Smarter Analytics Live 2013

Turning information and insight into actionable business outcomes.

Finding Opportunity in Chaos

Chris Howard

Software Technical Leader - Big Data, IBM Growth Markets

twitter #SALive2013 @ibmbaanz

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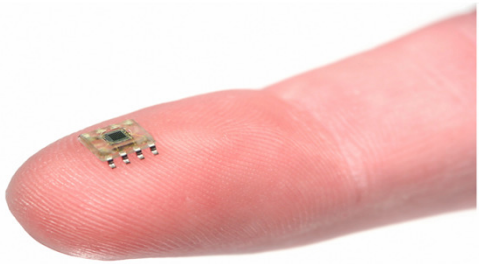
Drivers



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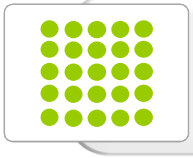
Big Data is All Data from Everywhere

Big Data Is Becoming The Next Natural Resource

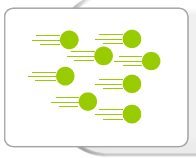
"We have for the first time an economy based on a key resource [Information] that is not only renewable, but self-generating. Running out of it is not a problem, but drowning in it is"

-- John Naisbitt



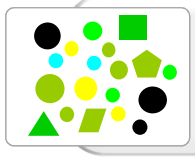
Use **greater amounts** of data

Volume



Use data **more quickly**

Velocity



Use **more types** data

Variety

Use **uncertain** data

Veracity

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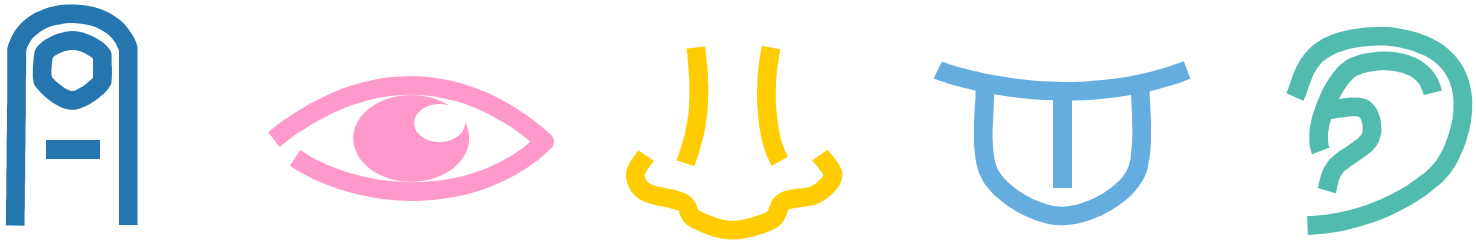
Use All Available Data to Make Better Decisions



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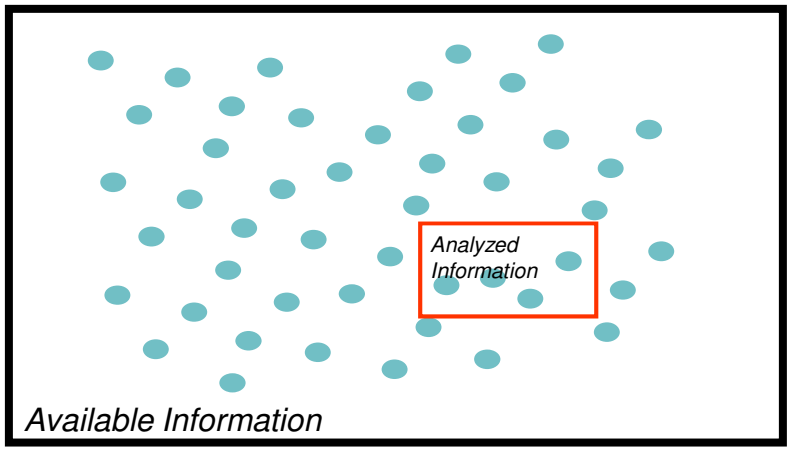
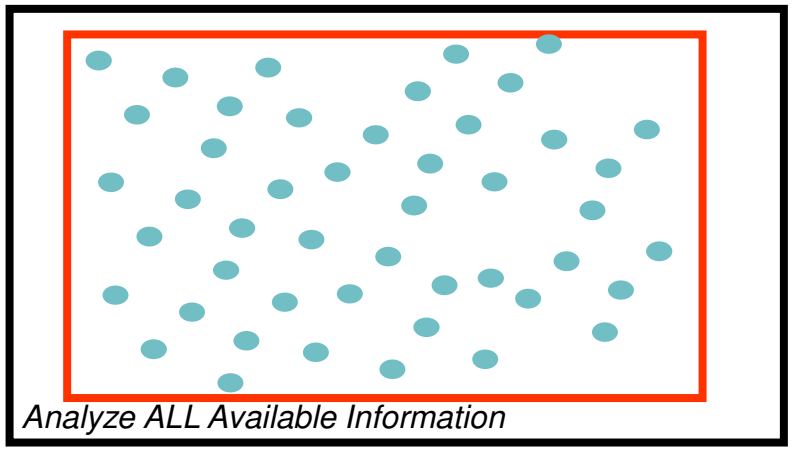
Paradigm Shifts Enabled by Big Data

IBM

Traditional Approach	Big Data Approach



Analyze Small Subsets of Information



Analyze All Information

Leverage more of the data being captured

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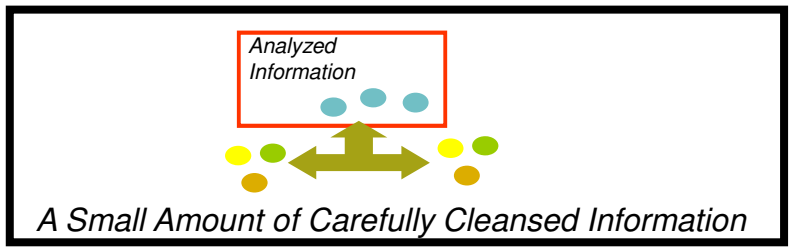
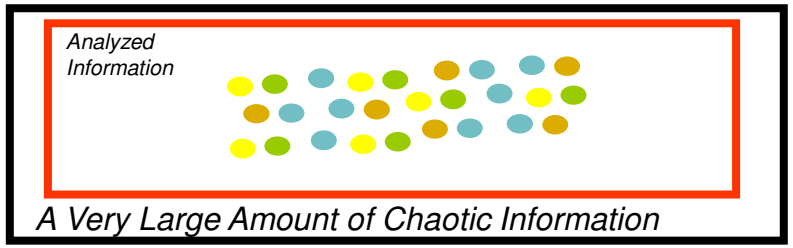
Paradigm Shifts Enabled by Big Data

Traditional Approach	Big Data Approach
	
Carefully Cleanse Information Before Analysis	**Analyze All Information As Is**

Reduce effort required to leverage data

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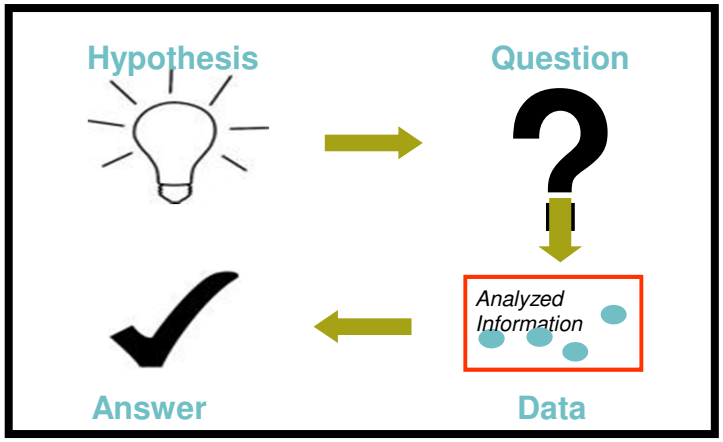
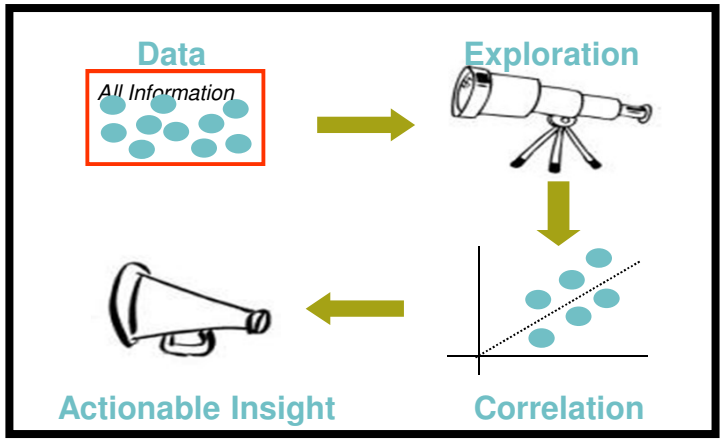
Paradigm Shifts Enabled by Big Data

Traditional Approach



Start with Hypothesis,
Test Against Selected Data

Big Data Approach



Explore ALL Data,
Identify Correlations

Data leads the way… and sometimes correlations are good enough

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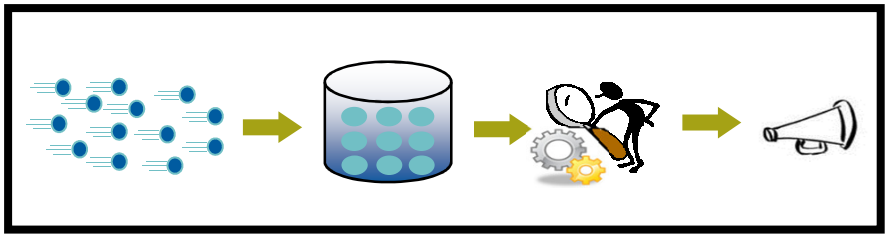
Paradigm Shifts Enabled by Big Data

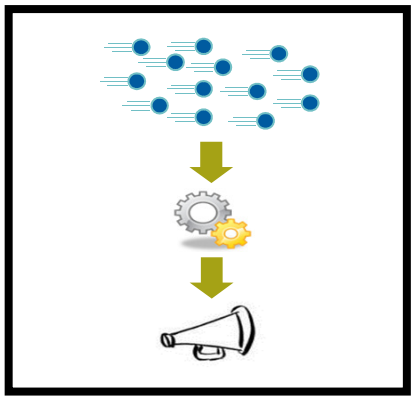
IBM

Traditional Approach



Analyze data AFTER it has been processed and landed in a Warehouse or Mart

Big Data Approach



Analyze data IN MOTION as it is generated, in real-time

Leverage data as it is captured

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How have most companies made information available for decision making across the enterprise?

