Cultivating Modernization Through Reuse: An API First Approach

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Jonathan Pearl serves as the Executive Director and Global Head of Technology Product Management for Enterprise Information Delivery at BNY, where he plays a pivotal role in shaping the technology landscape that underpins the organization's operational success. With a robust background in enterprise application development and technology product management, Jonathan is at the forefront of driving digital transformation initiatives that enhance client and partner experiences.

Promote reuse to reduce cost, simplify complexity, and increase speed to market with new products and services.

Why Reuse?

Thousands of decisions through the lifetime of a program / project.

Hundreds of decisions monthly.

Dozens of decisions daily.

Expected Outcomes

- Revenue Growth
- Reduced Friction
- Improved Operational Efficiency
- Risk Reduction
- Enhanced Client Experience
- Operating Leverage
- Improved Control Coverage
- Margin Expansion

APIs Unlock Reuse

DELIVERING:

- Quicker speed to market and expanding access to data and enterprise utilities.
- Controlling access to data and preventing unintended loss.
- Creating additional revenue stream opportunities.

API GROWTH

18x

Increase in internal API calls demonstrates that internal systems are talking to each other in a structured way.

9x

Increase in external API calls as clients request and consume more.

Key Components

Build

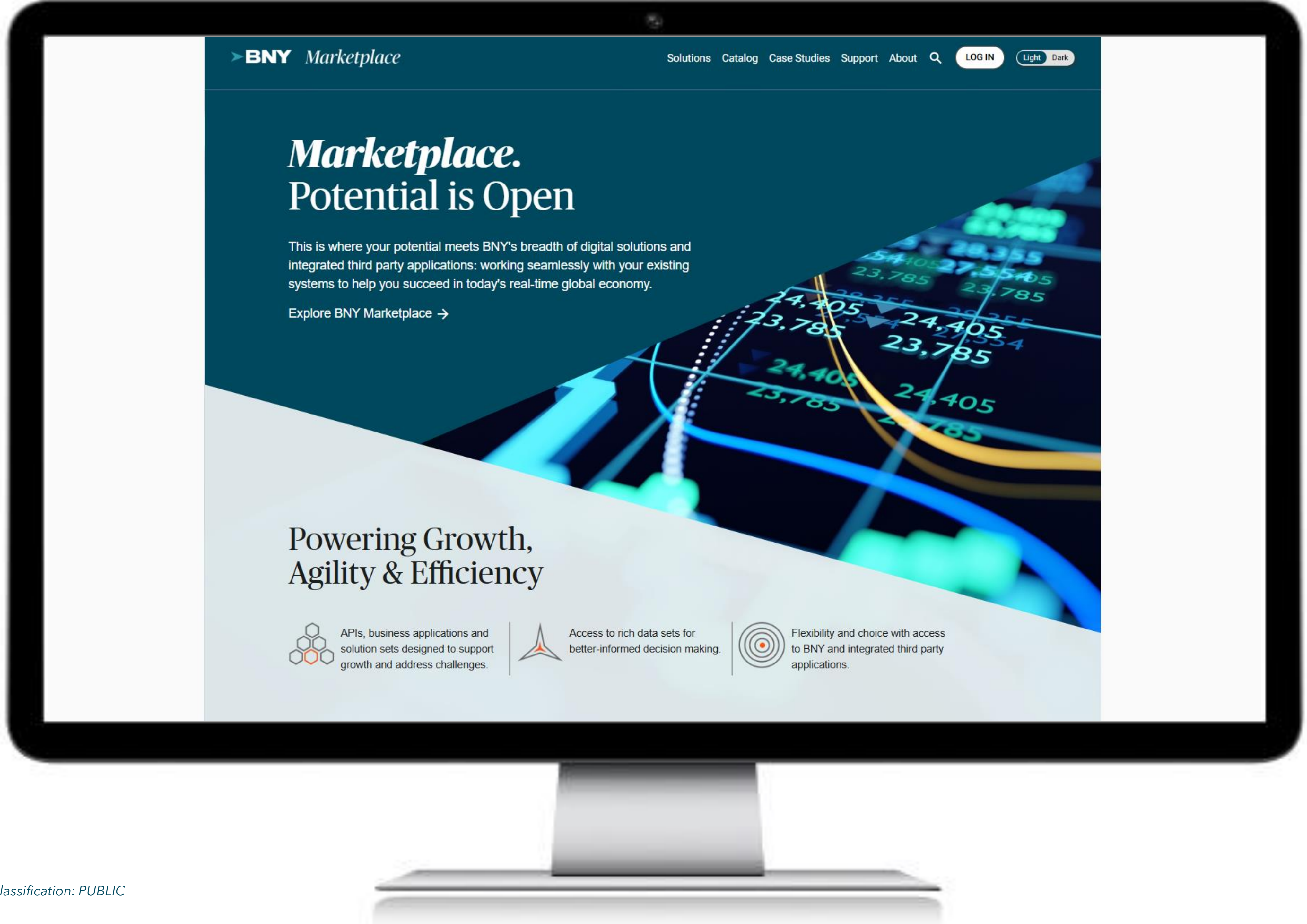
Self-service, standards driven set-up and onboarding for engineers to create, configure and publish APIs.

