

SPECIALIZED & EMERGING ADVISORY

Space Payments Infrastructure

Future-oriented advisory for payment, treasury, identity, connectivity, settlement, resilience, and governance infrastructure supporting commercial activity beyond terrestrial networks.

CORE SIGNAL

Space commerce will require payment infrastructure designed for intermittent connectivity, long latency, autonomous operation, constrained identity, jurisdictional complexity, and delayed reconciliation.



THE MANDATE

Why This Practice Matters

As orbital, lunar, and deep-space economic activity expands, conventional real-time payment assumptions may no longer hold. Infrastructure must tolerate communication gaps while preserving authorization, value limits, auditability, and...

EXECUTIVE QUESTIONS

- 1 Which space-commerce scenarios require payment, escrow, metering, collateral, or autonomous economic decisions?
- 2 How can authorization remain safe when balances, revocations, and risk signals arrive late?
- 3 What identity and evidence are required for humans, devices, vehicles, habitats, and autonomous agents?
- 4 How will divergent local records reconcile to terrestrial money, accounting, legal rights, and final settlement?

WHO WE SUPPORT

Space and satellite companies

Banks, payment firms, and FinTechs

Government and space agencies

Telecommunications and network providers

Insurers, logistics, and infrastructure investors

EMERGING ADVISORY

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 Use-Case Architecture

Define commerce scenarios, actors, instruments, value flows, timing, and risk boundaries.

02 Disconnected Authorization

Design offline or delayed decisions using credentials, limits, policies, escrow, and local evidence.

03 Identity & Trust

Establish device, human, organization, mission, and asset identity under constrained connectivity.

04 Settlement & Reconciliation

Coordinate local ledgers, terrestrial rails, netting, FX, collateral, finality, and conflict resolution.

05 Network & Resilience

Engineer store-and-forward messaging, delay tolerance, redundancy, cyber controls, and recovery.

06 Governance & Jurisdiction

Address legal entity, contract, sanctions, tax, insurance, dispute, and multi-jurisdiction questions.

THE PROBLEM LANDSCAPE

Where Institutions Lose Control

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



01 Always-On Assumptions

Conventional payment designs depend on continuous connectivity and immediate central authorization.

02 Latency Changes Risk

Long delays make balances, limits, revocation, fraud response, and finality harder to coordinate.

03 Identity in Motion

People, devices, spacecraft, habitats, and autonomous agents require trustworthy changing credentials.

04 Ledger Divergence

Local economic records can conflict with terrestrial systems after disconnection or message loss.

05 Jurisdiction Unclear

Contracting, currency, sanctions, liability, taxation, and dispute rules may span multiple regimes.

06 Mission-Critical Coupling

A payment failure may interrupt life-supporting supply, access, energy, communications, or logistics services.

MDMI DIAGNOSTIC LENS

We redesign the payment trust model for delay: who may authorize what, under which limits, using which evidence, until global reconciliation is restored.

THE ADVISORY OFFER

What MD Market Insights Delivers

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



01

Space-Commerce Use-Case Strategy

Define priority scenarios, actors, economics, infrastructure dependencies, and development roadmap.

02

Delay-Tolerant Payment Design

Develop authorization, messaging, balances, limits, escrow, retry, and eventual-settlement patterns.

03

Identity & Credential Architecture

Design credentials for people, devices, autonomous systems, missions, and organizations.

04

Treasury & Settlement Model

Address funding, liquidity, FX, collateral, netting, accounting, and terrestrial settlement.

05

Resilience & Cyber Controls

Design redundancy, cryptographic trust, anomaly handling, revocation, recovery, and forensic evidence.

