

Sharing the Right Data at the Right Time: How to Successfully Implement a Smart Data Fabric Integration

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How to Successfully Implement a Smart Data Fabric Integration

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Rajib Nandi is a seasoned technology leader with over two decades of experience in the financial sector, including Asset Management, Capital Markets, and Corporate Banking. As the Head of Data and Analytics at Harris Associates and Oakmark Funds, Rajib spearheads data and technology initiatives that enhance organizational value and client experiences. Previously, Rajib held senior tech positions at CIT and Bank of America.

Harris | OakmarkSM

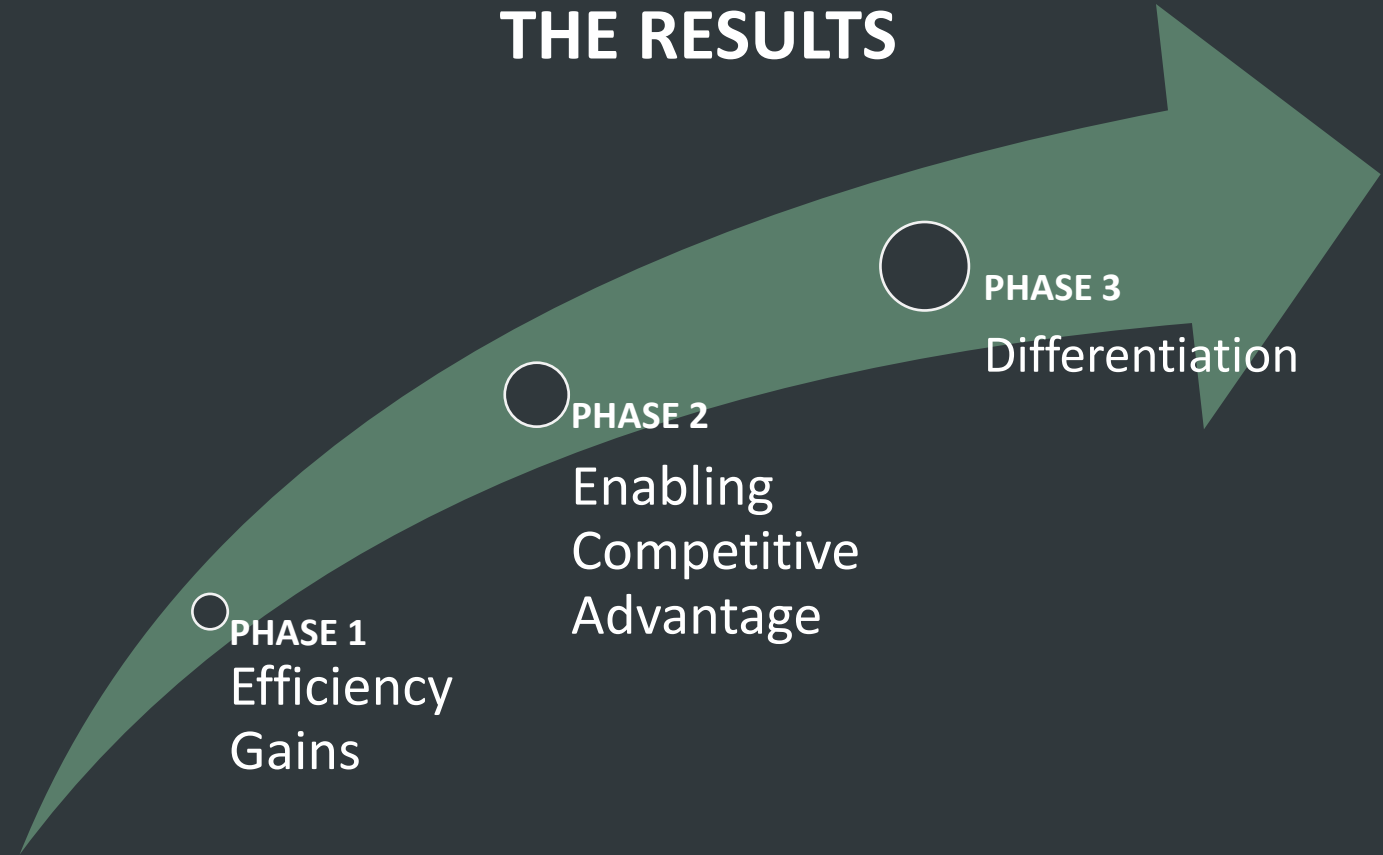
Harris Associates is an active investment management firm with high conviction investment philosophy covering Domestic, International, Global Equity Strategies and Fixed Income Strategies. Harris is an investment advisor to Oakmark Funds and part of Natixis group with \$1.3 trillion in assets under management as of March 31, 2024.

