



# TRANSFORMING CROSS-BORDER PAYMENTS: A BLUEPRINT FOR LEGACY ERP SYSTEMS

## Abstract

Cross-border payments can be expensive, slow, and opaque—especially when initiated from legacy ERP systems designed for batch processing and limited banking interoperability. Meanwhile, the industry is standardizing richer, structured payment data with ISO 20022, and regulators continue to raise expectations for AML/KYC controls, sanctions screening, and auditability.

This whitepaper outlines a pragmatic modernization blueprint for legacy ERP environments, particularly Oracle PeopleSoft Financials, based on an implementation of a bi-directional, host-to-host integration with a tier-1 global banking payments platform.

The solution enabled host-to-host payment initiation, using ISO 20022 standards, automated acknowledgments and status reporting, beneficiary-level tracking and automated accounting and reconciliation, including FX gain/loss and bank fee postings, in more than 114 currencies while significantly improving transparency, compliance, and the beneficiary experience. Key outcomes included reduced banking costs, improved regulatory adherence, faster settlement cycles, and scalable global operations. This transformation not only addressed the immediate needs of a large international financial institution but also serves as a blueprint for modernizing cross-border payment ecosystems across the industry.

# Table of Contents

Introduction	2
Navigating the Challenges and Complexities of Cross-Border Payments in Legacy ERP Systems	2
Achieving Digital Transformation in Cross-Border Payments Using Legacy ERP Systems	3
Infosys Solution for Streamlining Cross-Border Payments on PeopleSoft	4
Case Study: Financial Transformation for a Leading Global Financial Institution	5
Conclusion	6
About the Authors	7

## Introduction

Cross-border payments are the backbone of global trade and international development. However, they continue to be constrained by inefficiencies, risks, and limited transparency. Financial service providers are facing persistent challenges to modernize cross-border payments even while core ERP roadmaps remain phased or hybrid.

For PeopleSoft environments, modernization does not need to mean replacing the ERP. A focused program that modernizes bank connectivity and automates the full payment lifecycle—initiation, acknowledgments/status, exceptions, accounting, and reconciliation—can deliver value quickly while keeping PeopleSoft as the system of record.

## Navigating the Challenges in Legacy ERP-Based Cross-Border Payments

### 1. Fragmented Payment Infrastructure

Global payment corridors typically involve multiple intermediaries and disparate clearing and settlement mechanisms. This fragmentation creates:

- **Longer processing cycles** due to sequential validations, repairs, and handoffs across correspondent networks
- **Higher transaction costs driven** by intermediary fees, lifting charges, and unexpected deductions
- **Limited interoperability** that constrains real-time or near-real-time processing and reduces straight-through processing (STP)

### 2. Regulatory and Compliance Complexity

Cross-border transactions must satisfy heterogeneous regulatory requirements across jurisdictions, including:

- **Variable AML/KYC obligations**, which demand consistent, high-quality party and remittance data
- **Sanctions screening and data privacy mandates** that increase operational risk and investigation workload
- **Heightened exposure to penalties and reputational damage** when compliance evidence and audit trails are incomplete or inconsistent

### 3. Limited Transparency and Tracking

Traditional ERP-to-bank payment models often provide minimal real-time visibility for operations teams and beneficiaries, leading to:

- **Manual and reactive status inquiries** that consume time and increase exception handling
- **Limited beneficiary visibility** into payment progression, delays, and final confirmation, driving follow-ups and dissatisfaction
- **Delayed identification of rejects/returns**, increasing rework and extending resolution cycles

### 4. Currency and FX Exposure

Foreign exchange volatility introduces financial and operational complexity, particularly when execution timing differs from initiation:

- **Settlement and valuation mismatches** between initiation, conversion, and execution dates
- **Manual FX gain/loss and fee accounting** that slows close processes and increases reconciliation breaks
- **Inconsistent rate sourcing and controls**, which can create audit challenges and posting discrepancies

### 5. Constraints of Legacy ERP Systems

Organizations operating on older ERP platforms often face functional and architectural limitations that slow modernization, such as:

- **Limited automation across the end-to-end lifecycle** (initiation, acknowledgments, exceptions, accounting, and reconciliation)
- **Weak native support for modern banking standards** such as ISO 20022 messaging and API-enabled connectivity
- **Batch-oriented processing models** that restrict responsiveness to confirmations, status updates, and returns

