FINANCIAL-SERVICES TECHNOLOGY

PayTech & Payments Modernization

Payment strategy, product, architecture, messaging, processing, fraud, treasury, clearing, settlement, reconciliation, data, and operating-model transformation.

CORE SIGNAL

Payments modernization succeeds when customer experience, message integrity, risk decisions, liquidity, processing, settlement, reconciliation, and service operations remain synchronized.

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PRACTICE AREA BRIEF • 10-PAGE EDITION

THE MANDATE

Why This Practice Matters

Payment ecosystems are becoming faster, richer in data, more open, and more connected. Institutions must modernize core processing while preserving resilience, fraud control, financial integrity, and customer trust.

EXECUTIVE QUESTIONS

1. **What customer and business outcomes justify modernization, and which payment rails and capabilities are required?**
2. **Can transaction state and meaning be preserved across channels, hubs, schemes, ledgers, and settlement?**
3. **How will fraud, sanctions, AML, authentication, and cyber controls operate at real-time speed?**
4. **What liquidity, reconciliation, exception, support, and recovery capabilities must change with the platform?**

WHO WE SUPPORT

- Banks and payment service providers
- Card issuers and acquirers
- FinTech and embedded-finance firms
- Treasury and transaction-banking teams
- Clearing, settlement, and network operators

FINANCIAL-SERVICES TECHNOLOGY

ENTERPRISE ADVISORY

THE CAPABILITY MAP

Six Capabilities That Define the Practice

A structured view of the business, technology, data, control, and operating-model capabilities required to execute reliably.

01 Payment Product & Journey

Design initiation, consent, authentication, status, exceptions, refunds, and customer communications.

02 Processing & Orchestration

Control routing, validation, enrichment, workflow, retry, idempotency, and service levels.

03 Messaging & Interoperability

Modernize schemas, identifiers, APIs, ISO 20022, translation, and network connectivity.

04 Fraud, Financial Crime & Security

Integrate authentication, fraud scoring, sanctions, AML, cyber, and case workflows.

05 Clearing, Settlement & Treasury

Manage positions, liquidity, fees, netting, funding, finality, and correspondent relationships.

06 Reconciliation & Operations

Align transaction state, general ledger, suspense, disputes, investigations, and service ownership.

THE PROBLEM LANDSCAPE

Where Institutions Lose Control

The recurring failure patterns that create operational risk, delivery friction, hidden cost, and weakened executive confidence.

01 Front End Ahead of Core

Real-time customer promises are built on batch processing, manual exceptions, and delayed status.

02 Message Translation Loss

Data meaning changes across channels, schemes, hubs, ledgers, and legacy formats.

03 Duplicate and State Ambiguity

Retries and timeouts create unclear transaction status, duplicate risk, and customer confusion.

04 Fraud-Control Friction

Risk controls either block legitimate activity or allow speed to outpace detection and response.

05 Liquidity Blindness

Faster settlement increases the importance of intraday positions, funding, limits, and forecasting.

06 Reconciliation as Recovery

Breaks are detected after value moves because state, event, and accounting models are not aligned.

MDMI DIAGNOSTIC LENS

We follow the payment instruction and economic value across channel, identity, message, risk, processing, ledger, clearing, settlement, reconciliation, and customer resolution.

THE ADVISORY OFFER

What MD Market Insights Delivers

Modular services that can be deployed independently or combined into a sequenced transformation program.

01 Payments Strategy & Target Architecture

Define product priorities, rails, core capabilities, platform options, economics, and roadmap.

02 Real-Time Payments Transformation

Design processing, fraud, liquidity, notifications, exceptions, operations, and resilience.

03 ISO 20022 & Messaging

Develop canonical models, mappings, enrichment, coexistence, controls, and data-use cases.

04 Payment Hub & Orchestration

Define routing, workflow, APIs, state management, integration, and operating ownership.

05 Fraud & Financial-Crime Integration

Connect authentication, scoring, screening, investigations, holds, release, and learning.