Unlocking the True Potential of Data in Asset Management

Enabling data-driven decision making in business areas such as sales, marketing, operations, investment management, risk management, requires a single source of truth from multiple internal and external data sources

To achieve this, Harris Associates implemented a new approach to data

THE RESULTS



The Challenge of Disparate Data



Timeliness



Consistency

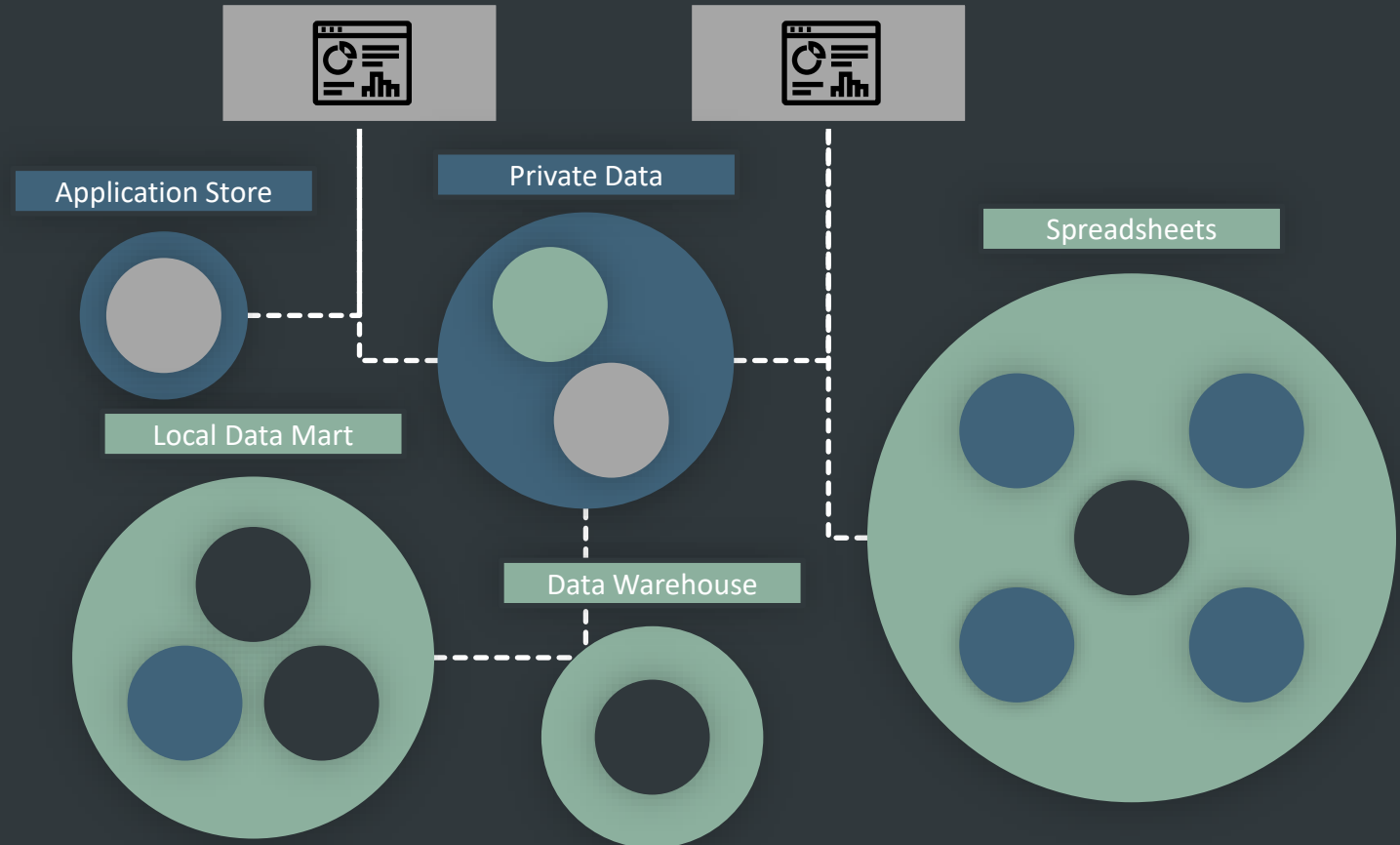


Business Value

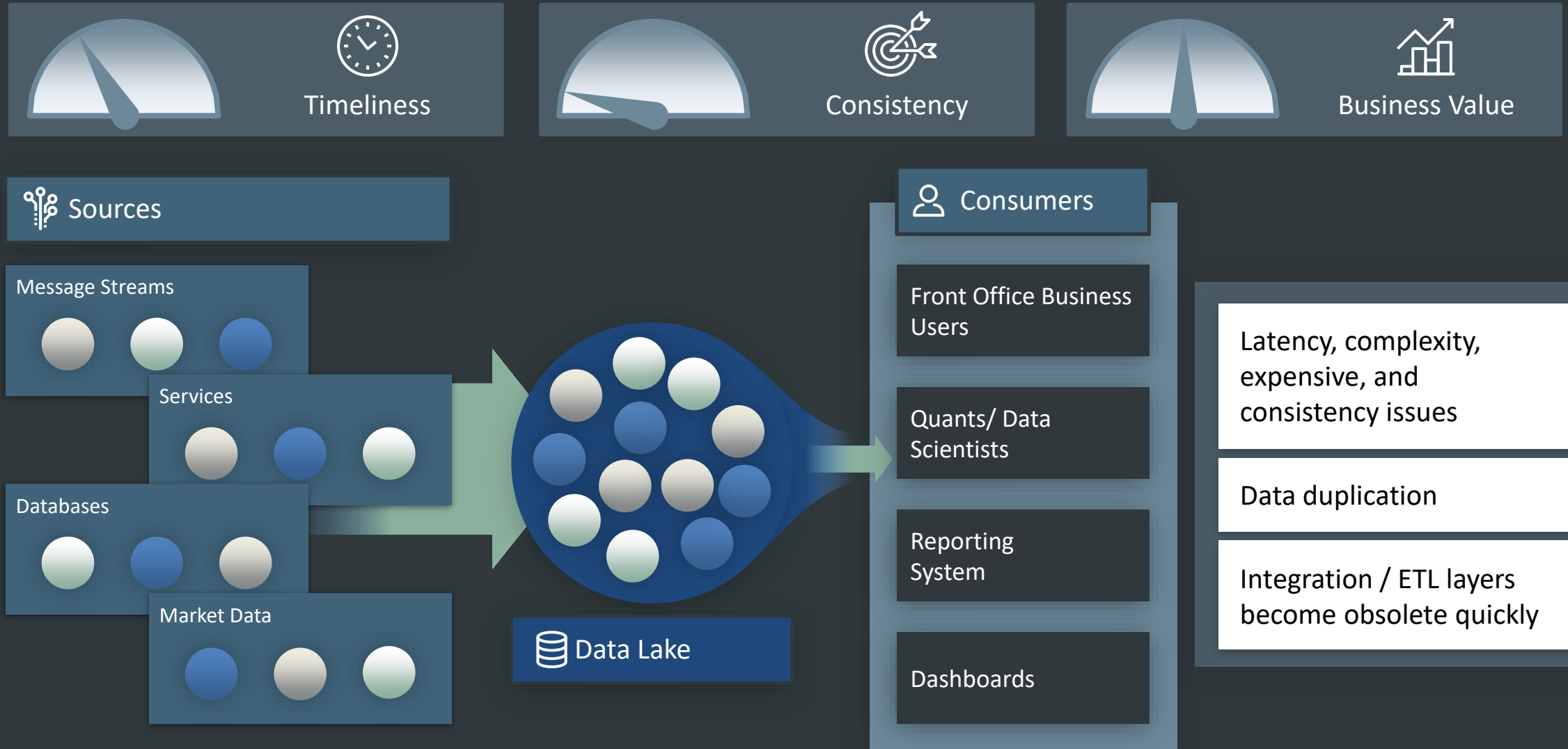
Most Financial Services firms have disparate datasets

Aggregating data from different sources is even more challenging with higher volumes of data

