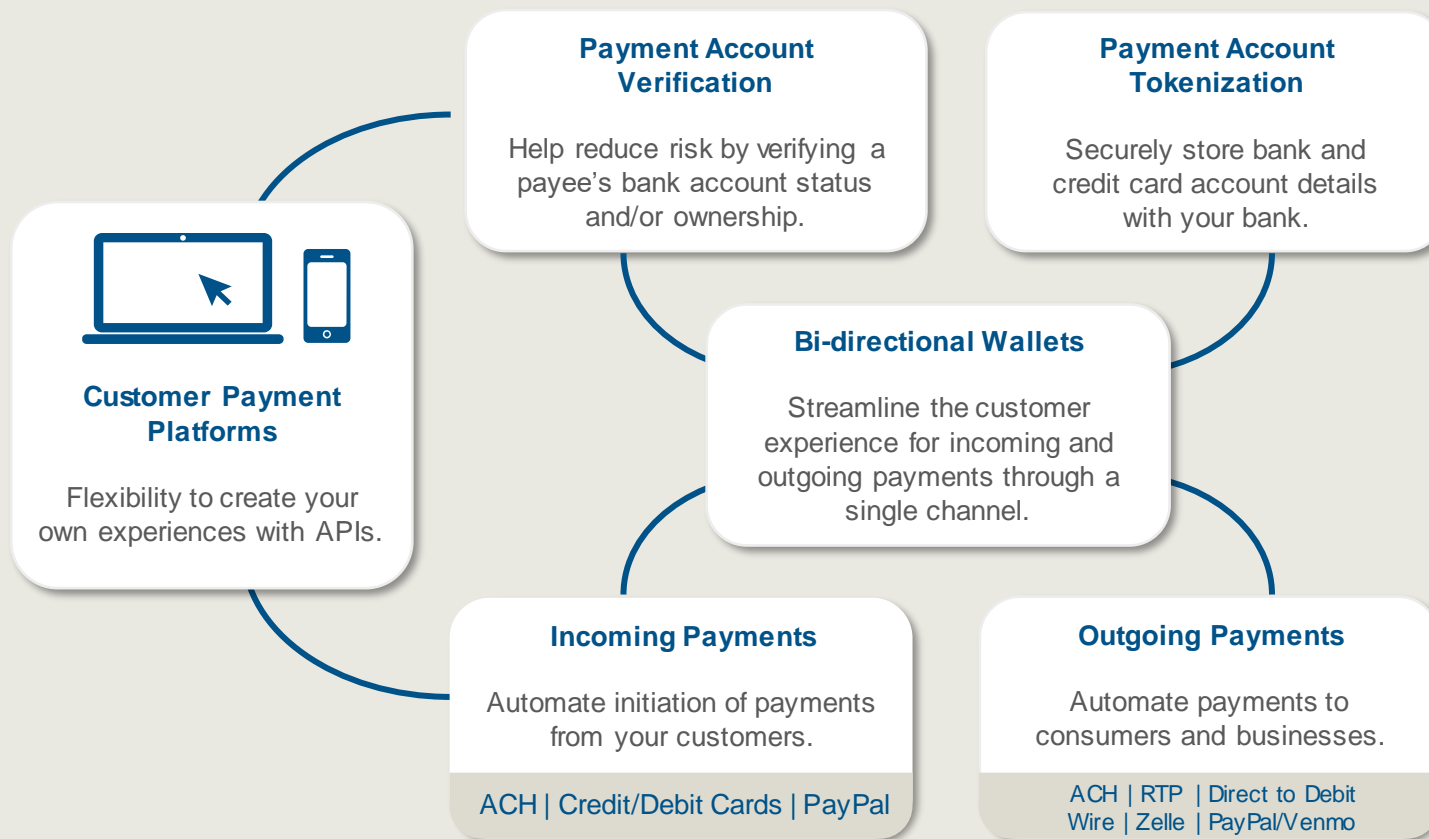
Predictable Outcomes

API documentation details all responses, and this predictability allows for responses to be handled programmatically by API developers.