Discover

Secure, easy one-stop shop for users to browse, discover and subscribe to APIs.

Run

Run-time Control – where API requests and responses are managed.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Access to rich data sets for better-informed decision making.
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Expectations

Discover

Can you solve my business problem?

Learn

Can I easily understand the capabilities, integration requirements and operational processes?

Build

Can I build an MVP quickly and inexpensively?

Sales and Adoption Cycles Have Evolved

TRADITIONAL		MODERN
Reputation & consulting network	**Awareness**	Referrals
Request for proposal	**Interest**	Access sandbox or documentation
Responding to RFP & negotiation	**Consideration**	Build working app or contact enterprise sales
Continued conversations with prospective clients	**Evaluation**	Use product in a limited way or in testing
Integration & project management	**Buy**	Pay as you go, subscription or enterprise

KEY TAKEAWAYS

- For many customers working with APIs the decision to choose one provider over another is in the hands of their developers.
- API platforms need to be easy to use and understand without having to speak to sales.
- Website documentation is developer or expert focused and allows a prospect or client to try the service before they buy.

The time to first transaction can be as little as a few hours, and to operating at scale in just a few days.

Persona Based Approach

Stage	Targeted Persona(s)	Needs/Questions	Features of Good
Discover and Evaluate	• Business Head • Product Manager	• **Is this of use to me?** • *Could it solve my problem?* • *Will it meet my needs?* • *Are there any red flags?*	• User-friendly Design • Intuitive navigation • Product descriptions • Use cases • Logins/Accounts • Community
Learn	• Product Manager • Client Developer	• **How does it work?** • *Time to "Hello World"* • *Are the docs a good experience?*	• Quickstart guides • Well organized technical documentation • Code Samples (w/ mocking ability) • Collections • Pricing
Build	• Client Developer	• **Can I build a proof of concept?** • *Speed to MVP?* • *Is the product a good experience?* • *How do I get support?*	• API Playground/Sandbox • Extensions • Clear and market-aligned API policies • Changelogs
Scale	• Product Manager • Client Developer	• **Can I build it to scale?** • *Can I do more?* • *How do I offer feedback?*	• SLAs • Product breadth (Engineering) • Partner programs • Analytics
Internal Development Platform	• Internal Developers & Designers	• **Can I enable a good experience?** • *How do I design good product features at speed/scale?* • *How do I ensure standards are met?*	• Linters • Docs generation • Service registry • Gateway • Monitoring and logging

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API First Governance

Disciplined process with tailored governance at every level on 'Buy vs Build vs Reuse' of capabilities

Design

Portfolio Review | Evaluate | Purchase | Build

Shared Services & Capability Reuse

Ensure new and continuing programs maximize reuse of Shared Services capabilities.