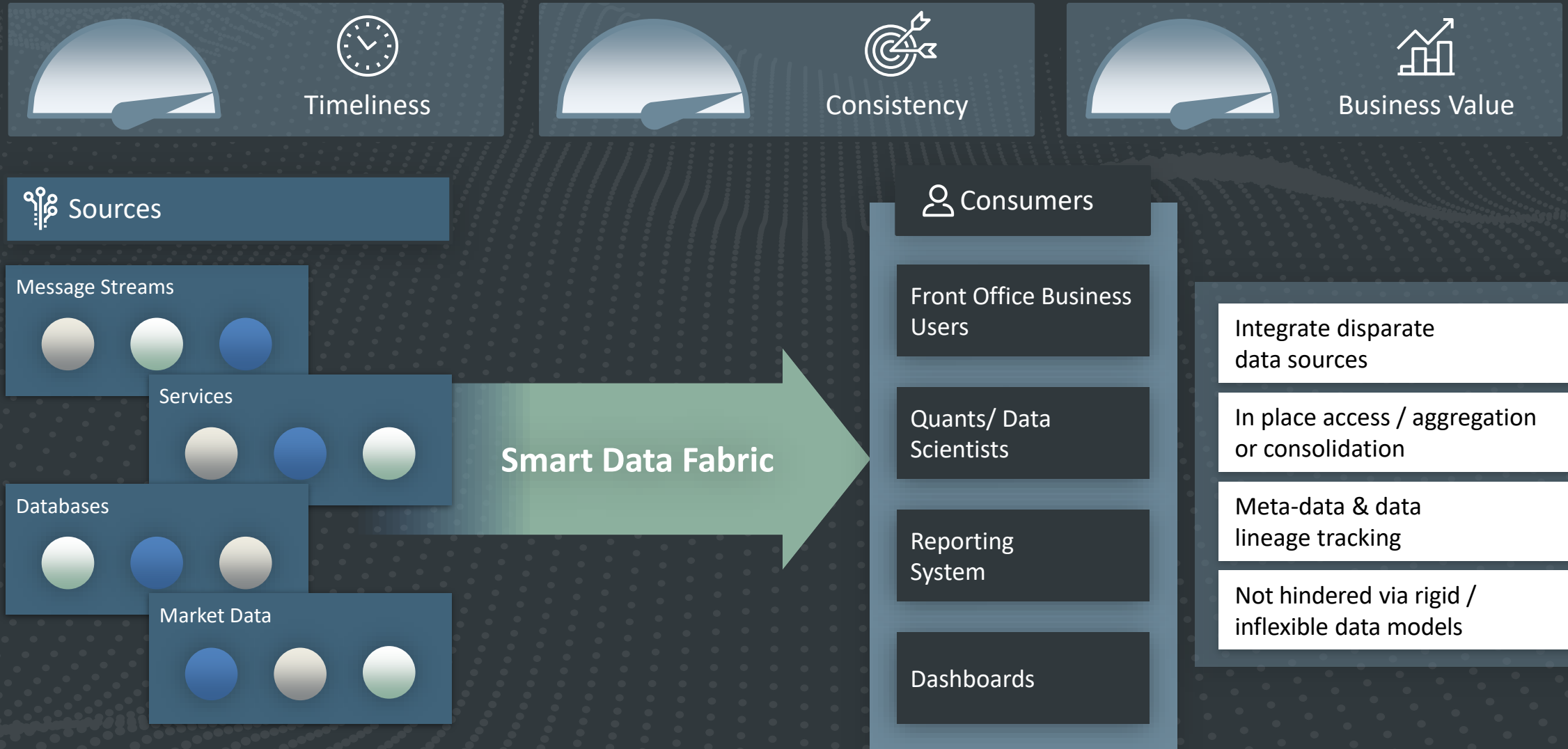
Real-time decision making is the key to a competitive edge



