Tarmin GridBank: Financial Services

Where Data Defines Value.™

Tarmin. Where Data Defines Value.

TARMIN
Where Data Defines Value.

About Tarmin

- Founded in 2007

- Corporate Headquarters: Boston, London

- Pioneer of Data Defined Storage

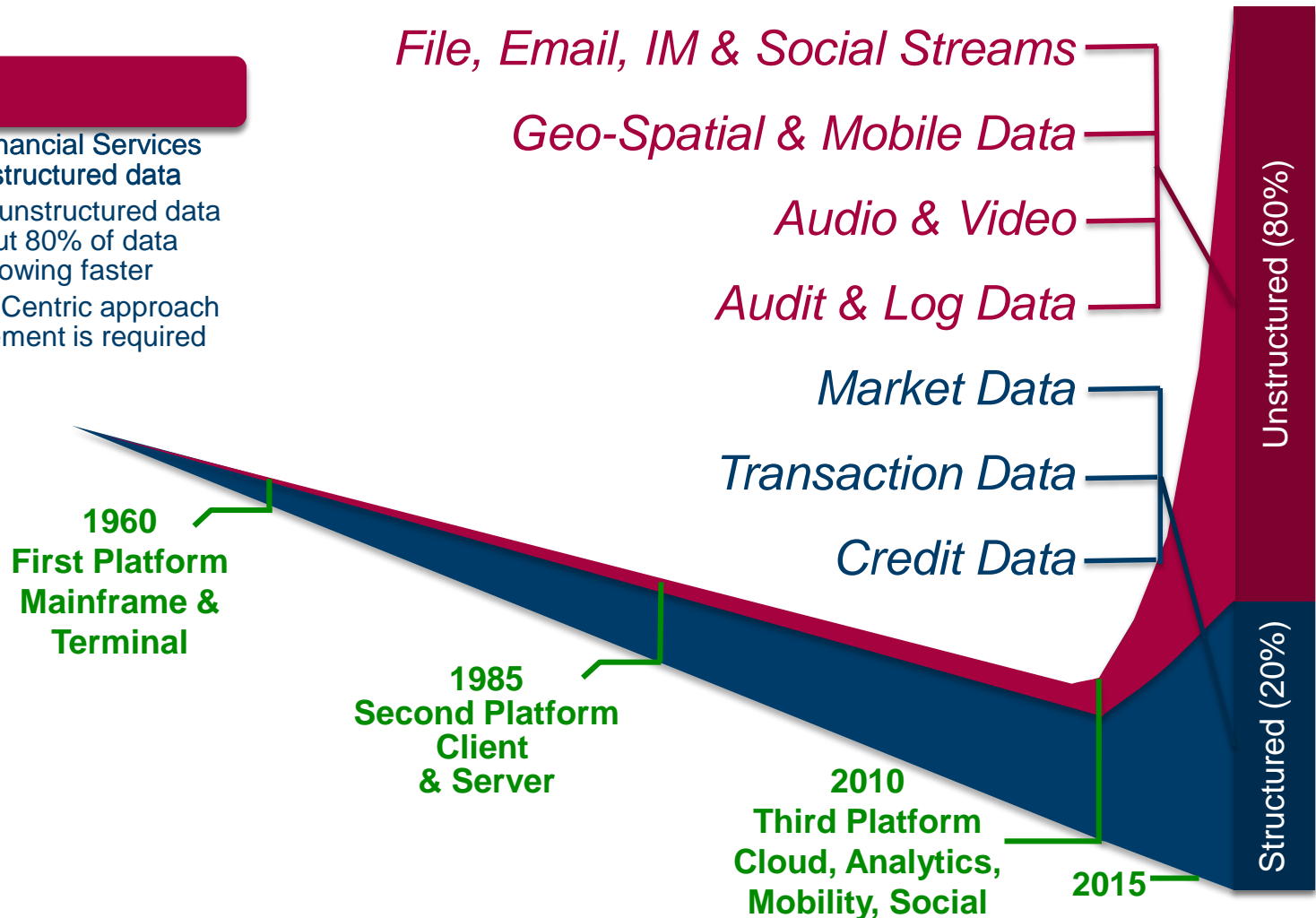- Solution: GridBank Data Management Platform

Gartner 2013
CoolVendor

STORÂGE AWARDS
THE STORRIES XI

STORÂGE AWARDS
THE STORRIES IX
WINNER
**Archiving & Compliance
Product of the Year**

2014 WINNER
DCS awards

WORLD FINANCE 100

CIO 100
HONOREE
2014

Financial Services Data Growth

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Data Growth

- Traditionally, Financial Services produced only structured data
- Third Platform: unstructured data represents about 80% of data volumes & is growing faster
- A modern Data Centric approach to data management is required

File, Email, IM & Social Streams

Geo-Spatial & Mobile Data

Audio & Video

Audit & Log Data

Market Data

Transaction Data

Credit Data

Unstructured (80%)

Structured (20%)

1960
First Platform
Mainframe &
Terminal

1985
Second Platform
Client
& Server

2010
Third Platform
Cloud, Analytics,
Mobility, Social

2015

Trends and Challenges in Finance

Challenges

Data Silos	• Limited data transparency & access between business units
Data Volumes	• Massively growing unstructured data volumes
Regulation & Reputation	• Increasingly complex regulatory & business conduct environment
Business Risk	• Huge data flows from a variety of devices & sources
Data Discovery	• Restricted search across complex data repositories
Business Economics	• IT cost/performance needs & business requirements

Opportunities

Data Aggregation	• Unified data, simplified infrastructure & lower TCO
Massive Scalability	• Scale to very large, rapidly growing data sets
Information Governance	• Simplified legal & regulatory compliance
Secure Data Access/Audit	• End-to-end identity centric security
Business Efficiency	• Global data view & access. Accurate Search & e-Discovery
IT & Business Alignment	• Meet reduced CAPEX/OPEX & business requirements