83% of companies consider APIs to be a critical part of their business strategy.¹

¹ The State of API Integration 2020 report, Cloud Elements

Example Use Cases



GETTING STARTED

ACCESSING THE BANK'S API DEVELOPER PORTAL

1. Review API Developer Portal

2. Connect

3. Build

4. Launch

The screenshot displays the PNC API Developer Portal interface. On the left, a navigation menu includes 'PNC APIs', 'Home', and 'Product Catalog'. A central graphic features the PNC APIs logo surrounded by icons for a key, padlock, wrench, lightbulb, envelope, and laptop. Below this is a callout box: 'Designed for Your Needs. Our APIs help ensure the best experience for you and your customers.' The main content area is titled 'PNC API Products' and includes a 'Filter by' section with checkboxes for 'Use-Case Categories' (Epay Zelle Network Lookup, Payments, Epayment, Verification Services, Receivables, Account Information, Request For Payment) and 'Target Users' (Corporate & Institutional). Two product cards are visible: 'Epay Zelle Network Lookup' and 'Check Deposit'. On the right, a detailed view of the 'POST /api/mlp/v1/payments' endpoint is shown, including a description, parameters, and a JSON body example.

Developer portals allow you to learn about, test and deploy your solutions using APIs

TRANSFORMING YOUR CUSTOMERS' EXPERIENCES

EMBEDDED FINANCE DELIVERED

CASE STUDY: INSURANCE COMPANY CREATES VALUE FOR THEIR CUSTOMERS

Challenge

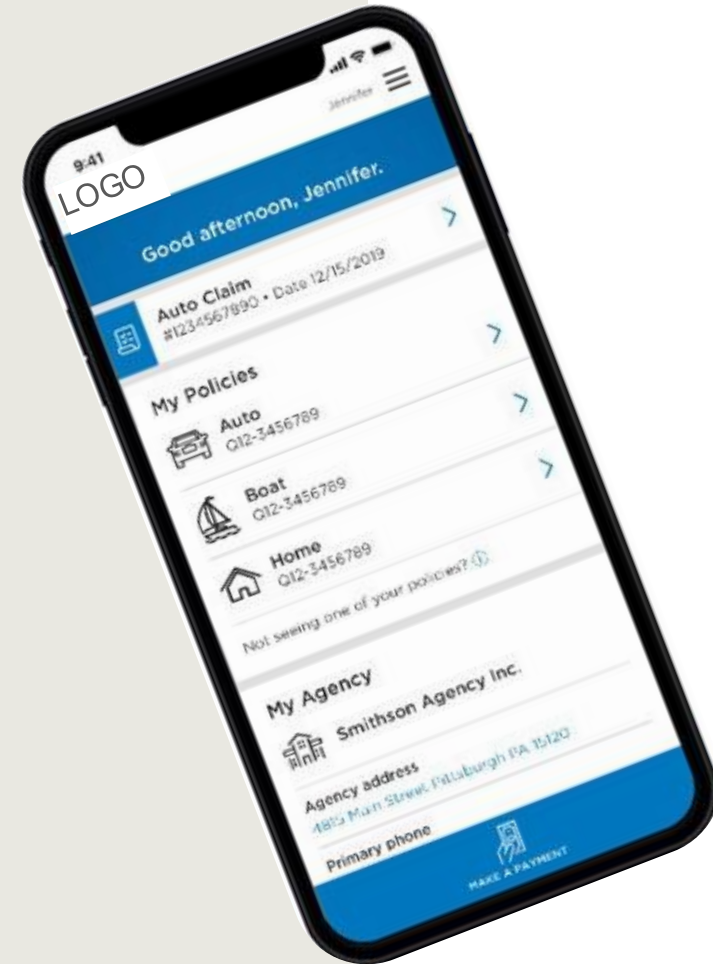
- Sending funds using *Zelle*®
- 60-70% payment success rate
- Time and cost to research
- Inconsistent customer experience
- Reduce need for prenotes to validate bank account information

Solution

- API lookup for *Zelle*® to receive immediate feedback on email addresses and enrollment status for clients
- Account Verification Solution API to validate routing and account numbers

Experience

- Leveraged payment status API to ensure clients received the funds
- 95% payment success rate
- Improved customer experience



WHAT ELSE ARE PEOPLE BUILDING

WITH THEIR BANK'S APIs?



Receivables

- **Billing**
 - Invoice Presentment
 - Invoice Retrieval
- **Payment Capture**
 - ACH Debit
 - Credit Card
 - Debit Card
 - PayPal/Venmo
 - Apple Pay
 - Check Deposits

Payables

- **Invoice Automation**
 - Retrieve Invoice Image
 - Retrieve Invoice Data
- **Payments Initiation**
 - ACH Credit
 - Wire (US / INT'L)
 - RTP Credit
 - Virtual Card
 - Direct to Debit Card
 - Zelle / PayPal
 - Check Issuance / Printing

Verification

- **Account Verification**
 - Bank Routing # Lookup
 - Verify Account Number
 - Authenticate Ownership
 - Zelle Registration Status
 - Credit/Debit Card Verify
- **Identity Verification**
- **eWallets**
 - Verification
 - Tokenization