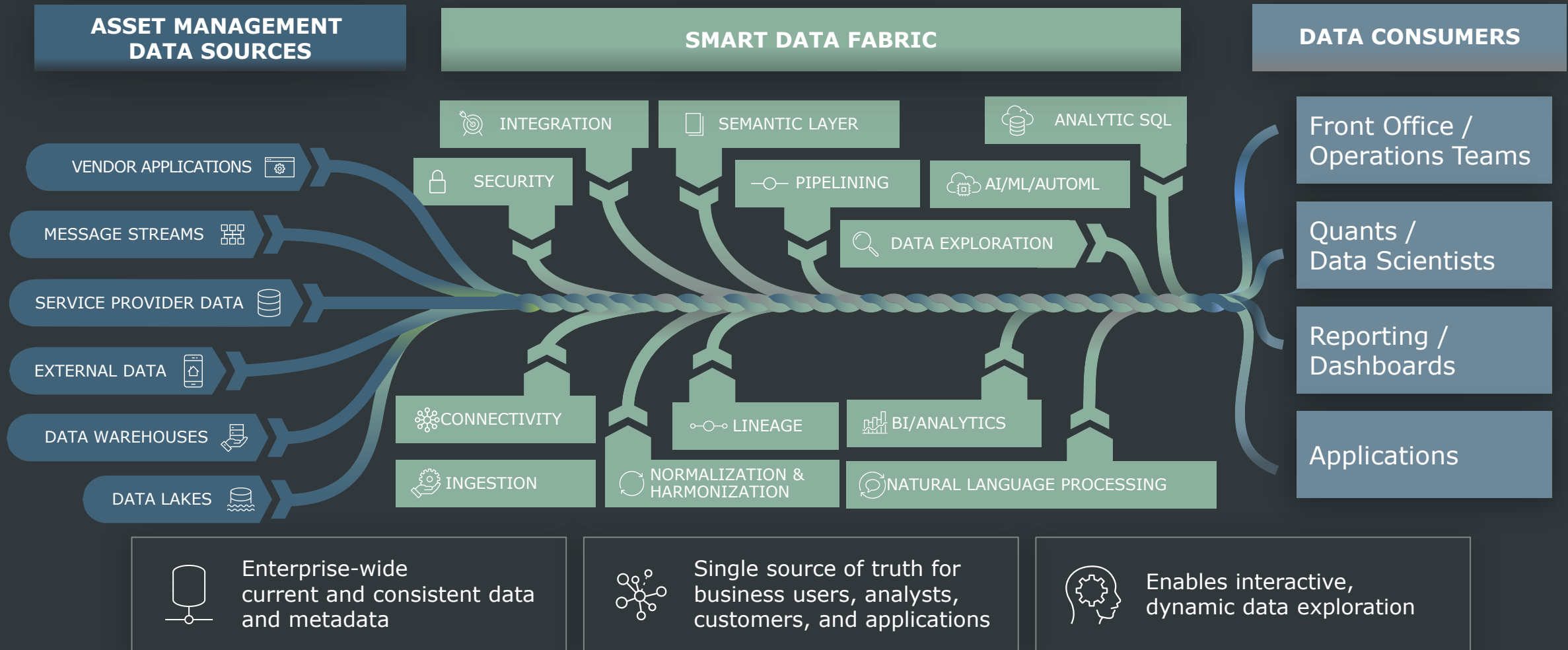
The Challenge of Disparate Data



Why a Smart Data Fabric?