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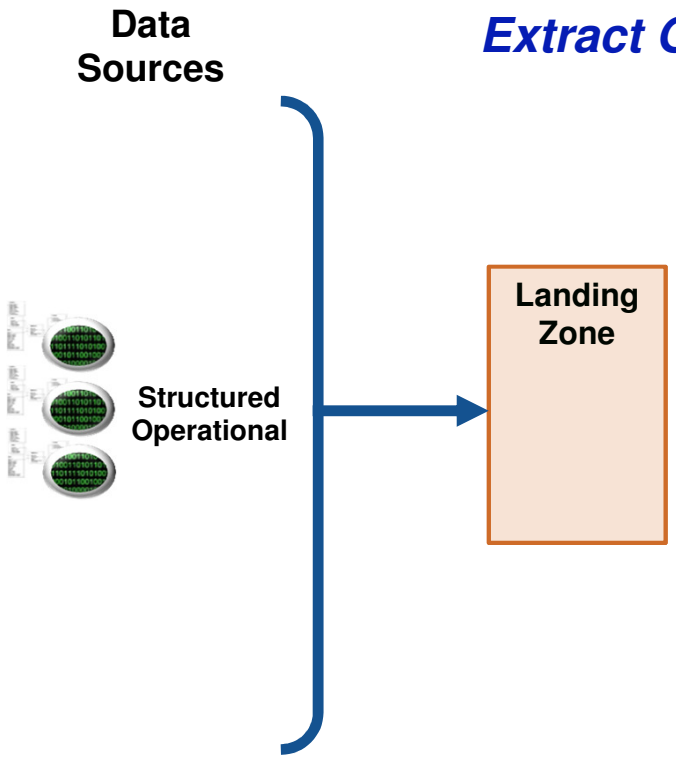
Traditional enterprise data and analytics environments



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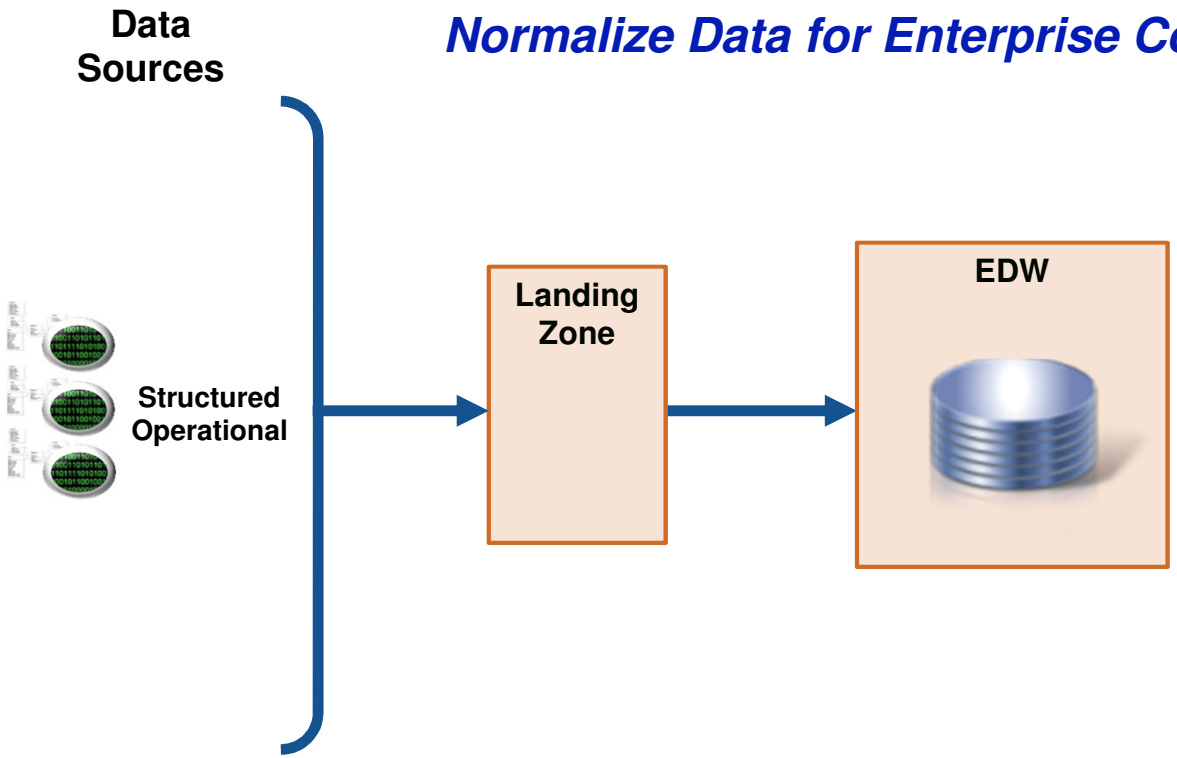

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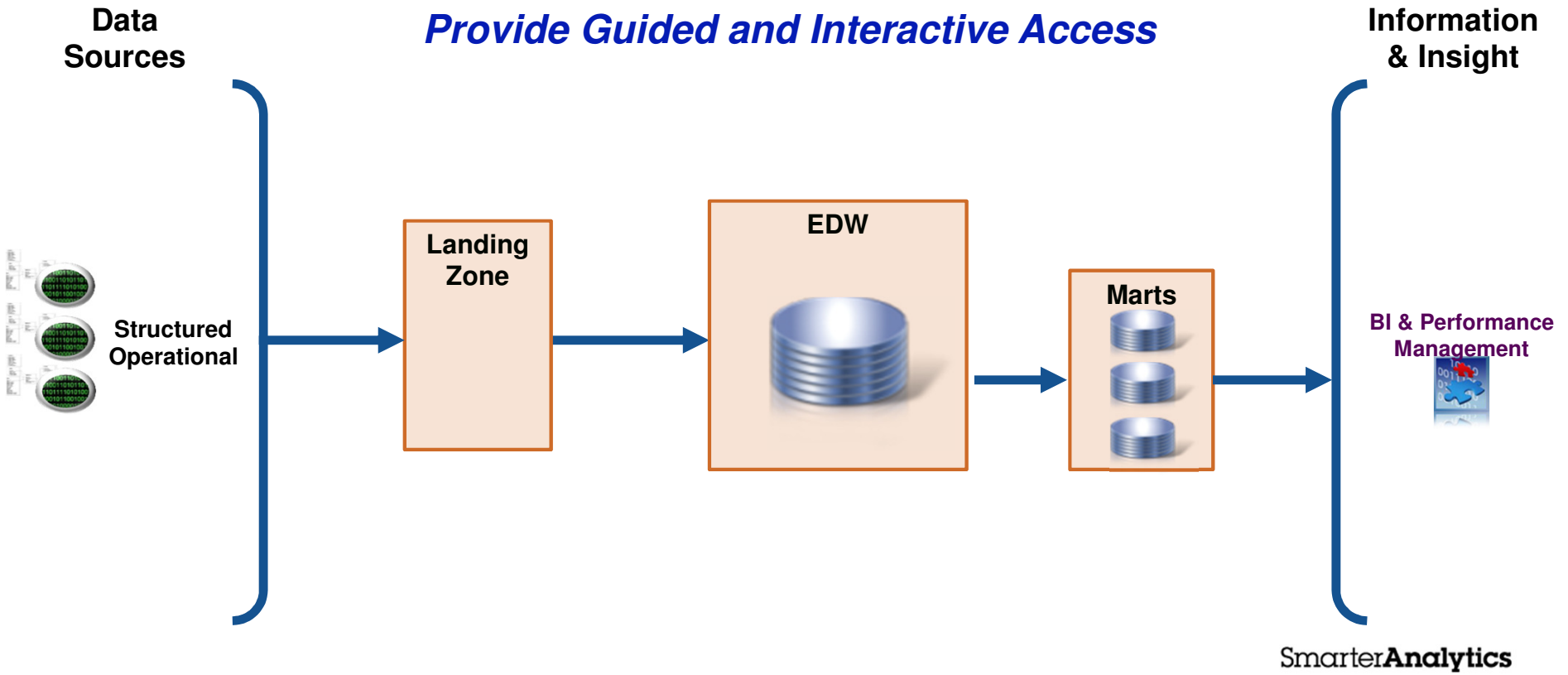