06

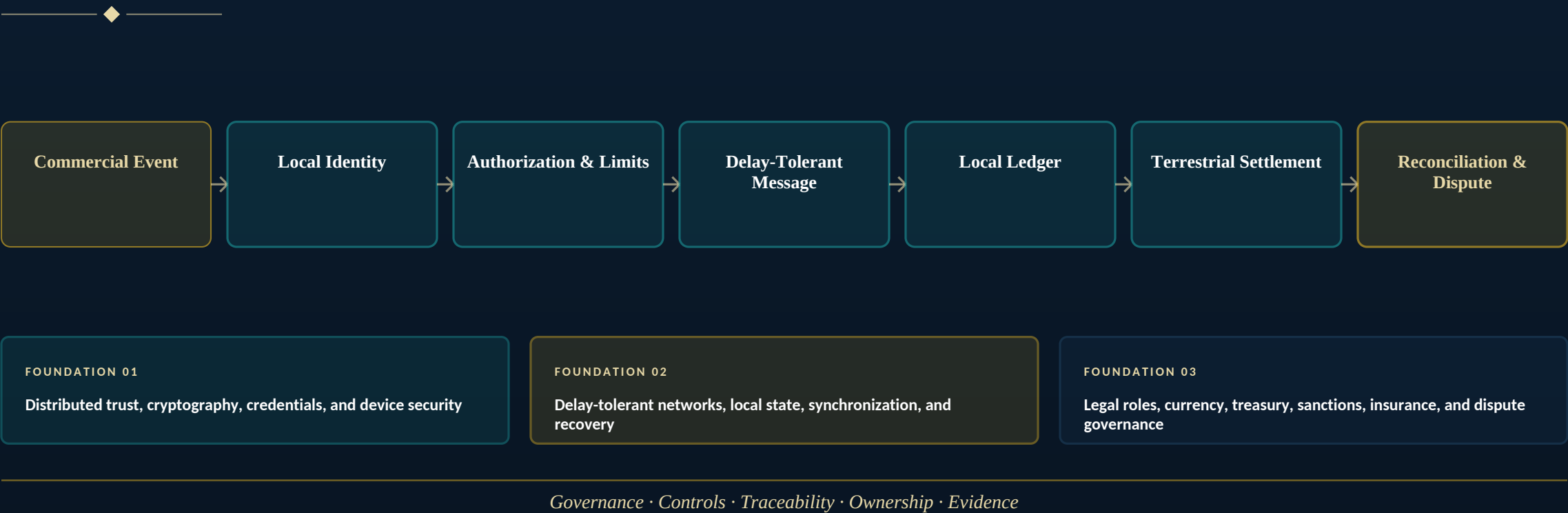
Governance & Ecosystem Blueprint

Clarify roles, standards, legal questions, partnerships, pilots, and institutional readiness.

THE SYSTEM VIEW

From Strategy to Controlled Execution

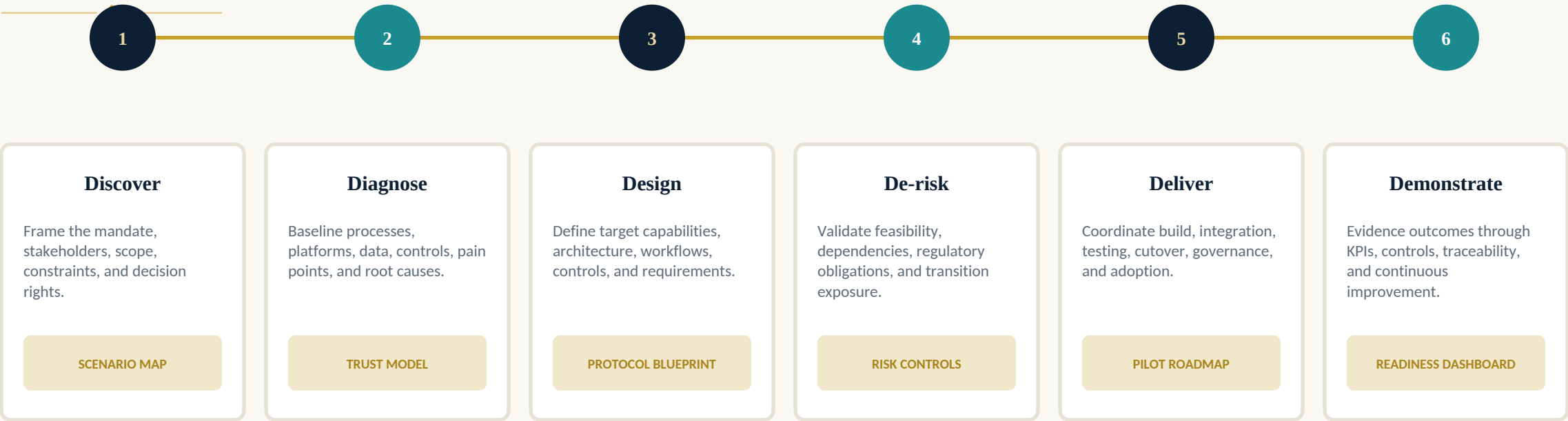
The practice is designed as an end-to-end system: decisions, workflows, platforms, data, controls, and outcomes must operate as one chain.