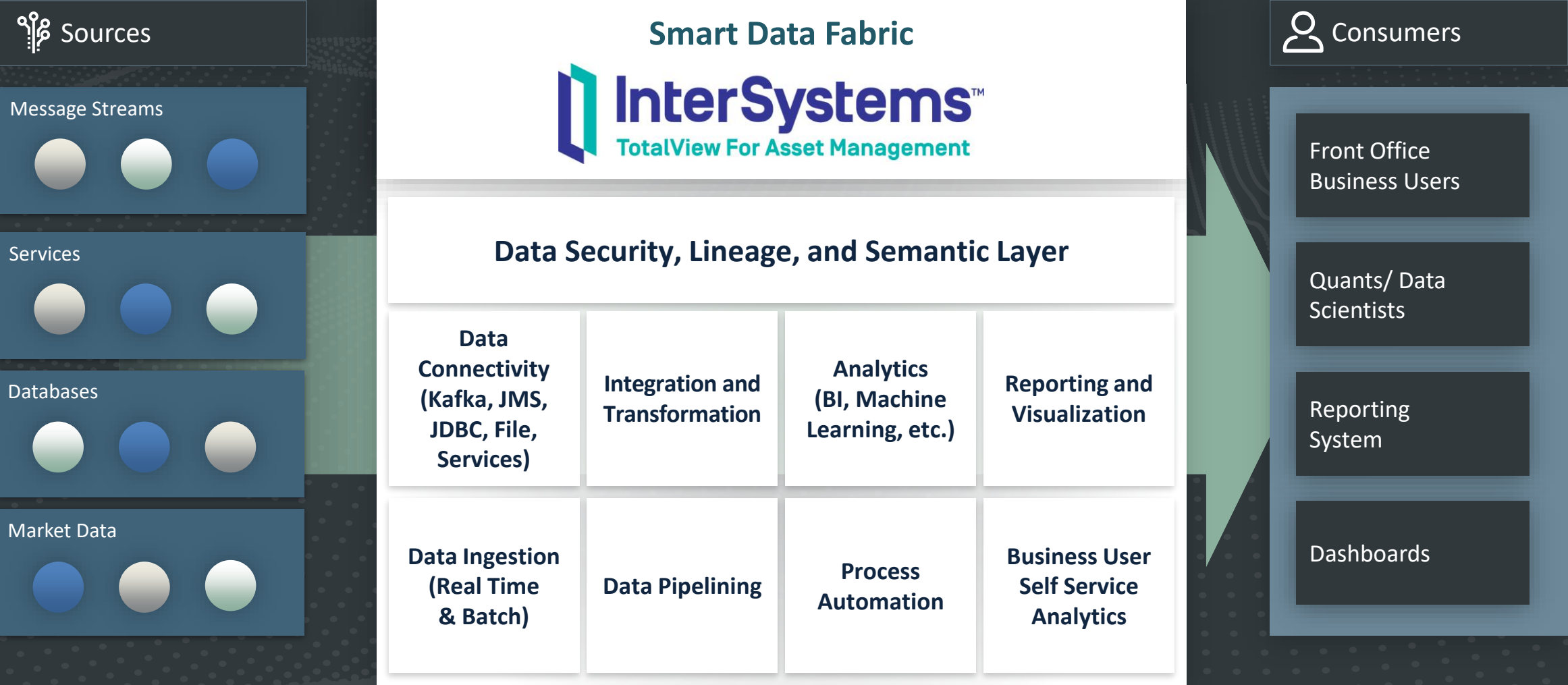
Smart Data Fabric Architecture



Smart Data Fabric Functional Components

| | |
|--|--|
| ☑Data connectivity | ☑Natural language processing |
| ☑Data pipeline | ☑Reporting, visualization, exploration |
| ☑Data preparation | ☑Process orchestration and workflow |
| ☑Data security | ☑Translytical database |
| ☑Data persistence and virtualization (collect and connect) | ☑Multi-model database (relational, object, key-value, document, columnar) |
| ☑Data transformation | ☑Distributed, consistent cache |
| ☑Data integration | ☑Application development |
| ☑Data access and search | ☑Full lifecycle API management |