## 6. Cybersecurity Risks

Cross-border payment flows are prime targets for fraud and cyber threats:

- **Insecure transfers and weak authentication** expose vulnerabilities that increase exposure to interception, tampering, or credential compromise
- **Insufficient segregation of duties and monitoring**, elevating internal and external fraud risk
- **Need for Robust security controls** including secure transport (e.g. SFTP), Payload encryption (e.g. PGP), strict access governance, and end-to-end audit logging

## Achieving Digital Transformation in Cross-Border Payments Using Legacy ERP Systems

Digital transformation in cross-border payments has evolved from an operational enhancement to a strategic necessity. Legacy execution models—typically reliant on manual uploads, fragmented integrations, and limited end-to-end status feedback—create structural bottlenecks that are no longer viable in an increasingly interconnected and regulated global economy. Sustainable modernization requires a holistic approach encompassing technology, process optimization, and compliance alignment.

### 1. The Imperative for Transformation

The drive to modernize cross-border payments is being accelerated by three converging pressures:

- Rising stakeholder expectations for faster settlement and real-time visibility into payment status and exceptions
- Industry and regulatory shifts, including ISO 20022 adoption and strengthened scrutiny of AML/KYC and sanctions screening
- Structural cost pressures, as banking fees, investigations, returns and manual rework materially affect operational overhead

### 2. Hallmarks of Digital Transformation

- **End-to-End Automation**  
Modernized models reduce reliance on manual interventions and processing. Host-to-host connectivity and structured status feedback loops support higher straight-through processing, with acknowledgments, returns, and reconciliation outcomes increasingly handled through defined workflows.
- **Standardization and Interoperability**  
Transformation is characterized by consistent, structured data exchange across corridors and banking partners. ISO 20022 enables richer, better-defined payment and party data, which improves downstream screening, reduces repair rates, and supports repeatable integrations. Interoperability becomes dependent on governed mappings and standardized validation rules.

- **Real-Time Transparency and Operational Control**  
A modern operating model provides real-time visibility into payment progression for beneficiaries. Status signals and exception alerts reduce the dependency on manual inquiries, while dashboards and alerts improve operational monitoring and provide proactive oversight for faster issue resolution.
- **Enhanced Security and Control**  
Secure file transmission (via SFTP), PGP encryption, strong authentication, access governance, and segregation of duties collectively mitigate exposure to fraud and cyber threats.
- **Intelligent Accounting and Reconciliation**  
Transformation extends beyond payment execution to financial integrity. Automated journals for principal movement, FX gain/loss, returns, and bank fees reduce reliance on manual calculations and improve close-cycle predictability. Statement-driven reconciliation reduces breaks and suspense balances, improving both control and efficiency.

### 3. Strategic Outcomes

- **Operational efficiency:**  
Higher straight-through processing (STP) reduces manual touchpoints, accelerates exception resolution, and improves end-to-end throughput.
- **Cost and FX optimization:**  
Better visibility into fees and FX impacts lowers unit costs, reduces rework, and strengthens financial control over cross-border spend.
- **Compliance and auditability:**  
Structured data and embedded controls improve screening effectiveness, strengthen evidence trails, and enhance audit readiness across jurisdictions.
- **Stakeholder experience:**  
Timely status visibility and fewer failures/returns increase predictability for internal teams and improve trust and satisfaction for beneficiaries.