Third Party Software

Eliminate duplicate 3rd Party products by consolidating to Standard Product List.

Return to Planning

Microservices & API Reuse

Identify new opportunities for Microservices and API reuse.

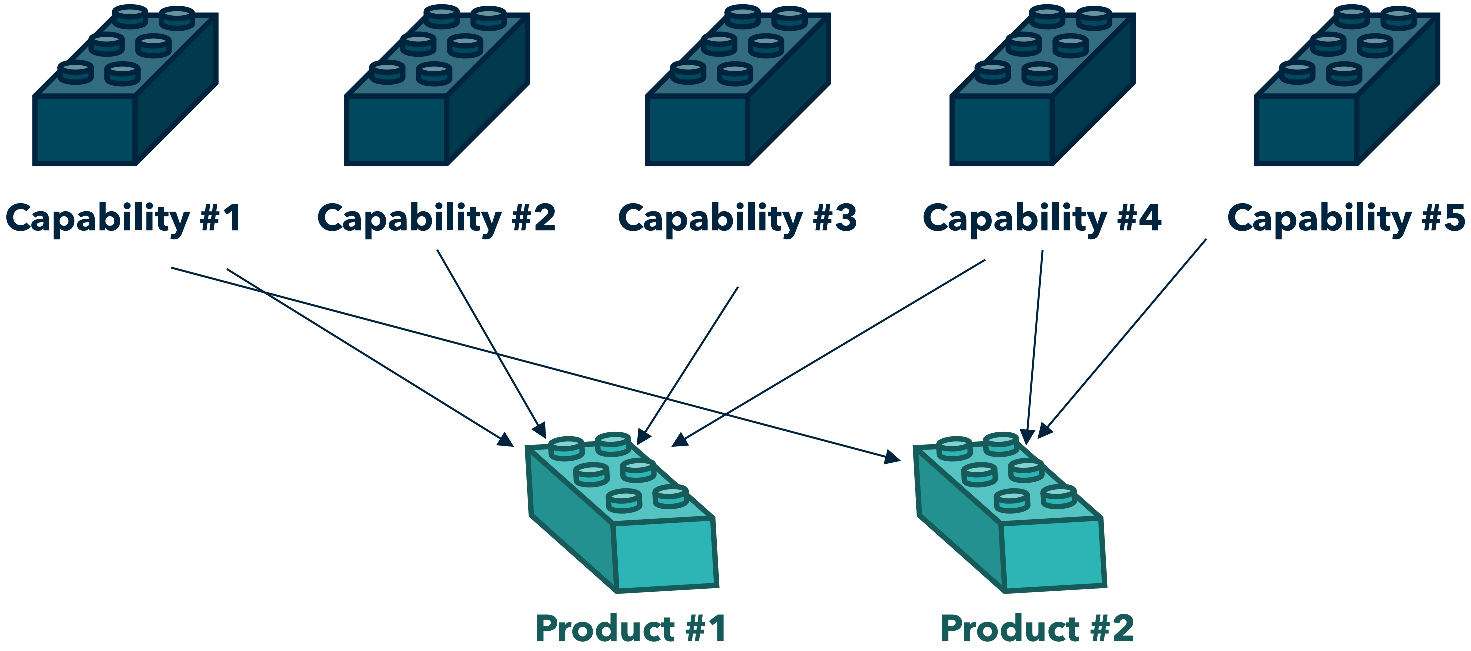
Return to Design

An API First approach drives application modernization and reuse.
Monoliths are refactored into common capabilities for reuse as Shared Services, followed by decomposition into Microservices.