| ☑Business intelligence | ☑Supports on prem, public and private cloud, hybrid |
| ☑Machine learning and AutoML | |

Smart Data Fabric Implementation



Results: Phase 1 – Efficiency Gains

Immediate efficiency benefits

Smart Data Fabric

- ✓ Data Ingestion Layer: ETL with a scheduling Layer
- ✓ Messaging Infrastructure
- ✓ Data Persistence Layer
- ✓ Semantic Layer
- ✓ Data Quality and Integrity Layer
- ✓ Accessibility via API / Driver Based / SQL / Visualization Tools (PowerBI and Tableau)



Cost Savings

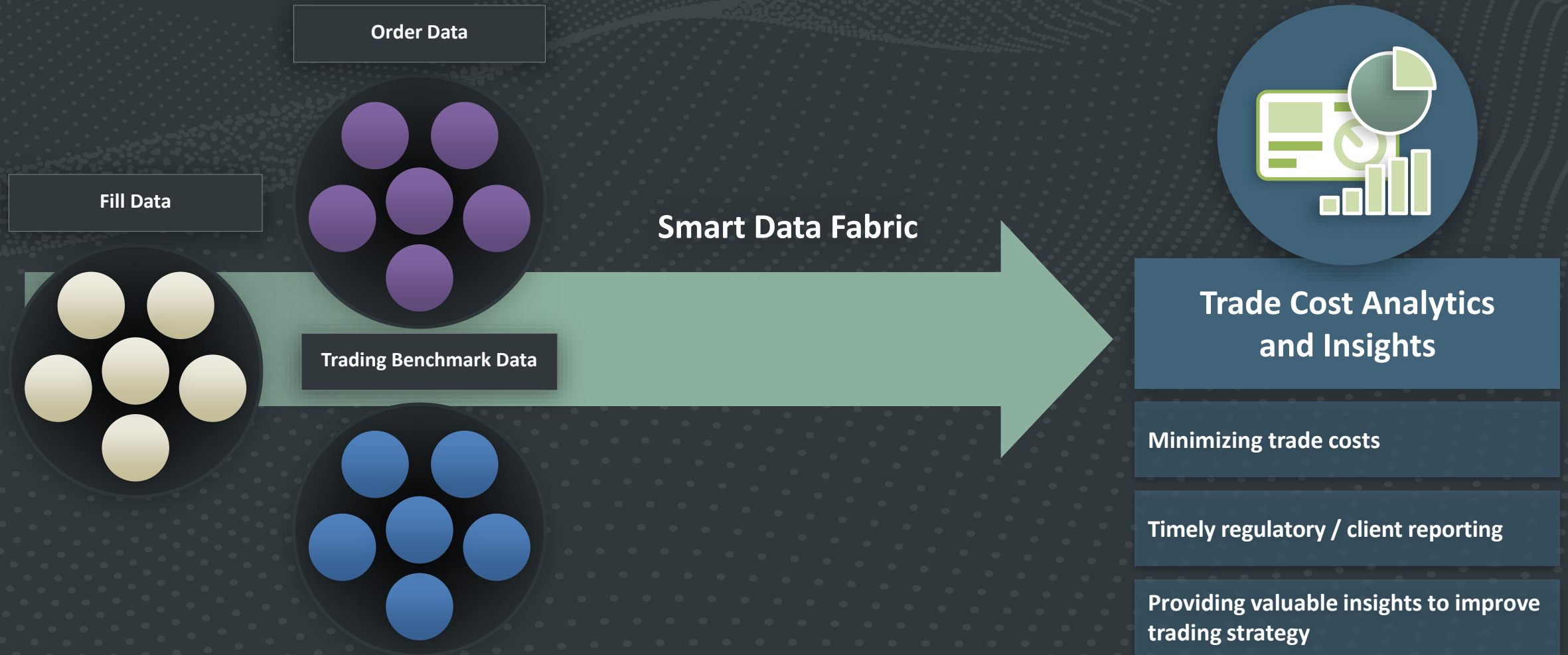
A central data platform to manage integrations