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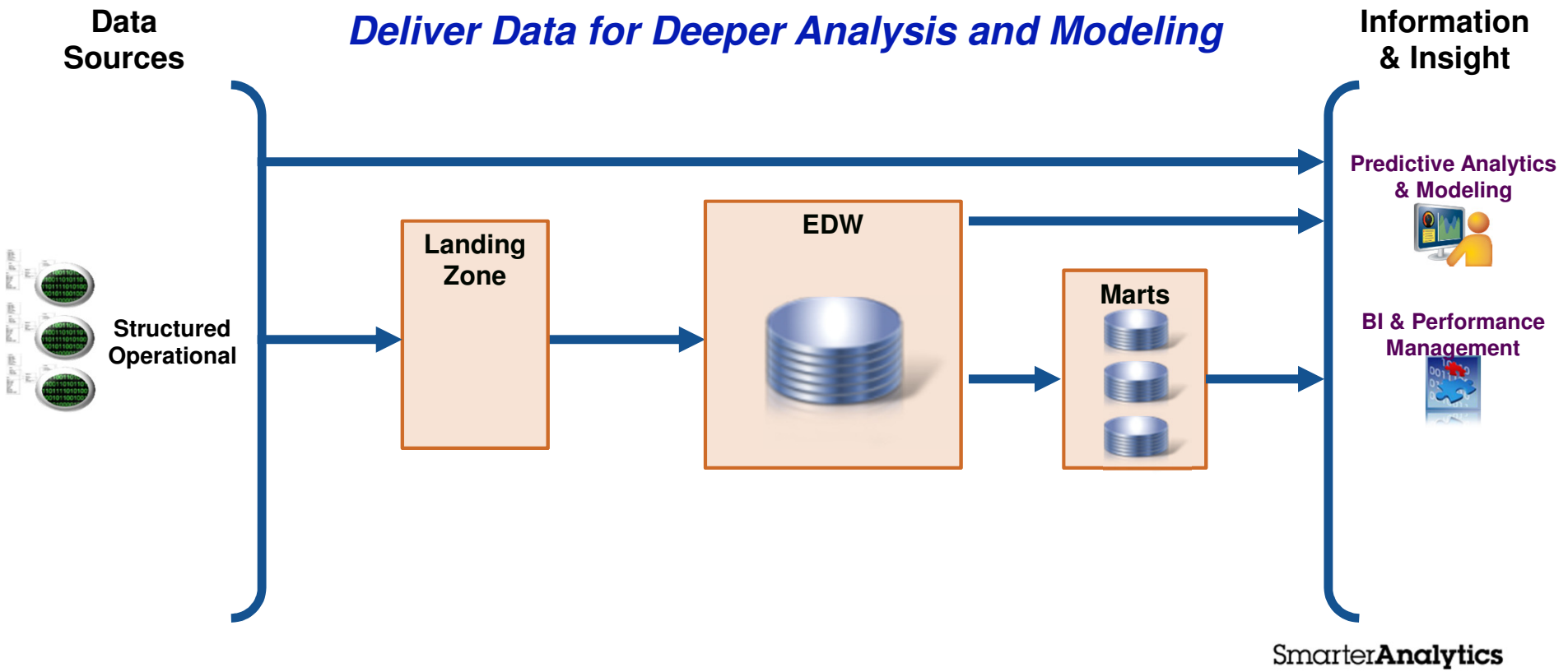

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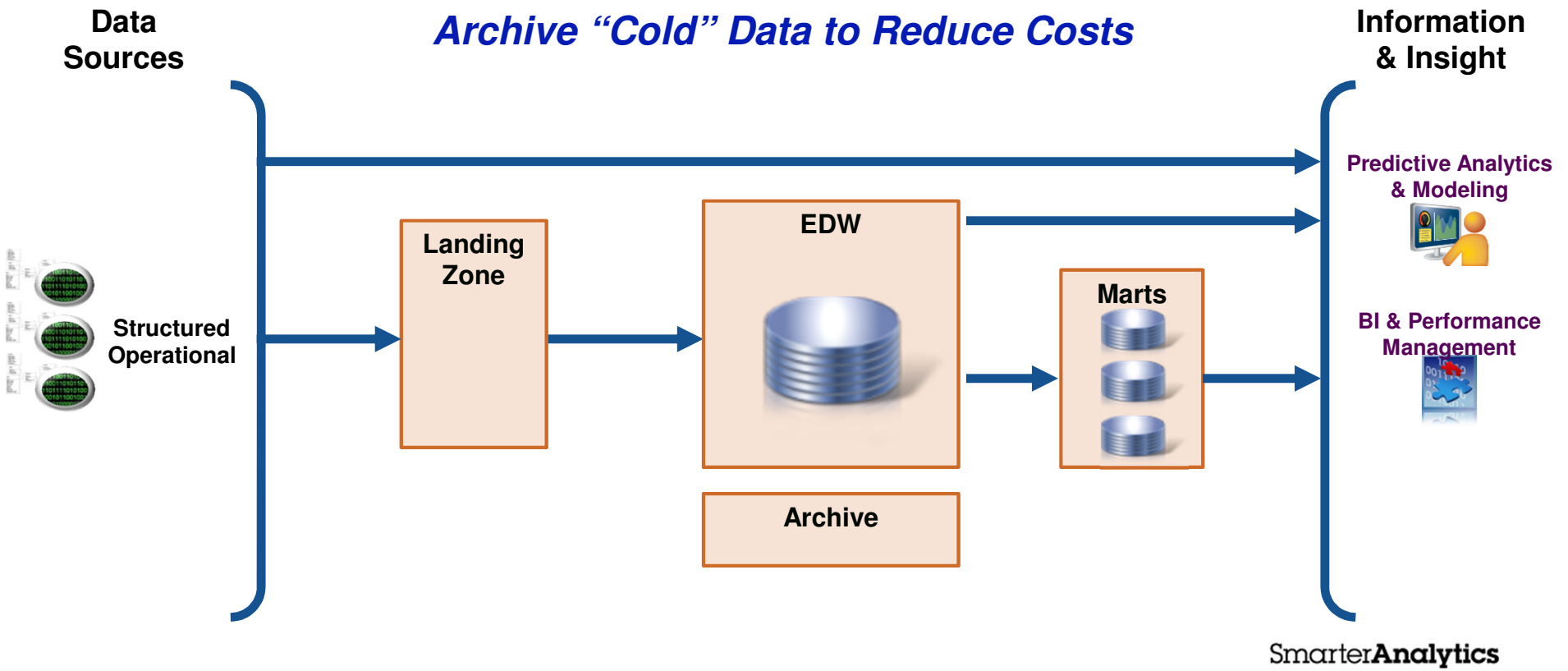

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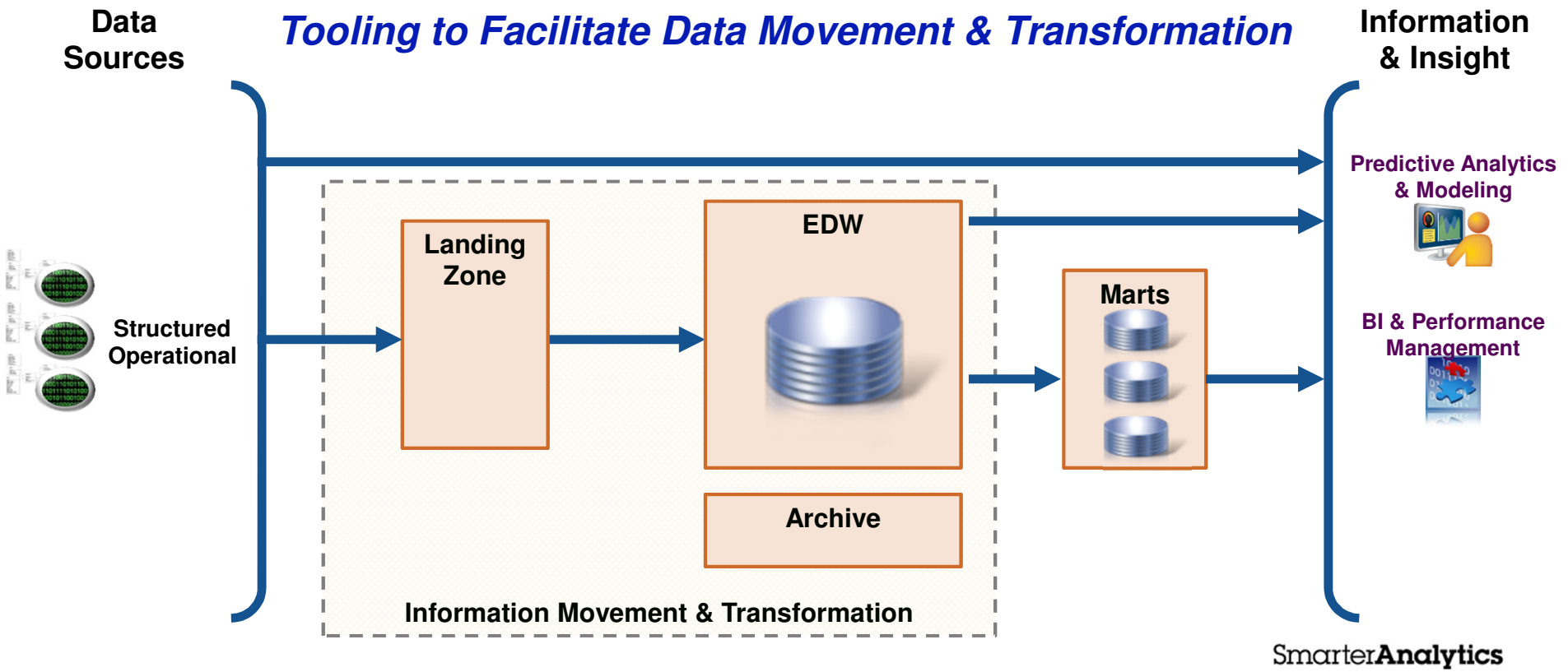