06 Settlement, Reconciliation & Operations

Redesign liquidity, ledger, clearing, suspense, disputes, investigations, and service MI.

THE SYSTEM VIEW

From Strategy to Controlled Execution

The practice is designed as an end-to-end system: decisions, workflows, platforms, data, controls, and outcomes must operate as one chain.

Customer Instruction → Identity & Consent → Message & Validation → Risk & Routing → Ledger & Clearing → Settlement & Reconciliation → Service & Insight

FOUNDATION 01

Canonical payment, party, account, and status data

FOUNDATION 02

High-availability processing, APIs, messaging, state, and observability

FOUNDATION 03

Fraud, AML, cyber, liquidity, accounting, dispute, and resilience controls

Governance · Controls · Traceability · Ownership · Evidence

THE MDMI METHOD

A Six-Phase Path from Ambition to Adoption

A disciplined method that converts executive intent into implementable decisions, tested capabilities, operational readiness, and measurable value.

1

Discover

Frame the mandate, stakeholders, scope, constraints, and decision rights.

PAYMENT VISION

2

Diagnose

Baseline processes, platforms, data, controls, pain points, and root causes.

FLOW BASELINE

3

Design

Define target capabilities, architecture, workflows, controls, and requirements.

ARCHITECTURE BLUEPRINT

4

De-risk

Validate feasibility, dependencies, regulatory obligations, and transition exposure.

CONTROL DESIGN

5

Deliver

Coordinate build, integration, testing, cutover, governance, and adoption.

MIGRATION DELIVERY

6

Demonstrate

Evidence outcomes through KPIs, controls, traceability, and continuous improvement.

OUTCOME DASHBOARD

THE WORK PRODUCT

Decision-Grade Artifacts, Not Shelfware

Every artifact is designed to drive a decision, control execution, transfer knowledge, or evidence an outcome.

Payments capability map
DELIVERABLE 01

End-to-end payment flows
DELIVERABLE 02

Canonical payment data model
DELIVERABLE 03

ISO 20022 mapping catalogue
DELIVERABLE 04

Payment-hub requirements
DELIVERABLE 05

Transaction-state model
DELIVERABLE 06

Fraud and compliance control design
DELIVERABLE 07

Liquidity and settlement model
DELIVERABLE 08

Reconciliation framework

Exception and dispute workflow

Migration and cutover plan

Payments KPI dashboard

EXECUTIVE STEERING | DESIGN AUTHORITY | DELIVERY GOVERNANCE | RISK & CONTROL | ADOPTION & VALUE

THE VALUE CASE

Representative Use Cases and Success Measures

Illustrative applications showing how the practice converts complex institutional problems into controlled, measurabl

01 Real-Time Payment Launch

Build immediate initiation, processing, fraud, liquidity, notification, exception, and support capabilities.

02 ISO 20022 Migration

Preserve meaning, enrich data, manage coexistence, test interoperability, and control translation.

03 Payment Hub Consolidation

Centralize routing and orchestration while rationalizing channel and core integrations.

04 Cross-Border Payment Modernization

Improve transparency, tracking, fees, FX, correspondent routing, screening, and reconciliation.

SUCCESS MEASURES

- Payment success rate
- End-to-end processing time
- Duplicate rate
- Fraud loss and false positives
- Straight-through processing
- Liquidity forecast accuracy
- Reconciliation breaks
- Customer resolution time

BUILD THE NEXT MOVE

Turn Complex Change into Controlled Execution.

MD Market Insights helps payment organizations modernize the entire value chain - integrating product, processing, data, fraud, treasury, settlement, operations, resilience, and customer outcomes.

OPTION 01

Diagnostic Sprint

Rapid baseline, critical risks, priority decisions, and a sequenced action plan.

OPTION 02

Advisory Workstream

Focused design or delivery support for a defined capability, platform, or control domain.

OPTION 03

Transformation Partner

End-to-end support from strategy and architecture through implementation and adoption.

MD MARKET INSIGHTS

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Advisory · Consulting · Capability Development