Product Development

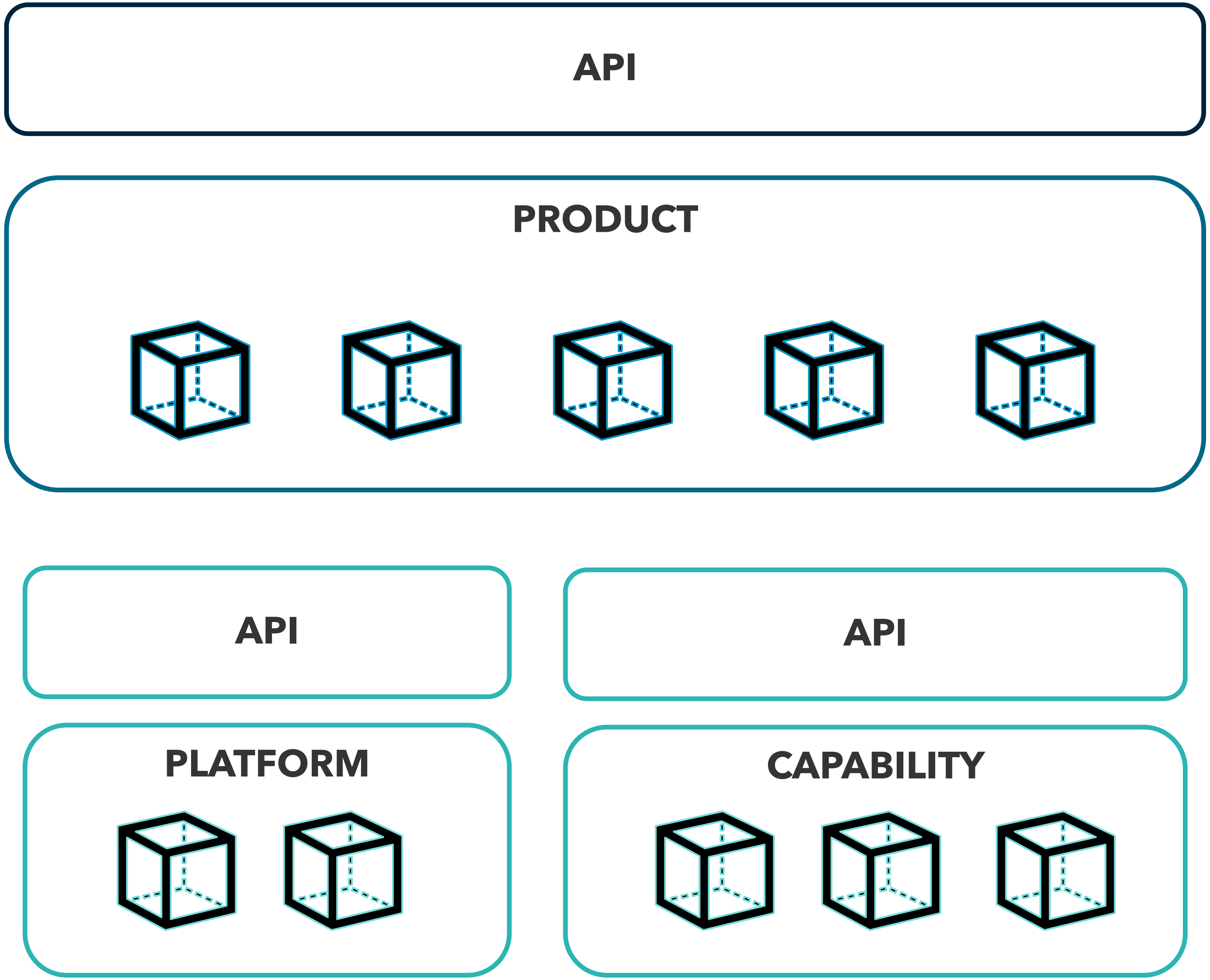
Highly governed design; ISO/standards-based APIs

Standards based??