# The Infosys Solution: Streamlining Cross-Border Payments on PeopleSoft

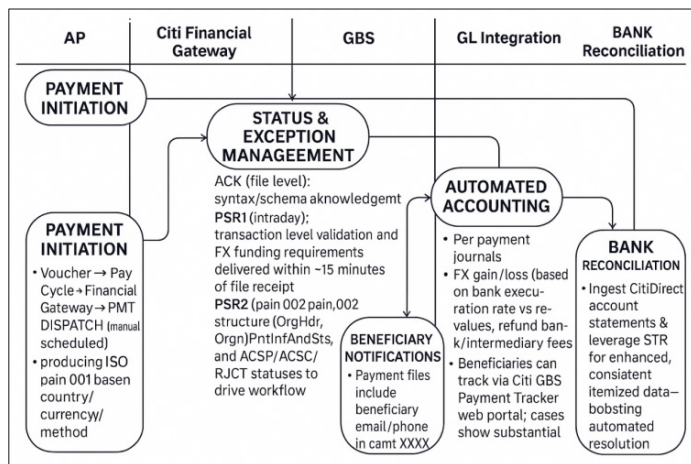
Organizations running PeopleSoft FSCM 9.2 often encounter fragmented bank integrations, limited payment-status visibility, manual reconciliations, and complex FX accounting in cross-border payment processing. In this program, the modernization objective was to move away from a one-way, USD-centric payment flow to a bi-directional, host-to-host integration, enabling a closed-loop operating model for end-to-end payments management.

The solution introduced automated ingestion acknowledgments and payment status reports (e.g., ACK/PSR1/PSR2 mapped to ISO 20022 status constructs), automated GL postings including FX gain/loss, and beneficiary tracking. Infosys delivered an integrated capability set leveraging PeopleSoft Financial Gateway, ISO 20022 message formats, API-enabled connectivity patterns, and straight-through reconciliation, enabling automation across the payment lifecycle—from voucher creation to beneficiary notification and bank-statement reconciliation.

The approach aligned with SWIFT's ISO 20022 migration milestones through November 2025. In addition, it anticipated evolving regulatory expectations, including India's draft RBI guidelines for faster inward remittances and near-real-time nostro reconciliation.

## 1. Solution Overview

- PeopleSoft Financial Gateway served as the orchestration layer for outbound payment dispatch, inbound acknowledgments/status, and bank-statement processing.
- ISO 20022 payment initiation (pain.001) and status reporting (pain.002) were configured and extended to support specific validation and processing requirements of the banking partner.
- Automated parsing and downstream accounting supported acknowledgments, exceptions, returns, and related financial postings.
- Beneficiary visibility enabled through notification and tracking service via secure email/SMS links.
- Reconciliation was supported through bank statement feeds and straight through reconciliation frameworks to reduce breaks and suspense balances.



## 2. Secure Connectivity and Formats

- Host-to-host SFTP connectivity was established using SFTP with SSH keys, PGP encryption, and IP whitelisting to strengthen transfer security and control.
- Outbound messages: pain.001.001.03
- Inbound messages: pain.002 based acknowledgements and status updates (ACK/PSR mapped to transaction and batch-level statuses)

## 3. Benefits and KPIs

- **Lower operational effort and bank costs** — fewer manual touchpoints, fewer investigations, and reduced avoidable fees.
- **Near real-time transparency** — improved visibility for operations teams and beneficiary self-service tracking through status updates.
- **Improved financial integrity** — automated FX accounting and reduced reliance on suspense postings through tighter lifecycle accounting controls.
- **Standards and compliance alignment** — improved readiness for ISO 20022-driven data expectations and evolving regulatory scrutiny.

## 4. Infosys Accelerators

- Preconfigured ISO layout packs for PeopleSoft
- Robust PSR ingestion and exception-handling framework
- Ready-to-use reconciliation templates leveraging straightthrough reconciliation templates



## Case Study: Cross-Border Payments Modernization for a Leading Global Financial Institution

A leading international financial institution responsible for promoting monetary cooperation, exchange-rate stability, and balanced global trade, undertook a transformation to modernize its cross-border payment operations.

The objective was to improve transparency, reduce manual effort, and expand currency reach while strengthening controls and financial integrity across the payment lifecycle.

### Key Challenges

- Manual, portal-based payment uploads and fragmented processing caused increased cycle times and errors.
- Cross-border payments were largely USD-denominated, creating dependency on conversions.
- Limited end-to-end real-time payment status visibility constrained operational oversight and delayed exception detection.
- FX gain/loss accounting and bank-fee reconciliation required significant manual intervention and heightened effort.
- Manual bank uploads and inconsistent controls increased exposure to security and fraud risks

### Infosys Engagement and Solution

Infosys, as the institution's managed services and transformation partner, delivered solution architecture, PeopleSoft FSCM 9.2 configuration, end-to-end integrations, testing, and rollout coordination with the integration partner.