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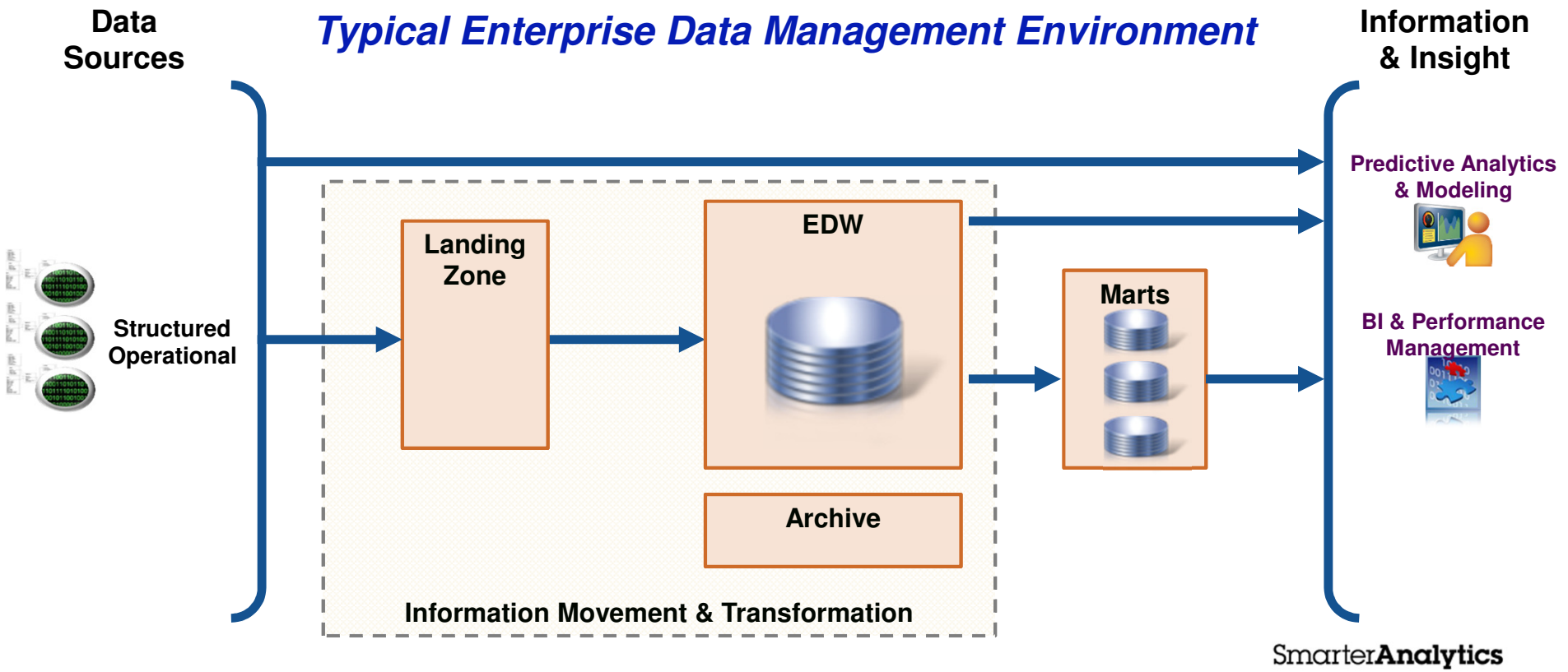
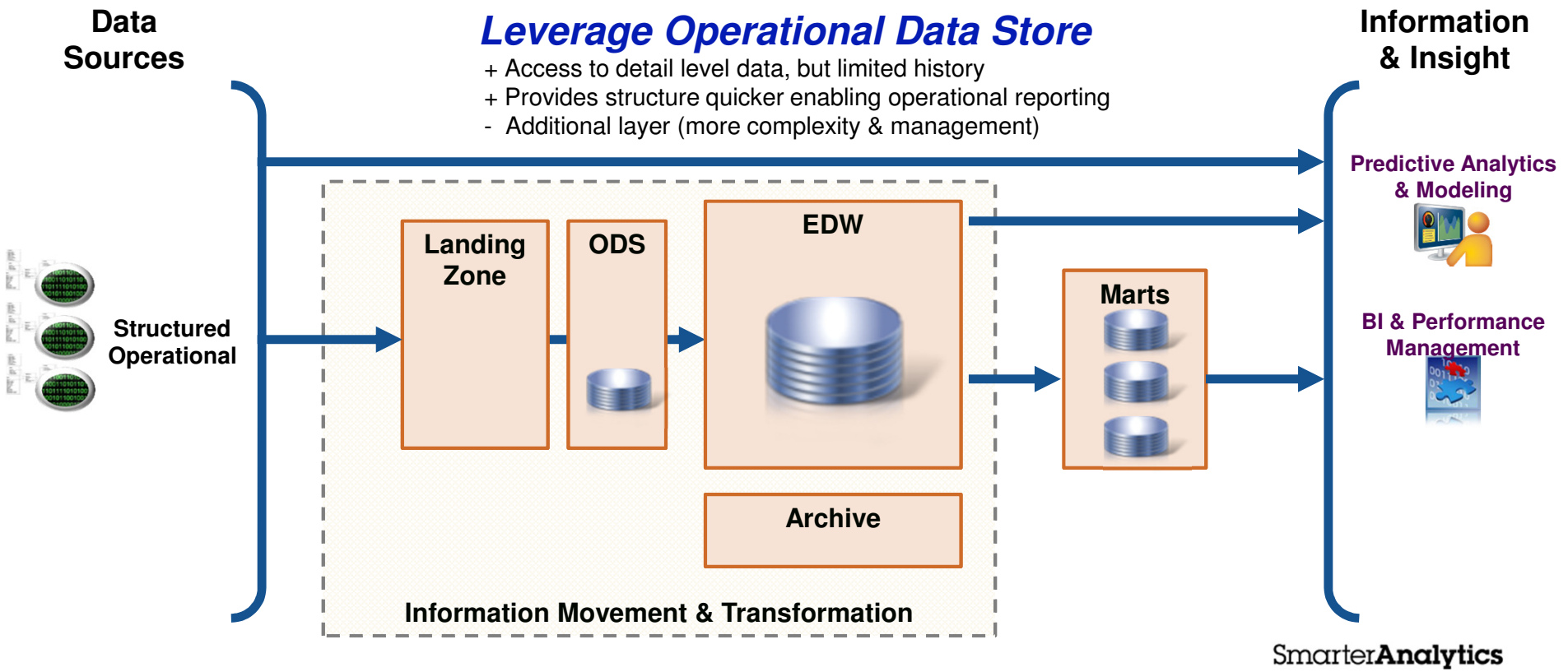


Traditional approaches to improve EDM architectures



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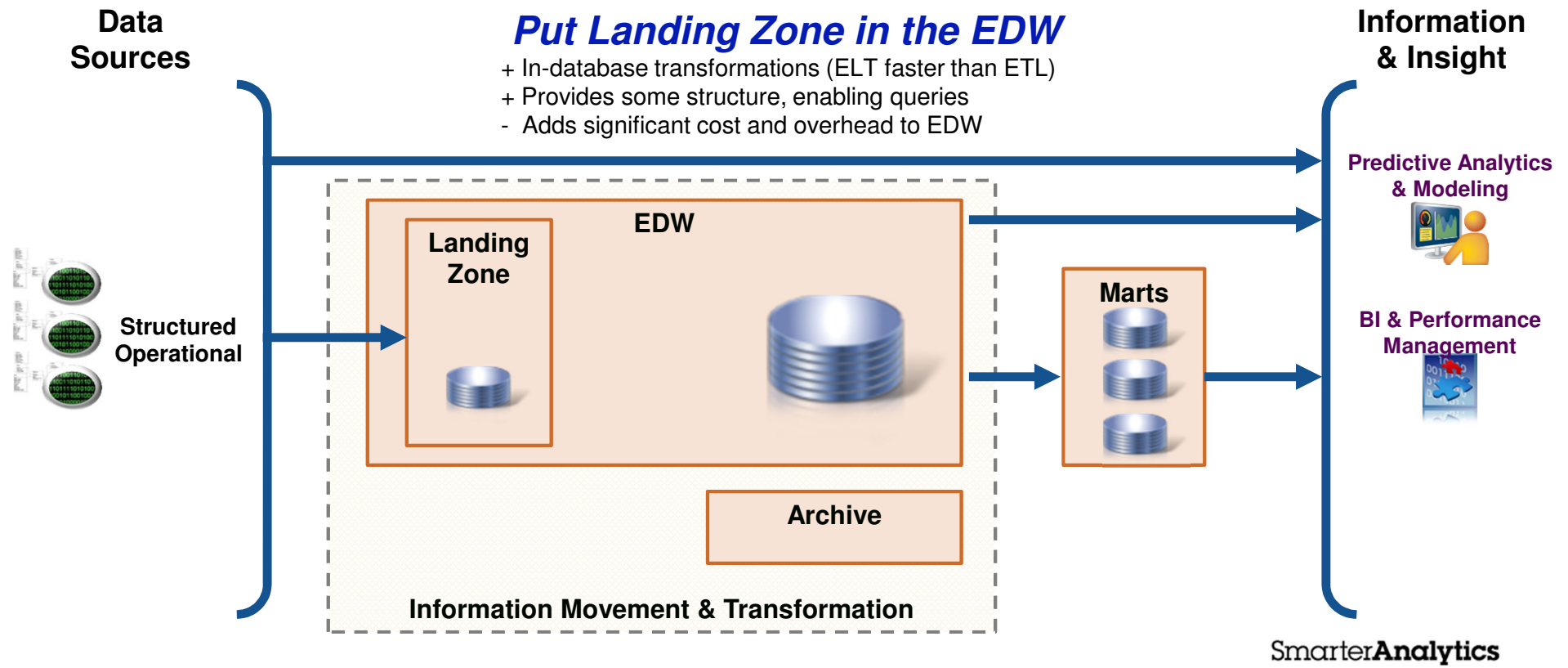

Finding Opportunity in Chaos

How are leading companies transforming their data and analytics environment to provide faster, better insights at reduced costs?