Reporting

- **Information Reporting**
 - Account Lists
 - Account Details
 - Account Transactions
 - Payment Statuses
 - Check Image Retrieval
 - Webhooks

APIs allow **clients** to **create** custom experiences for their **teams** or **customers**

Transforming Your Organization's Treasury Functions

Explore How Embedded Finance Can Transform Your Organization's Treasury Functions, Which Can Help Lead to Increased Operational Efficiencies



PLATFORM CONNECTORS

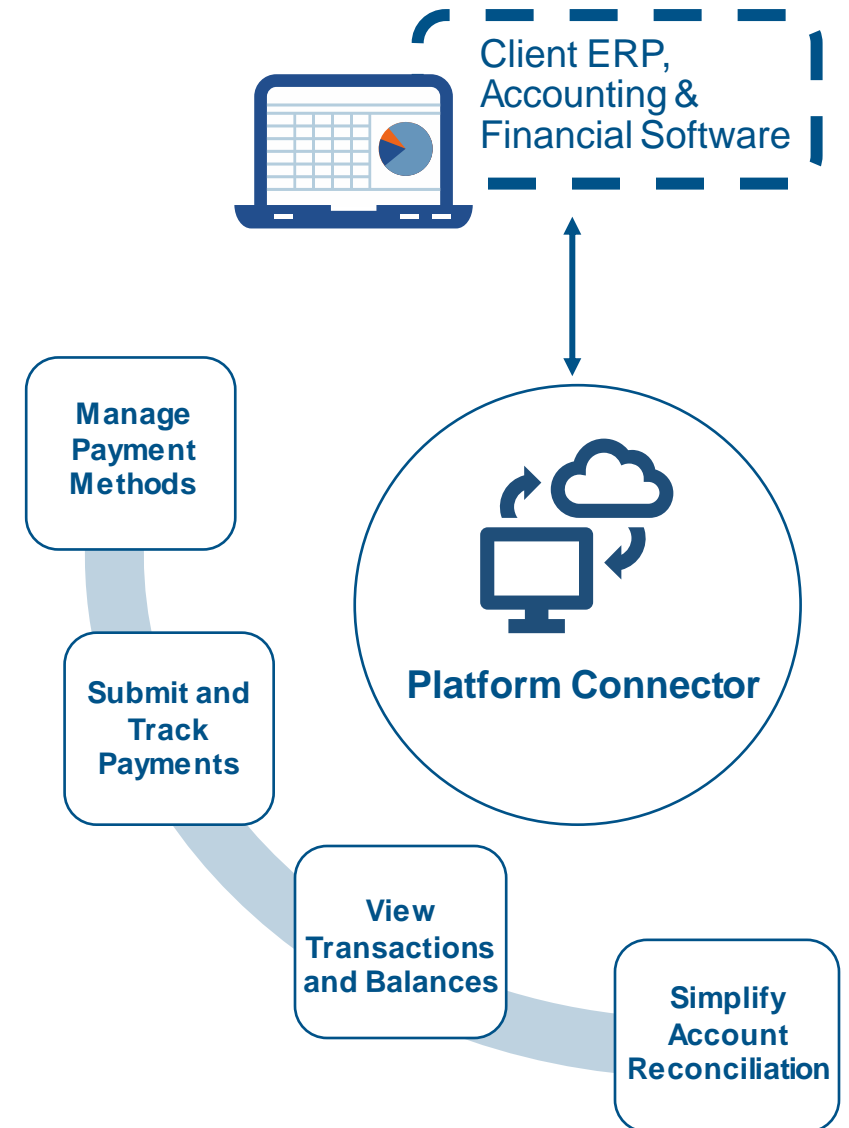
OVERVIEW

What Is a Platform Connector?

- A Platform Connector is a reusable integration.
- Platform Connectors can provide a channel to deliver process improvements, as well as contextual Embedded Finance experiences to clients within the systems they use every day.
- Connectors are quick and easy for clients to implement (days instead of months) and can help provide ongoing benefits such as efficiency gains and cost avoidance.

How Is a Connector Different Than an API?

- A Connector can be built using APIs, files or other technology.
- A Connector does not take deep technical knowledge to implement.