### Key contributions included:

- Process standardization across finance and HR to improve consistency operational efficiency.
- Closed-loop automation for payment initiation and acknowledgments/status updates , improving throughput and exception handling.
- Elimination of manual workarounds through integrated workflows and standardized operational controls.
- Accelerated delivery through Infosys' proven delivery methodologies.

### Outcomes

- Standardized cross-border payment operations across global offices, improving process consistency and control.
- Lower banking fees per transaction through improved routing, standardization, and fewer manual interventions.
- expanded support for local-currency payments across 114 currencies, enabling broader corridor coverage.
- ~25% reduction in overall payment cycle time



## Conclusion

The modernization of cross-border administrative payments on a legacy PeopleSoft ERP platform demonstrates how organizations can move beyond manual, USD-centric, one-way payment models to a resilient, bidirectional, and standards-based global payment framework. By integrating PeopleSoft Financials 9.2 with the cross-border payments hub through ISO 20022-compliant, host-to-host connectivity, the solution delivered end-to-end automation, improved transparency, and strengthened financial control across 114+ currencies.

Closed-loop processing – enabled through real-time payment status feedback, automated exception handling, structured FX accounting, and straight-through reconciliation – replaced labor-intensive processes and improved alignment between bank execution and ledger balances. The beneficiary notification and tracking service further enhanced stakeholder experience through proactive notifications and secure, self-service visibility into payment progression.

This transformation establishes an industrial-grade, future-ready payments backbone—resolving immediate operational challenges while positioning organizations to scale, innovate, and deepen automation in subsequent phases of their digital finance transformation journey.



## About the Authors

### **Tarun Kassana**

*Industry Principal, Infosys*

*Tarun is an ERP specialist with over 19 years of experience in banking, financial services, and insurance (BFSI) and IT consulting. He specialises in leading finance transformation programmes and designing cloud roadmaps that align with clients' strategic goals — increasingly leveraging AI and intelligent automation to drive smarter outcomes. Tarun has a strong track record of delivering digital transformation initiatives that optimise processes, strengthen financial systems, and enable measurable business value.*

### **Sandeep Pai**

*Delivery Manager, Infosys*

*Sandeep is a seasoned Delivery Manager at Infosys with over 23 years of experience across the Oracle ecosystem. He manages a diverse portfolio of 20+ customers across the Americas and has successfully led multiple large-scale ERP transformation programs for global enterprises. His experience spans Oracle EBS, PeopleSoft, and Oracle Cloud applications across complex, multi-cloud environments. Sandeep specializes in delivering ERP-led transformation for financial services clients, leveraging advanced Oracle capabilities augmented with GenAI-driven optimizations to drive business value.*

### **Saurabh Shah**

*Principal Consultant, Infosys*

*Saurabh is an ERP Consultant with over 14 years of experience across financial institutions and IT consulting domains. He has led multiple end-to-end implementations, upgrades, and support engagements spanning the banking sector and financial services industries. His expertise covers core financial modules such as general ledger, accounts payable, expenses, and cash management. He also has deep knowledge of Peoplesoft People tools, reporting tools, and compliance frameworks.*

### **Veenu Agarwal**

*Senior Consultant, Infosys*

*Veenu is a senior PeopleSoft ERP Consultant with over 17 years of experience, specializing in upgrades, production support, and implementation projects across diverse industries such as banking, financial services, agriculture, staffing, and automotive. Her core expertise spans PeopleSoft Financials modules including General Ledger (GL), Accounts Payable (AP), Cash Management (CM), Purchasing (PO), Accounts Receivable (AR), and Billing (BI). She has successfully led complex projects involving system upgrades, performance tuning, and troubleshooting, ensuring seamless business operations and compliance.*

**Infosys Cobalt** is a set of services, solutions and platforms for enterprises to accelerate their cloud journey. It offers over 14,000 cloud assets, over 200 industry cloud solution blueprints and a thriving community of cloud business and technology practitioners to drive increased business value. With Infosys Cobalt, regulatory and security compliance, along with technical and financial governance comes baked into every solution delivered.

For more information, contact [askus@infosys.com](mailto:askus@infosys.com)

**Infosys**<sup>®</sup>  
Navigate your next

© 2026 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior permission of Infosys Limited and/ or any named intellectual property rights holders under this document.