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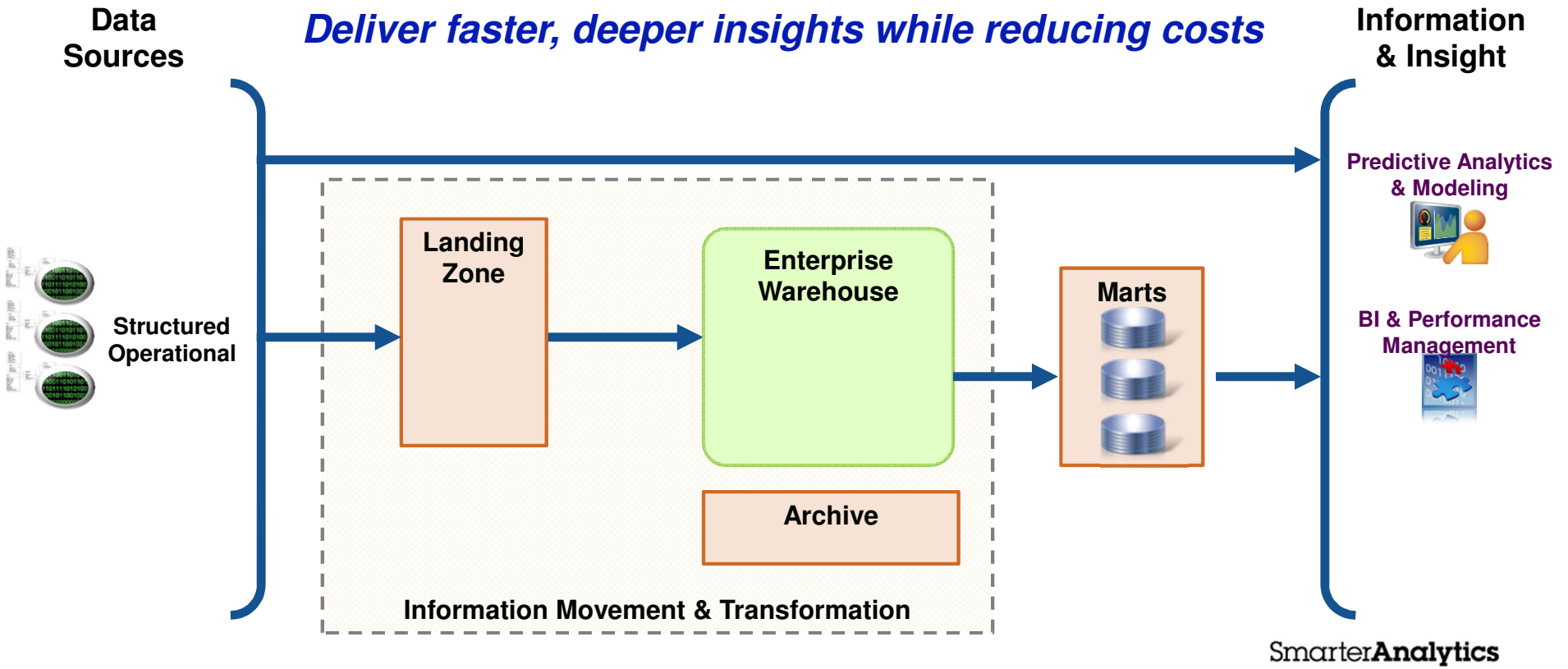
Transforming to Provide Better, More Cost Effective Information



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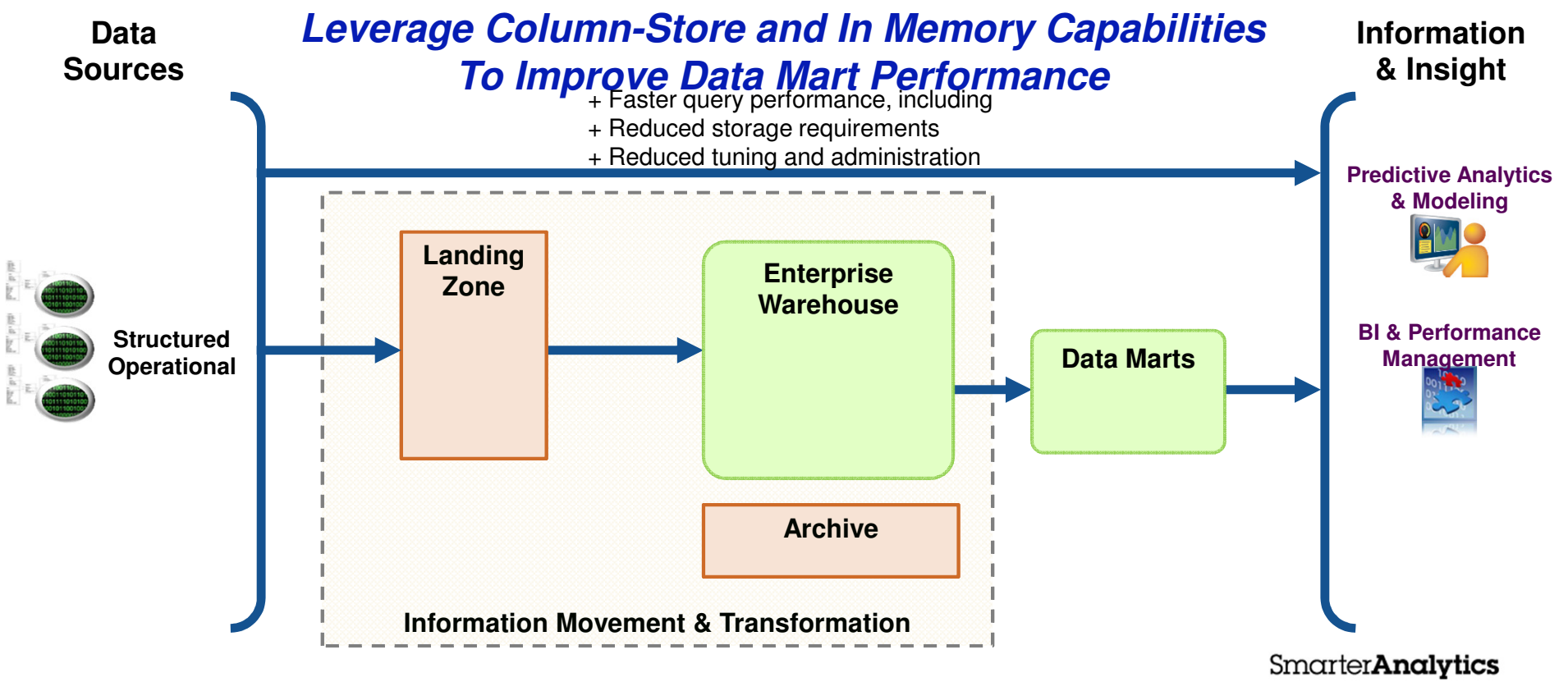