Reallocation of FTE to higher value efforts

Retiring legacy point solutions, which cost \$50-60K per year to maintain

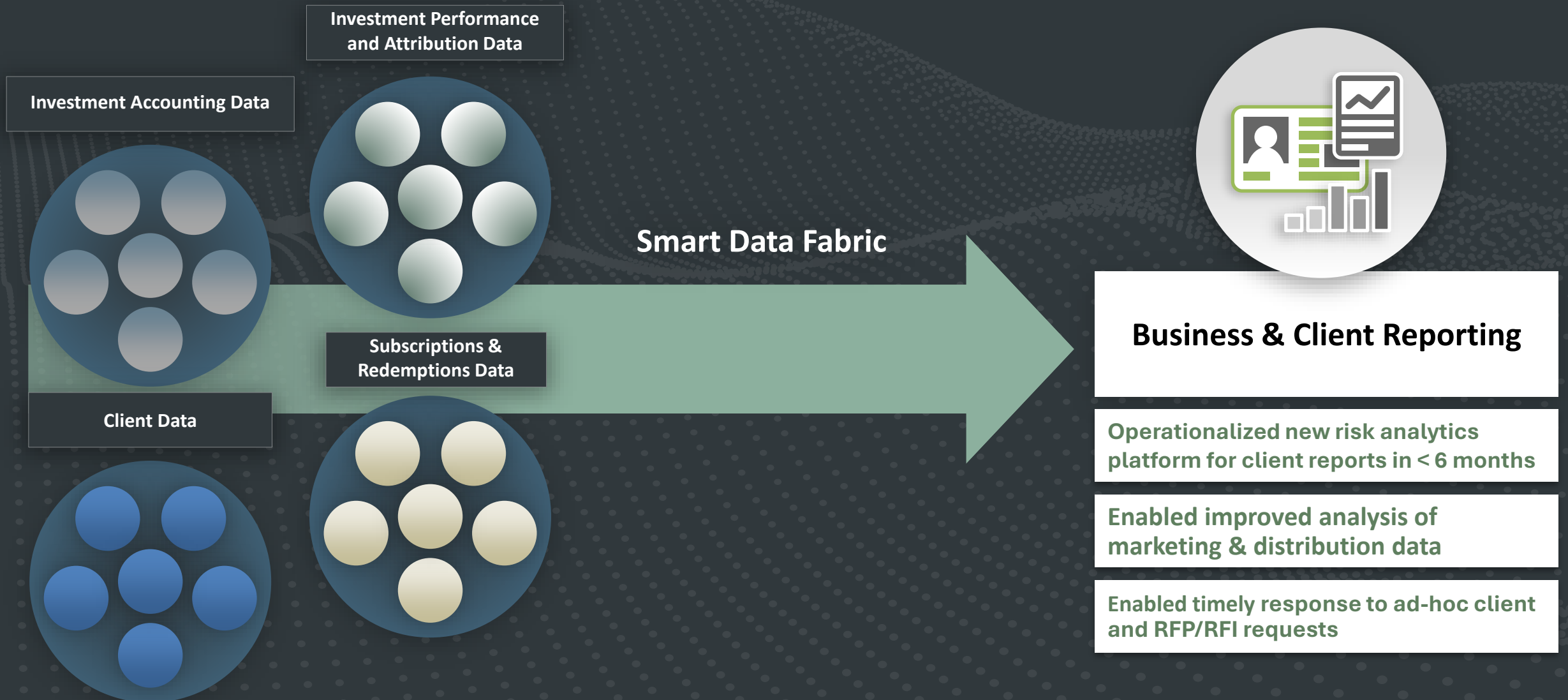
The effort and cost saved by implementing a single solution with all the necessary components already available has been invaluable.