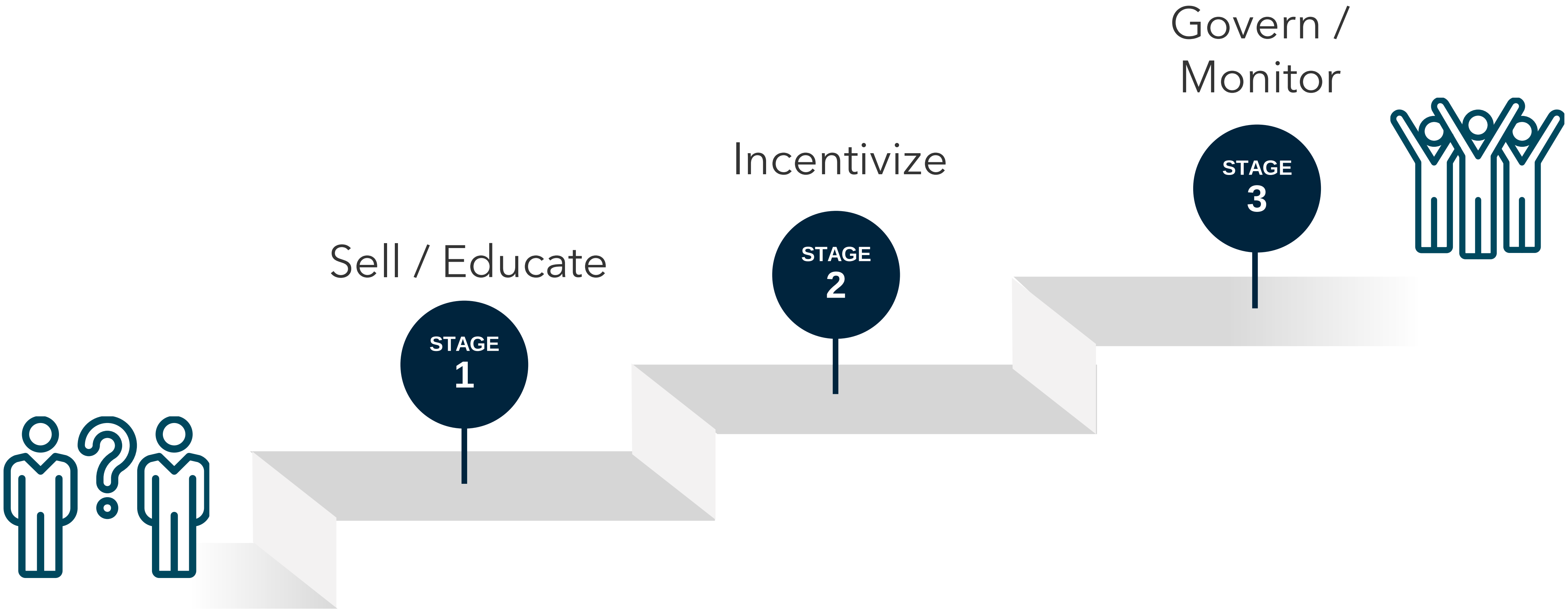


Consumed by product teams, clients and partners.

Consumed by clients and partners.