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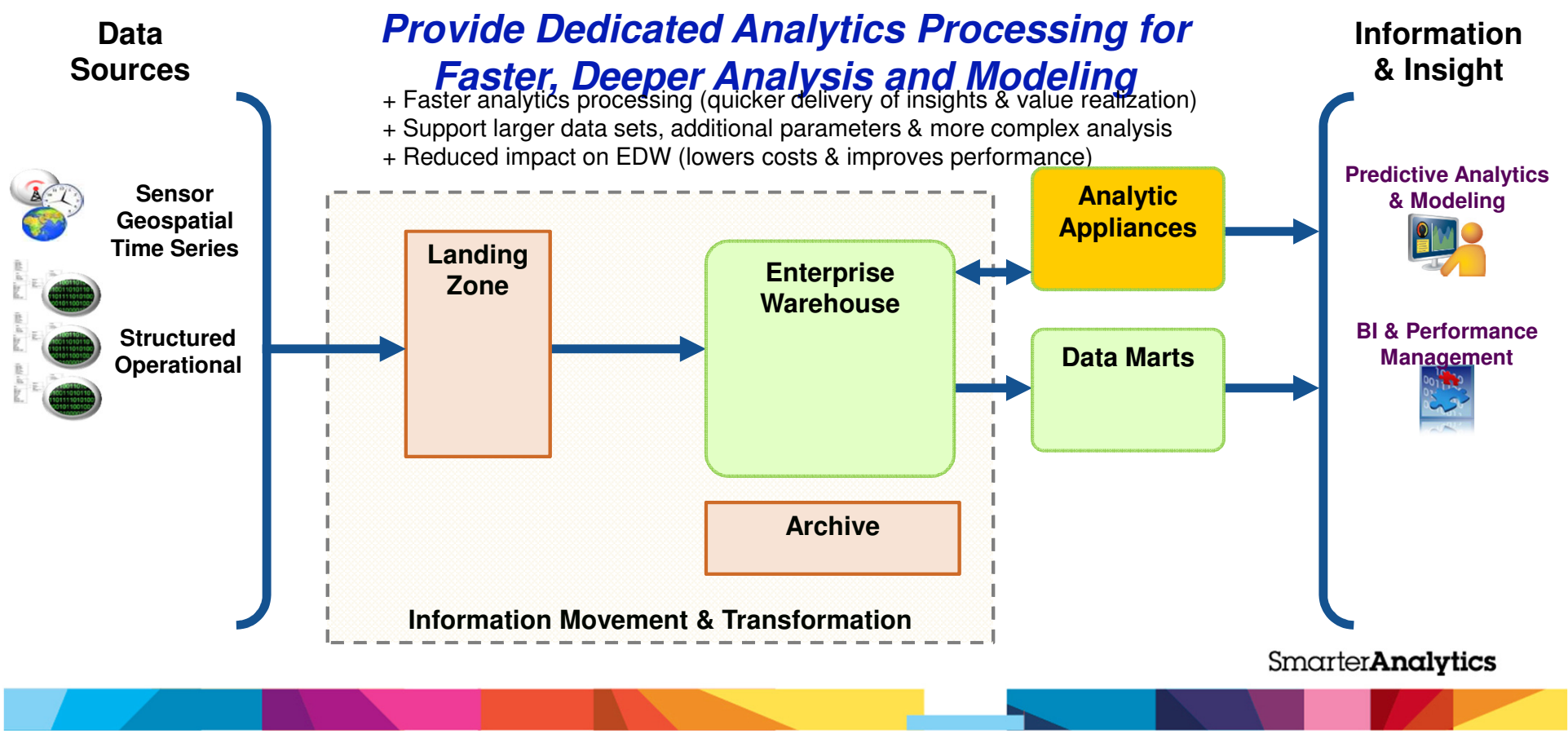

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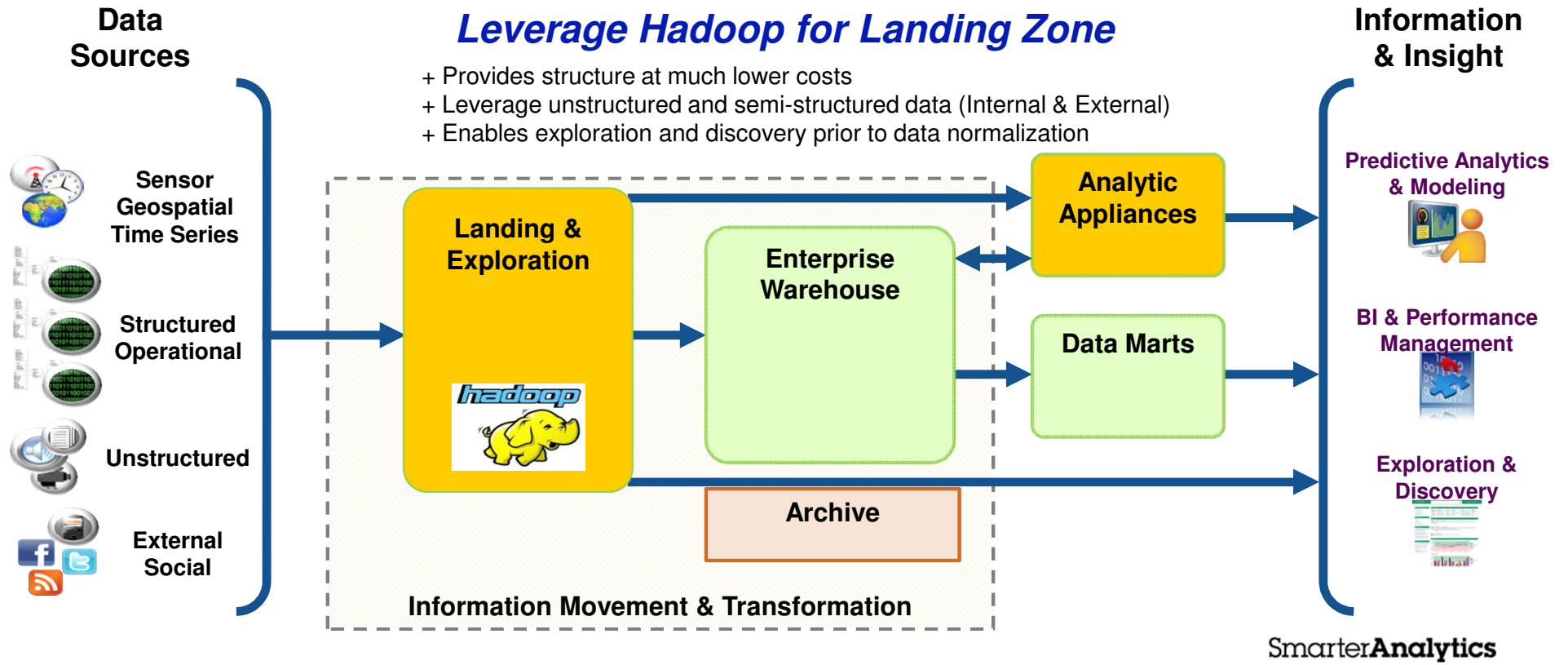

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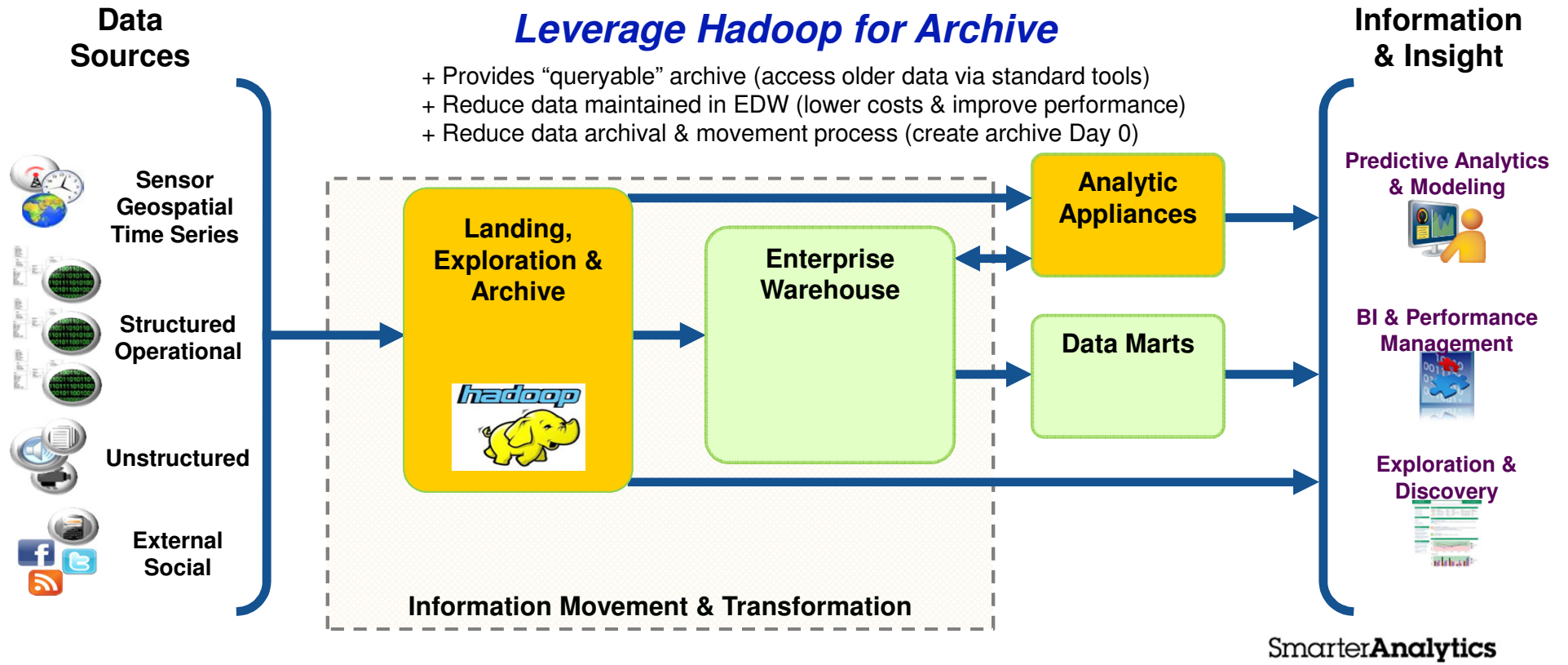