PLATFORM CONNECTORS

A DEEPER LOOK

Embedded Experience

▪ Manage Payment Methods

- Ability to set default payment methods and processing defaults for things like grouped payments and emailed remittance

▪ Submit and Track Payments

- Same Day and Traditional ACH
- Check Print & Mail Outsourcing with Positive Pay
- Wires
- Virtual Card

▪ View Transactions and Balances

- ERP embedded visibility of account balances and transaction details

▪ Simplify Account Reconciliation

- Automated integration into bank statement matching modules for simplified reconciliation

Simplified Integration

▪ Connect Your System Directly to Your Bank

- Easily connect to a sandbox to test functionality
- No need for custom files or establishing transmissions

▪ Install and Configure

- Minimal to no technical resources required
- Enhancements are easily deployed

Connectors Can Make It **EASY** to Implement Automated and Efficient Processes

TRANSFORMING YOUR ORGANIZATION'S TREASURY FUNCTIONS

PLATFORM CONNECTORS IN ACTION

EMBEDDED FINANCE DELIVERED



Payment Initiation

Balance Reporting

Transaction Reporting

Open Bills | Failed Bills

Pay Refresh

	DUE DATE	BILL NUMBER
<input type="checkbox"/>	2/2/2022	1262
<input type="checkbox"/>	2/2/2022	1266
<input type="checkbox"/>	2/2/2022	1268
<input type="checkbox"/>	2/2/2022	1294
<input type="checkbox"/>	2/2/2022	1302
<input type="checkbox"/>	2/2/2022	1305
<input type="checkbox"/>	1/19/2022	1121
<input type="checkbox"/>	2/18/2022	1124
<input type="checkbox"/>	2/18/2022	1125
<input type="checkbox"/>	2/18/2022	1127
<input type="checkbox"/>	2/18/2022	1136

Balances & Transactions

PINACLE® | PNC Overview

Bill Payments >

Reports > **Balances & Transactions**

Positive Pay >

Account Summary

Refresh

ACCOUNT ^	CURRENCY	PREVIOUS DAY LEDGER BALANCE
1000 - Checking (x0000 (Demo Data))	USD	999,065.69
1002 - Savings (x0002 (Demo Data))	USD	725,782.37
1004 - Payroll (x0001 (Demo Data))	USD	511,323.36

Transaction Reporting

1000 - Checking (x0000 (Demo Data))

Last Updated 15 minutes ago

PREVIOUS DAY BALANCES	INTRADAY BALANCES
LEDGER BALANCE: \$999,065.69	LEDGER BALANCE: \$365,420.23
AVAILABLE BALANCE: \$725,883.89	AVAILABLE BALANCE: \$303,842.16

FILTERS

FROM DATE: 4/13/2022 TO DATE: 4/14/2022

Refresh Export

SETTLED DATE	DESCRIPTION	CUSTOMER REFERENCE	BANK REFERENCE	BAI CODE	AMOUNT	POST DATE	DETAILS
4/14/2022 4:00:25 pm	ACH payment	06976948728c475959ea6a9982c5c306	429819c36e2b43f85e56880c2aa95744	231	(294,960.37)	4/14/2022 4:00:25 pm	View
4/14/2022 4:00:25 pm	ACH payment	346db742373642c0b4895c35e0644ad	e73db0b1494141e84241d238c0c7ba	141	(597,518.08)	4/14/2022 4:00:25 pm	View
4/14/2022 3:00:30 pm	Wire payment	0d782c1e811b4a6e9a7534025e5d53b7	449c2b3e66b3421f9a134800c386711b	294	334,999.72	4/14/2022 3:00:30 pm	View
4/14/2022 3:00:30 pm	ACH payment	bc177246bd444e41a91d22b15d4f79b	9ab437973e644b6fa051b477370ae7	747	894,448.20	4/14/2022 3:00:30 pm	View
4/14/2022 2:00:33 pm	Wire payment	ea65658396a4ca7887c5959d9b05b0	64db8bce430e40e39ac70c531082789	239	(319,479.21)	4/14/2022 2:00:33 pm	View
4/14/2022 2:00:33 pm	ACH payment	a7be301196a5407a87389754535a86c4	f57028968f2d4b9a8bca4a0c359a47	274	(734,904.73)	4/14/2022 2:00:33 pm	View
4/14/2022 1:00:41 pm	Wire payment	68c9d1c0b34b61828c3007961a05	a5970679fb46aa8b8e31e8015ba62d	210	972,131.05	4/14/2022 1:00:41 pm	View

*For illustrative purposes only.