THE MDMI METHOD

A Six-Phase Path from Ambition to Adoption

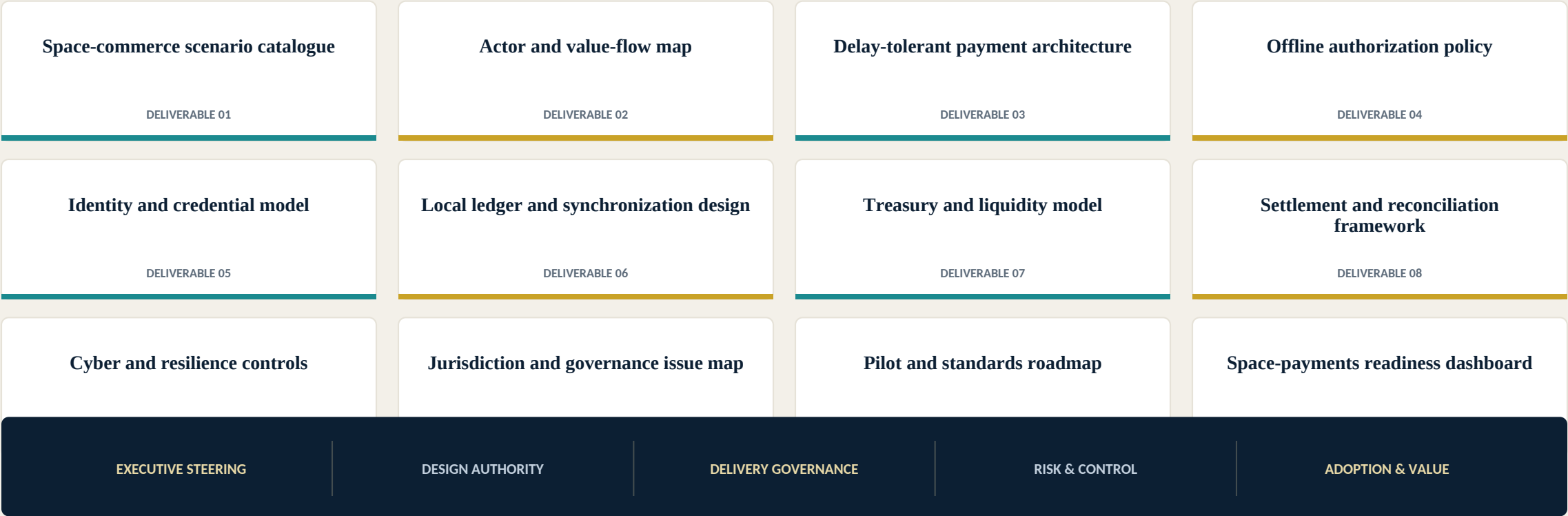
A disciplined method that converts executive intent into implementable decisions, tested capabilities, operational readiness, and measurable value.



THE WORK PRODUCT

Decision-Grade Artifacts, Not Shelfware

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



THE VALUE CASE

Representative Use Cases and Success Measures

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



01

Orbital Service Marketplace

Enable metered communications, compute, imagery, logistics, repair, and data services across intermittent links.

02

Lunar Habitat Payments

Support controlled local commerce, resource allocation, access, and supply settlement with delayed Earth connectivity.

03

Autonomous Machine Procurement

Allow vehicles or robotic systems to purchase energy, bandwidth, parts, or services within delegated limits.

04

Mission Escrow & Milestone Settlement

Release value against cryptographically evidenced mission events, delivery states, or service performance.

SUCCESS MEASURES

Authorized offline value

Reconciliation accuracy

Message-delivery reliability

Credential validation rate

Limit-breach containment

Settlement latency

Dispute resolution time

Service continuity

BUILD THE NEXT MOVE

Turn Complex Change into Controlled Execution.

MD Market Insights frames space payments as critical financial infrastructure - joining payments expertise with systems architecture, resilience, risk, identity, treasury, and future market design.

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.