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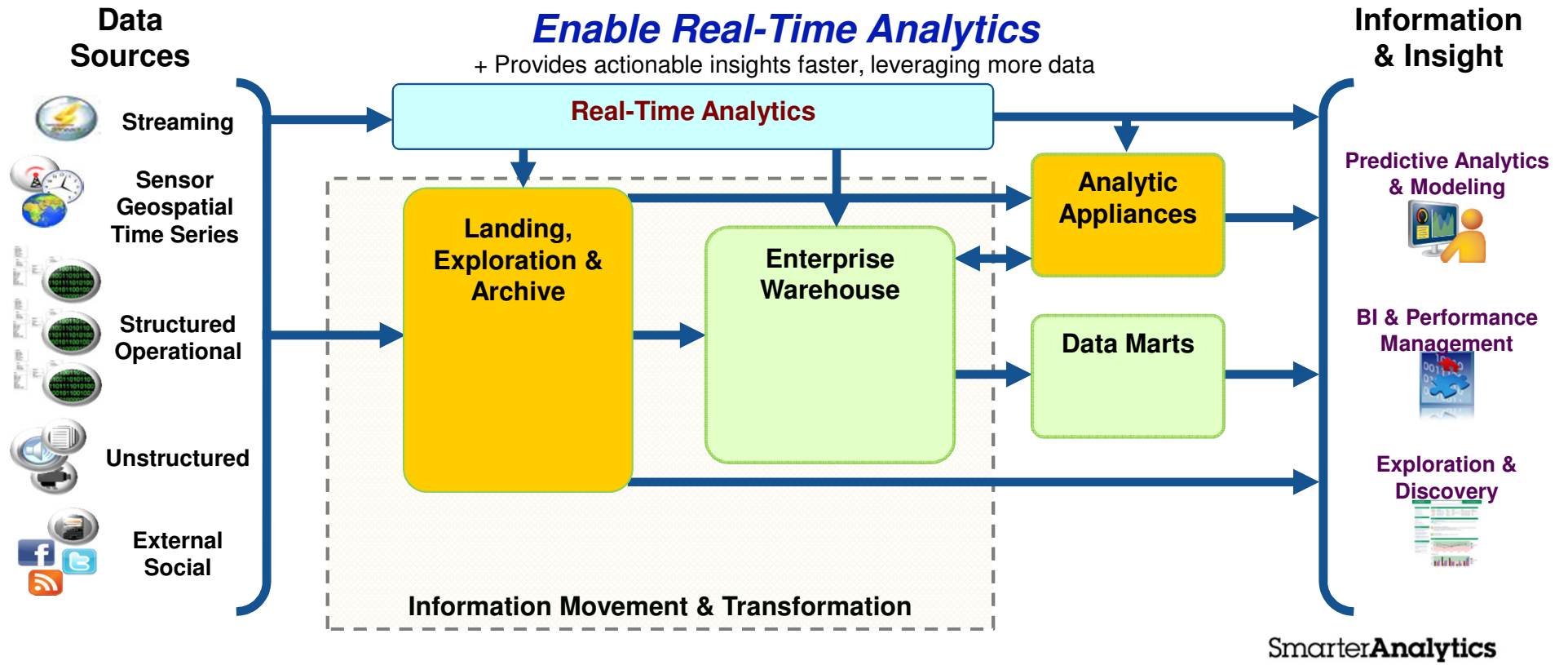

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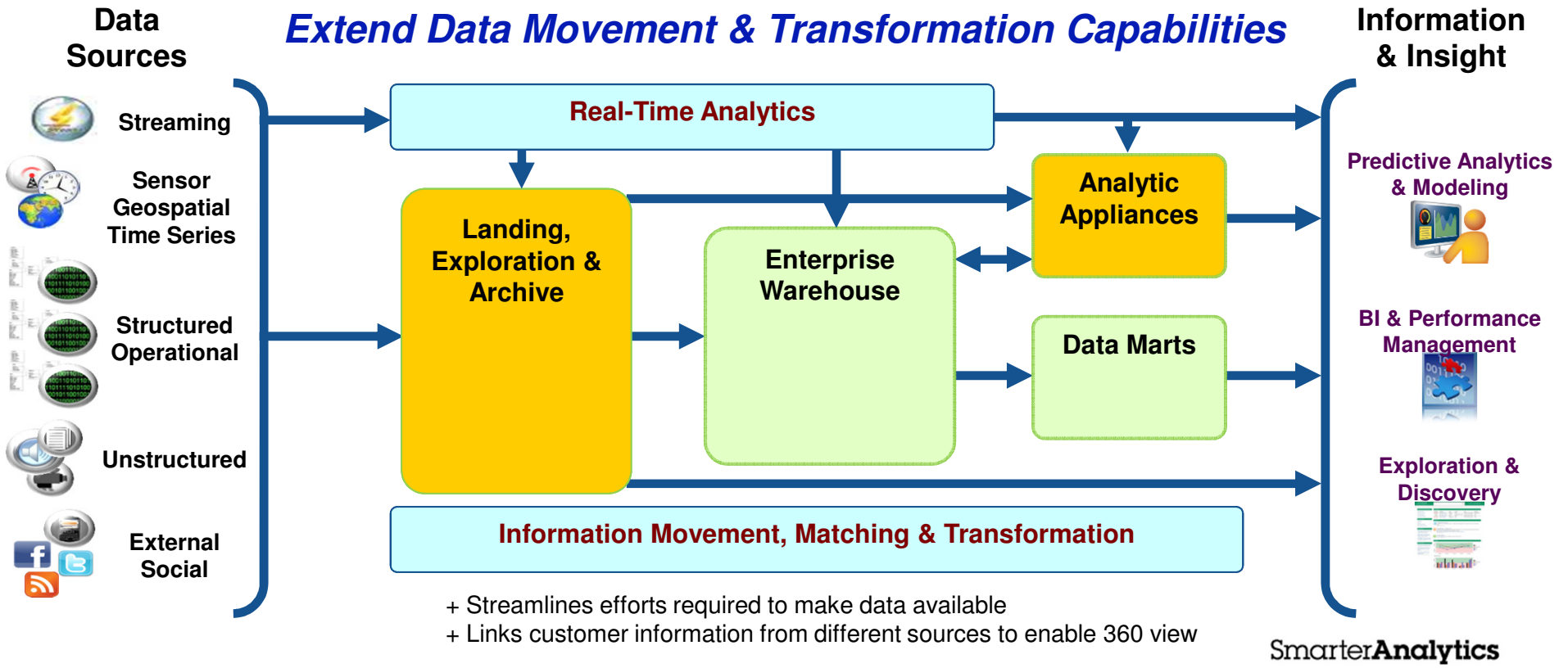