Spotlight on Trade Cost Analysis



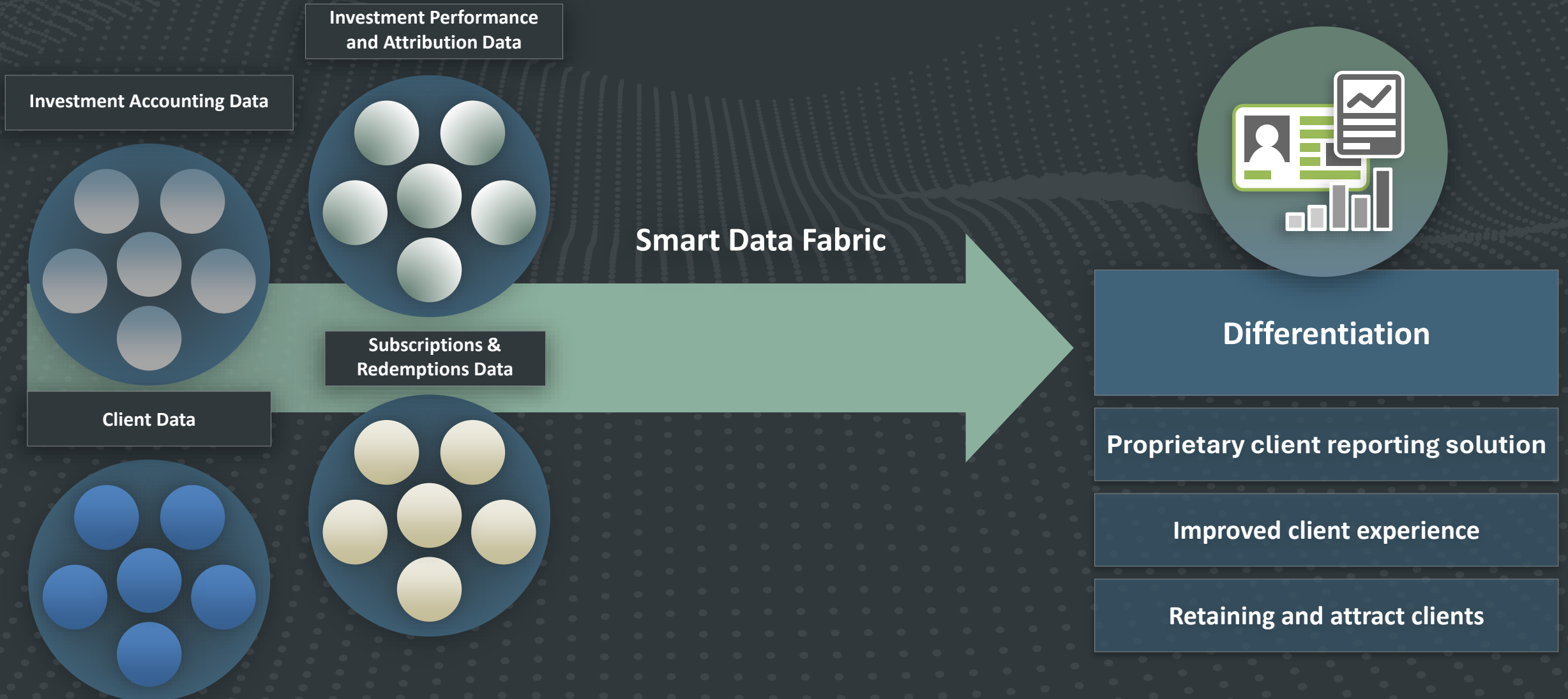
Results: Phase 2 – Enabling Competitive Advantage

Rapid Delivery of Reporting and Analytics to Clients Leads to Business Growth



Results: Phase 3 – Differentiation

Charting a new course in an increasingly competitive industry



Key takeaways

Focus on value – *don't be tech-rich and adoption-poor*

Value-Focused, Outcome-Driven

Time to Value

- We delivered value in < 6 months
- Created a network effect

Find the Right Solution

- Cost will flatten over time
- Value will increase exponentially

Start Small

- Start with simple, well understood needs that deliver immediate value to end users

Be Pragmatic

Size Matters

- There is a relationship between size of organization and complexity of architecture

Design for Your Firm's Needs

- Consider your size and existing resources
- Your internal resources should be able to support your solution on an ongoing basis

Partner for Success

Business and Operations

- This is a business/operations project, not a tech project
- Partner with a business where there is low hanging fruit

Data Operations

- Partner with your data ops to ensure data quality is high from the start