API
PRODUCT
API
API
PLATFORM
CAPABILITY

It’s a journey……



Sandbox Strategy is key; and a challenge

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Service Maturity Scoring

More mature = more adoption

Business Fit

API Readiness

Data Management

Onboarding Ease/ Ease of Adoption

Product Maturity

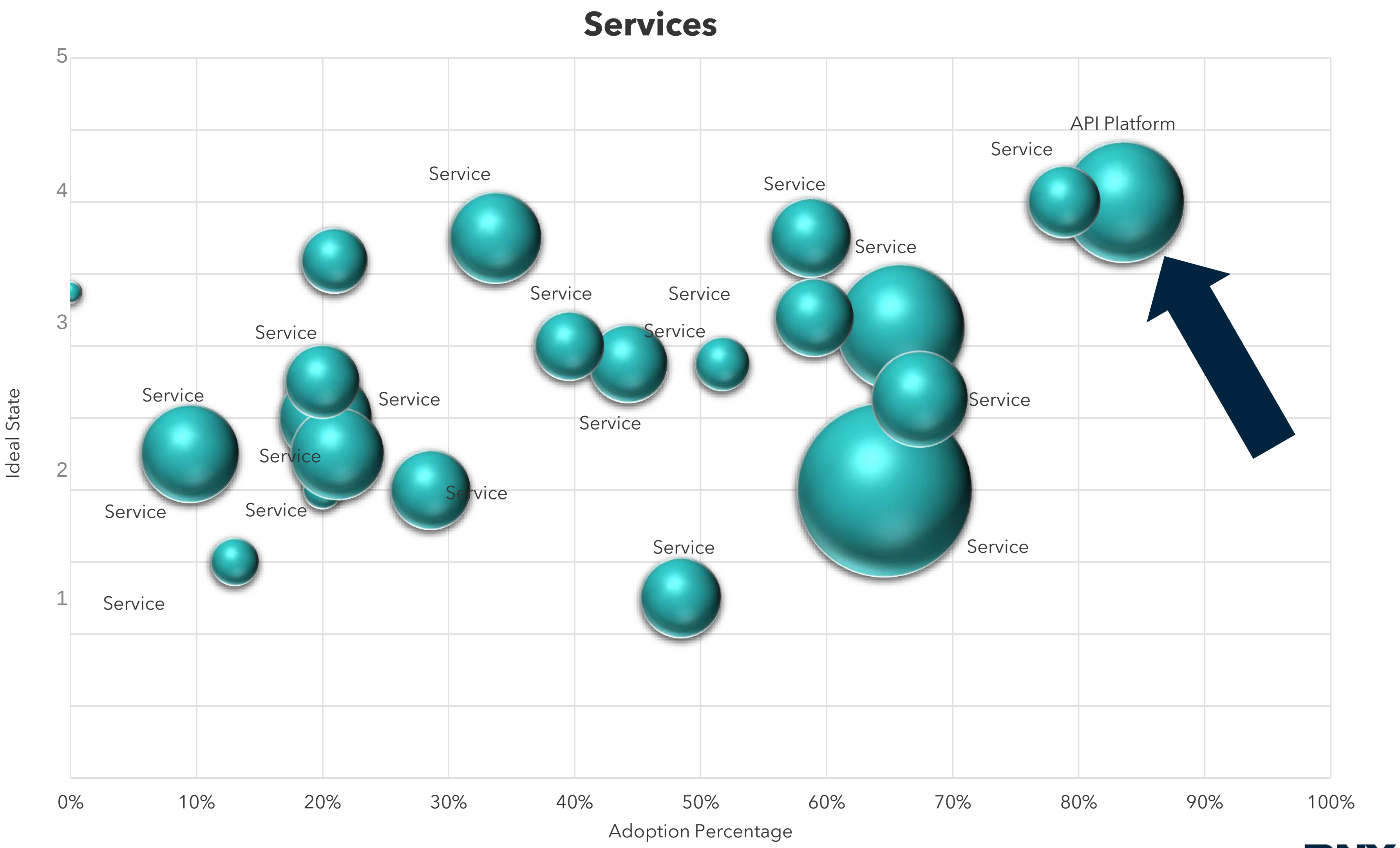
Technical Agility

Scalability

Resiliency

Security

Standards



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Breaking Down Silos

Driving innovation, efficiency, product development / enrichment

Borderless Integration

> Ambition is a platform where our clients can't separate where our technology, products and services end and theirs begin.

What about AI?

Enrich LLMs with core business and client data via existing APIs.

Increased ROI

LLMs represent another channel to leverage your investment in well designed and protected APIs accessing core business and client data.

Entitlement & Rights Management

The “closed loop” ecosystem delivers built in data access control.

Real-time Access to Business Data & Capabilities

Enrich models with real-time data and the ability to enter / modify transactions.

- **Fintech Mentality**
- **Domain Specific Models**
- **Data Loss Protection**
- **Investment Control**

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