TRANSFORMING YOUR ORGANIZATIONS TREASURY FUNCTIONS

EMBEDDED FINANCE DELIVERED

CASH STUDY: MORTGAGE BANKING FIRM CREATES VALUE FOR THEIR TEAMS

Challenge

- Implemented another application to process expenses and invoices
- Leveraged this solution for digital payments (ACH and virtual cards)
- Digital solution needed to automate integration for check processing

Solution

- Embedded Banking was an excellent solution
 - Embedded Banking solution in NetSuite® “calls” the approved invoices from another application
 - User selects the invoices to be paid via checks
 - Solution sends to Financial Institution’s consolidated payment platform to print checks and add to payee positive pay
 - Sends the check number and status to NetSuite®

Experience

- Financial institution provided the information, and the company installed the plug-in in NetSuite®
- Minimal paperwork was executed with the FI to begin back-end setup
- Initial testing, then end-to-end testing in sandbox environment over a few weeks
- Went live after testing and issue resolution

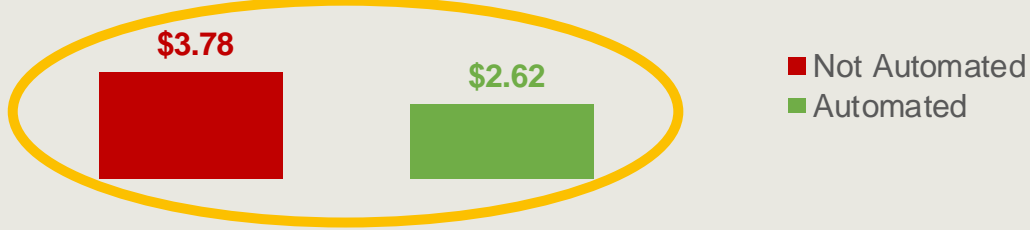
EMBEDDED FINANCE SOLUTIONS

CAN CONNECTORS CAN TRANSLATE INTO COST AVOIDANCE?

Automating the Payment Process

Cost Avoidance Example³

Average Processing Cost Per Payment¹

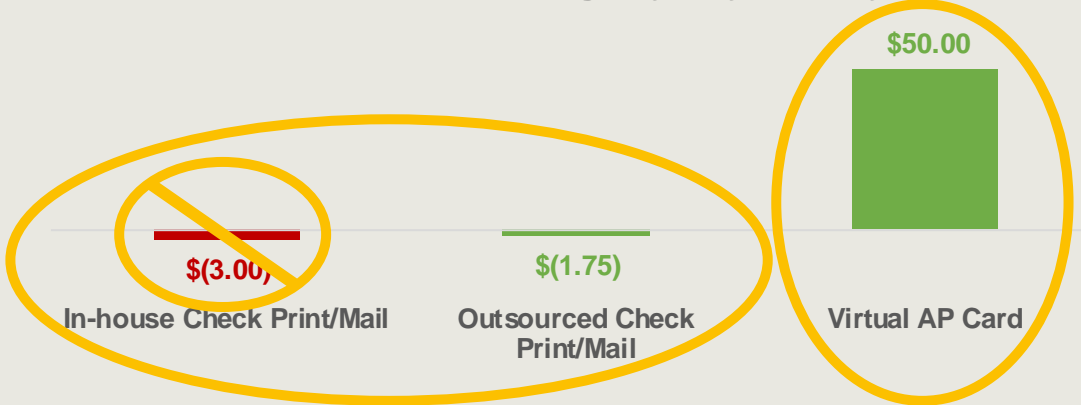


Payment Automation Savings: \$1.16
 x Payments: 10,000
 Savings Potential = **\$11,600**
 or ~ **30%**

Expanding Payment Options and Outsourcing

Cost Avoidance Examples³

Example of Savings by Payment Type²



Outsourced Check Print Savings: \$1.25
 x Checks: 9,000
 Savings Potential = **\$11,250**

Virtual AP Card Savings: \$53.00
 x Virtual AP Card Payments: 1,000
 Savings Potential = **\$53,000**

Total Savings Potential = \$64,250

¹ 2021 IOFM Maximizing Your Automation ROI. - Payables Benchmark Study Results
² Cost savings examples for illustrative purposes only. Virtual AP Card rebate only savings example based on following assumption: (Average Transactions size of \$5,000 with a rebate of 1%)
³ 2022 AFP Payments Cost Benchmarking Survey (rounded up estimated mean cost from \$2.98).

TAKEAWAYS



Embedded finance is the integration of financial services into a business's products, services, and processes, with a goal of placing banking services directly where and when they are needed



It can not only help businesses streamline internal operations and reduce costs, but also provide a differentiated experience for their customers



Embedded finance technology, such as platform connectors and APIs, are flexible and customizable



Businesses looking to implement embedded finance tools should consult financial institutions that have a demonstrated commitment to innovating through technology

FINAL THOUGHTS



Embedded finance market potential is large



Embedded finance can help you offer your customers great experiences while also developing new revenue streams



Embedded finance can help transform your organization's treasury functions, leading to increased back office operational efficiencies

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