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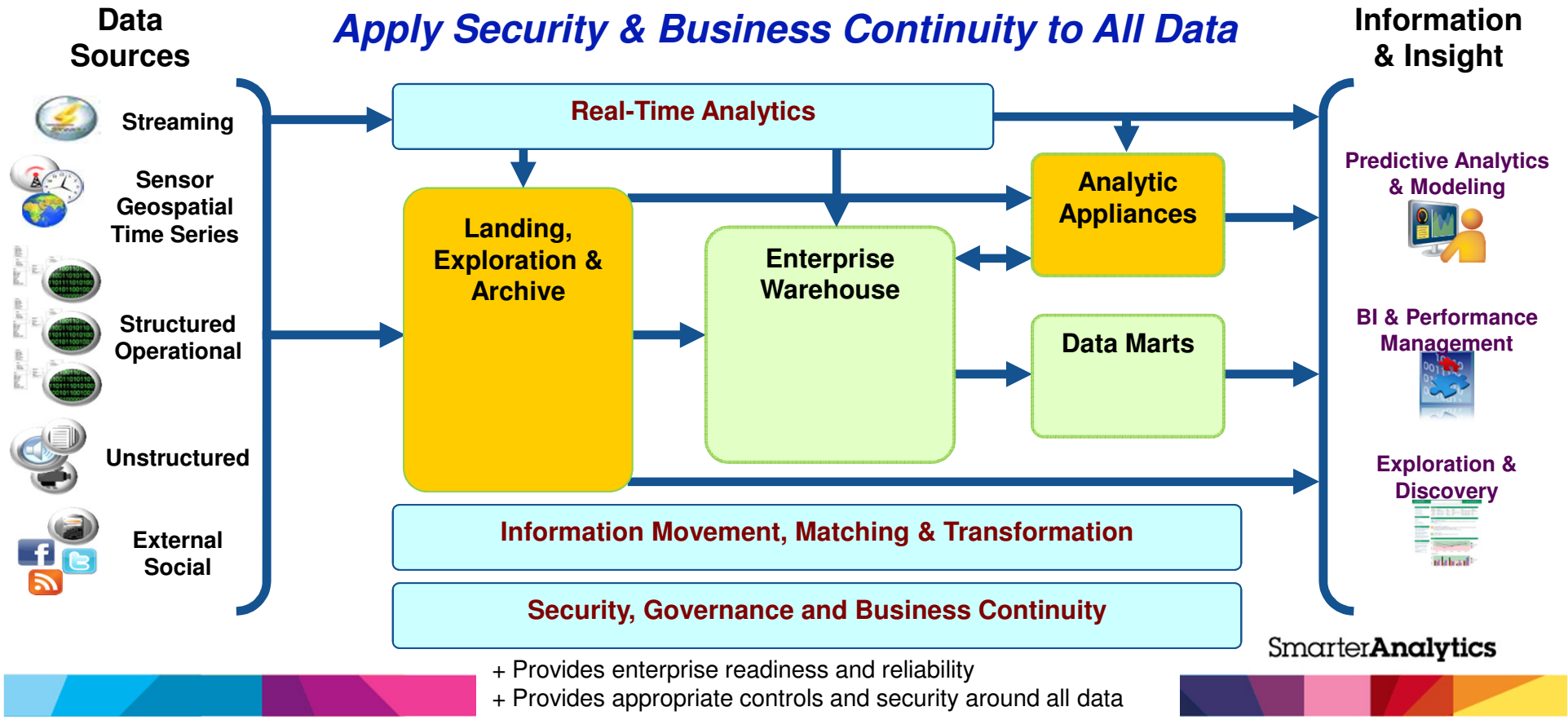
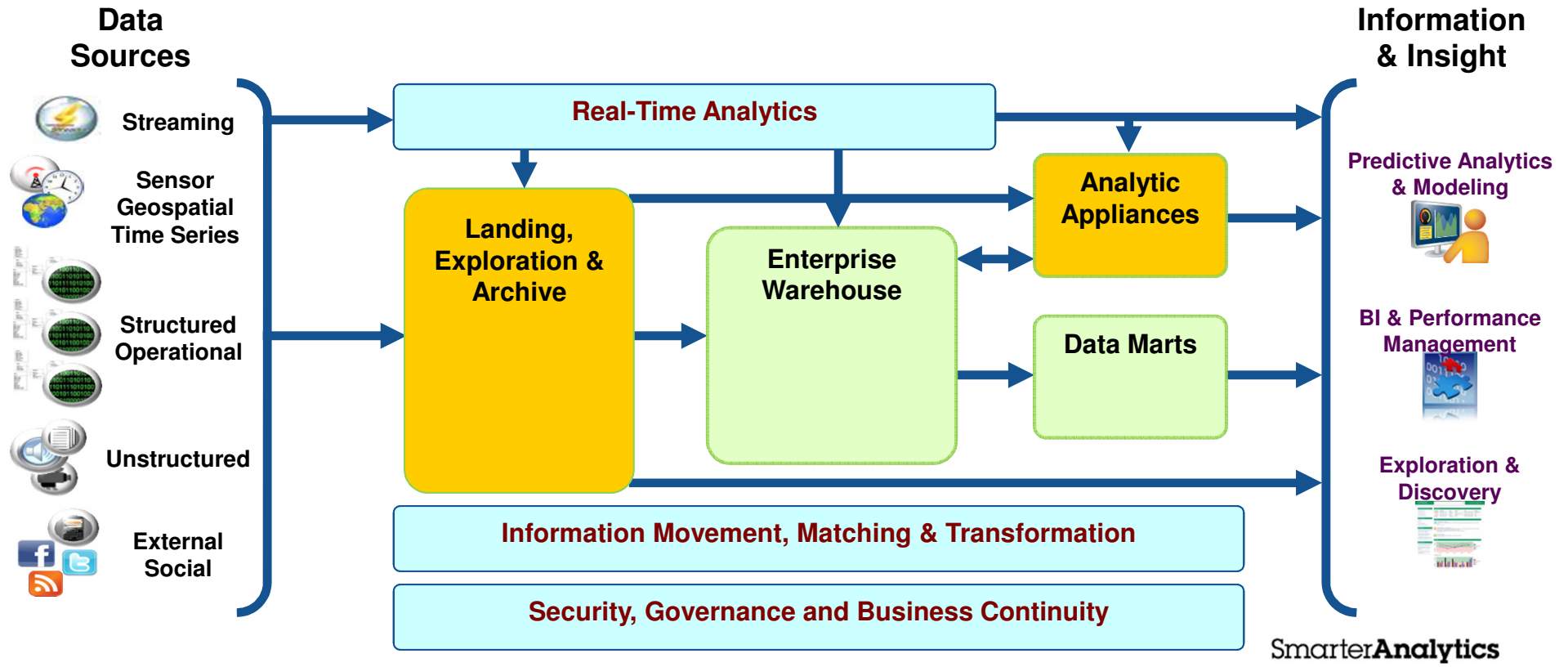


+ Provides enterprise readiness and reliability
+ Provides appropriate controls and security around all data

Next Gen Architecture for Delivering Information and Insights



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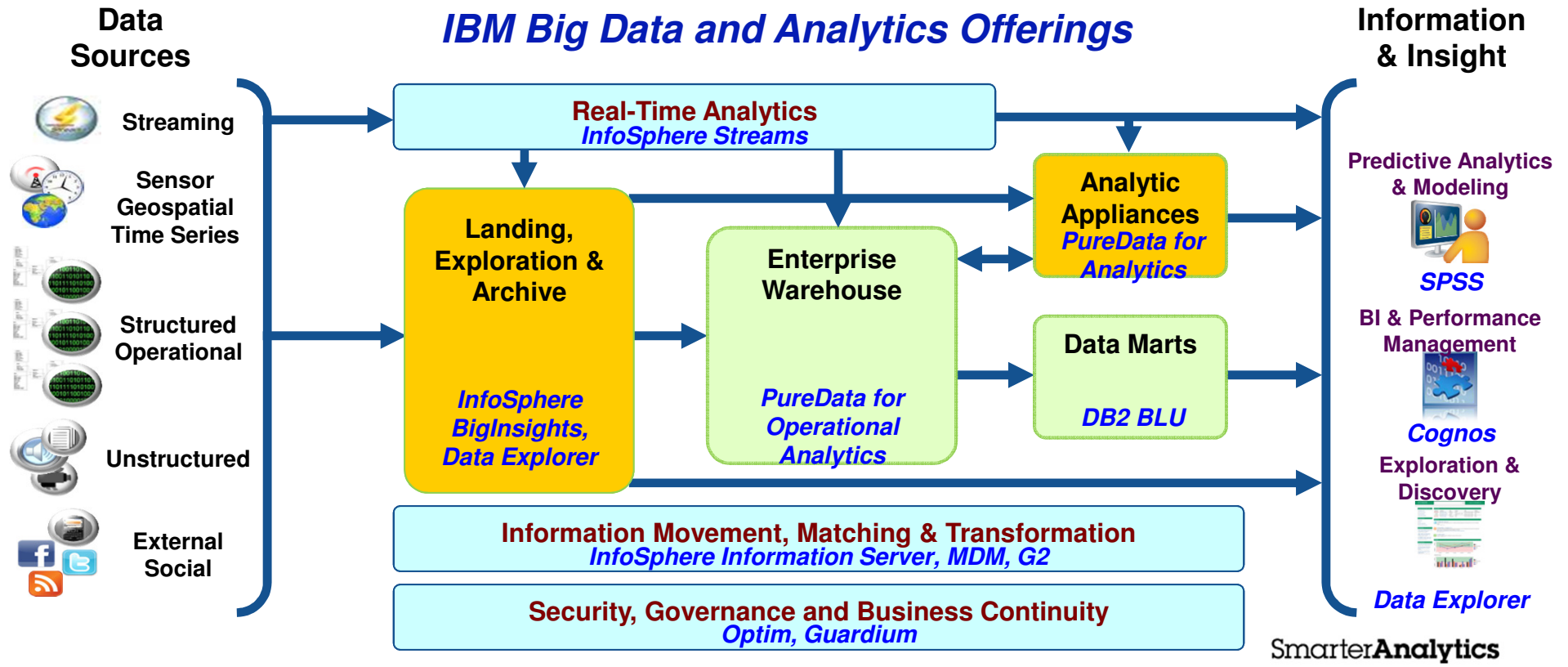

Banking
• Optimize Offers and Cross Sell
• Contact Center Efficiency and Problem Resolution
• Payment Fraud Detection & Investigation
• Counterparty Credit Risk Management
Insurance
• Claims Fraud
• Next Best Action
• Catastrophe Modeling
Telco
• Pro-active Call Center
• Network Analytics
• Location Based Services
• IT/Network Infrastructure Transformation
• Smarter Campaigns
Energy & Utilities
• Smart Meter Analytics
• Distribution Load Forecasting/Scheduling
• Condition Based Maintenance
• Create & Target Customer Offerings
Media & Entertainment
• Business process transformation
• Audience & Marketing Optimization
• Multi-Channel Enablement
• Digital commerce optimization
Retail
• Actionable Customer Insight
• Merchandise Optimization Playbook
• Dynamic Pricing
Travel & Transport
• Customer Analytics & Loyalty Marketing
• Capacity & Pricing Optimization
• Predictive Maintenance Analytics
Consumer Products
• Optimized Promotions Effectiveness
• Micro-Market Campaign Management
• Real Time Demand Forecast
Government
• Threat Prediction and Prevention
• Detect and Prevent Improper Payments
• Single View
Healthcare
• Measure & Act on Population Health
• Engage Consumers in their Healthcare
• Increase visibility into drug safety and effectiveness
Automotive
• Data Warehouse Optimization
• Predictive Asset Optimization (PAO)
• Actionable Customer Intelligence
Chemical & Petroleum
• EDW Smart Consolidation & Augmentation
• Operational Surveillance, Analysis & Optimization
• Engineering & Operational Data Exploration & Mining
Aerospace & Defense
• Uniform Information Access Platform
• Data Warehouse Optimization
• Predictive Asset Optimization (PAO)
Electronics / Industrial Products
• Channel Driven Customer Analytics (CDCA)
• Predictive Asset Monitoring & Optimization (PAMO)
Life Sciences
• Increase visibility into drug safety and effectiveness

Five key findings highlight how organizations are moving forward with big data and key success criteria

1. Start with existing sources of internal data that must be captured and maintained anyway
2. Focus on how to generate increased customer insights in support of an existing initiative
3. Determine up front what KPIs you are trying to impact and how you will deliver business value
4. Success depends upon a scalable and extensible platform, with security and governance
5. Delivering analytical insights faster is a differentiator and provides business value

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Thank You

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