Financial Institution Priorities
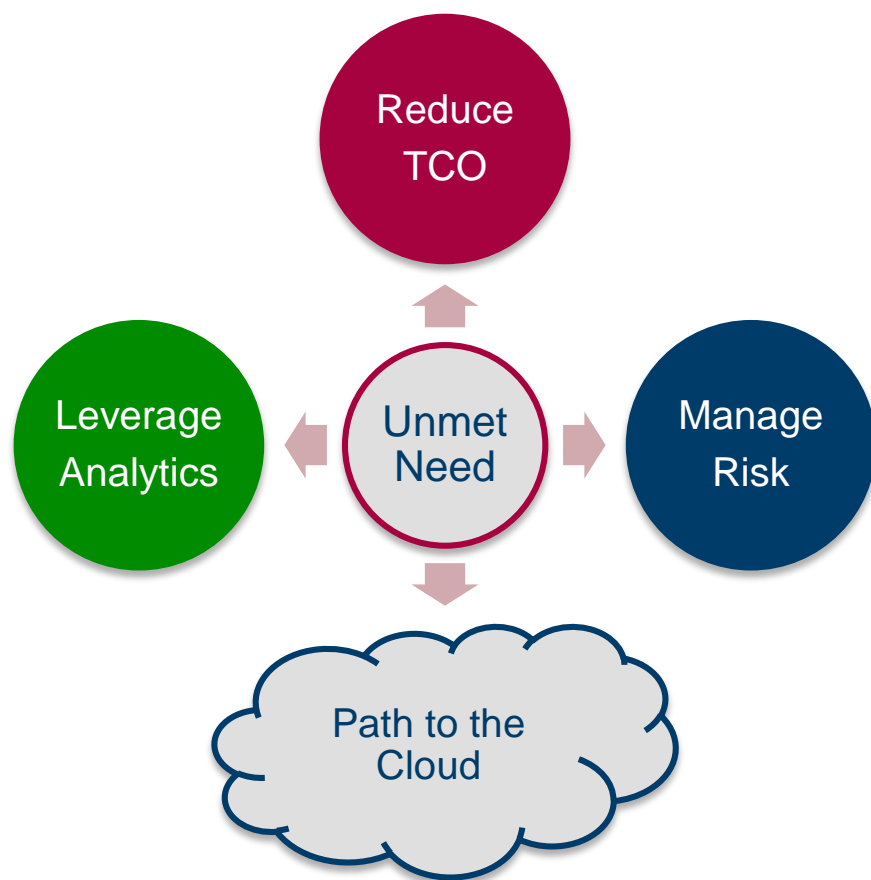
Reduce TCO
- Reduce CAPEX with no vendor lock in
- Constrain data growth & storage OPEX

Managing Business Risk
- Legal preparedness for compliance
- Reduce corporate exposure & conduct risk

Leverage Data
- Search & discover data across all silos
- Drive new revenue streams

Path to the Cloud
- Simple, agile cloud migration model
- Transparent, non-disruptive transition

GridBank Feature Set

GridBank File System

- Linear, scale out object storage technology
- Media independent: flash, disk, tape & cloud
- Single unified view of all data
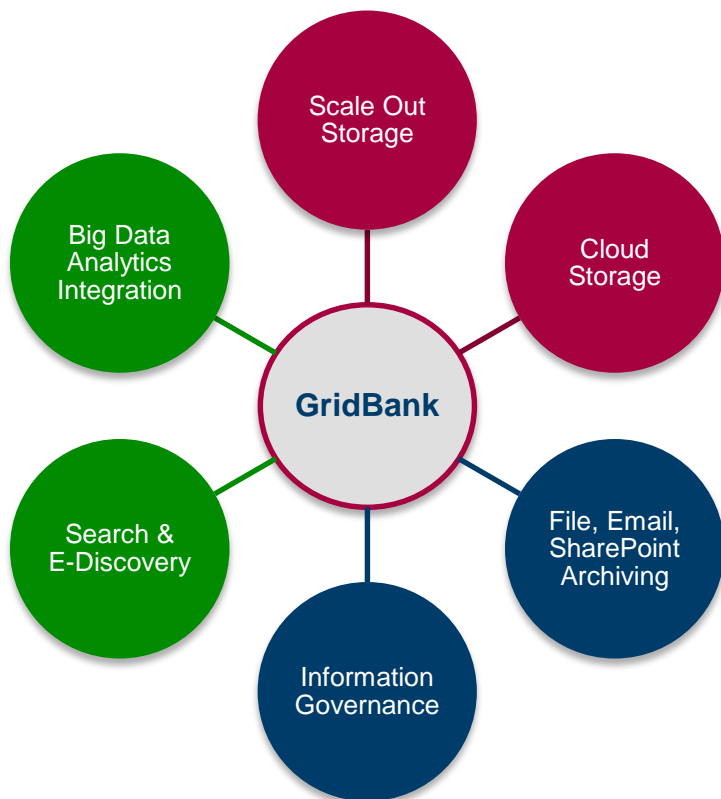
GridBank Data Management

- Policy-based data retention, granular legal hold & data migration for archiving & tiering
- High availability global replication
- AD-Integrated security & authentication

GridBank MetaBase

- Application integration of Exchange, SharePoint, Social Streams; supporting 550+ file formats
- File, full text content & custom metadata indexing
- Metadata repository: unified search & e-Discovery

Technology Use Cases

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GridBank File System

- Flexible Infrastructure Scalable to Petabytes
- Media Independent: Flash, Disk, Tape & Cloud
- Private, Public or Hybrid Cloud

GridBank Data Management

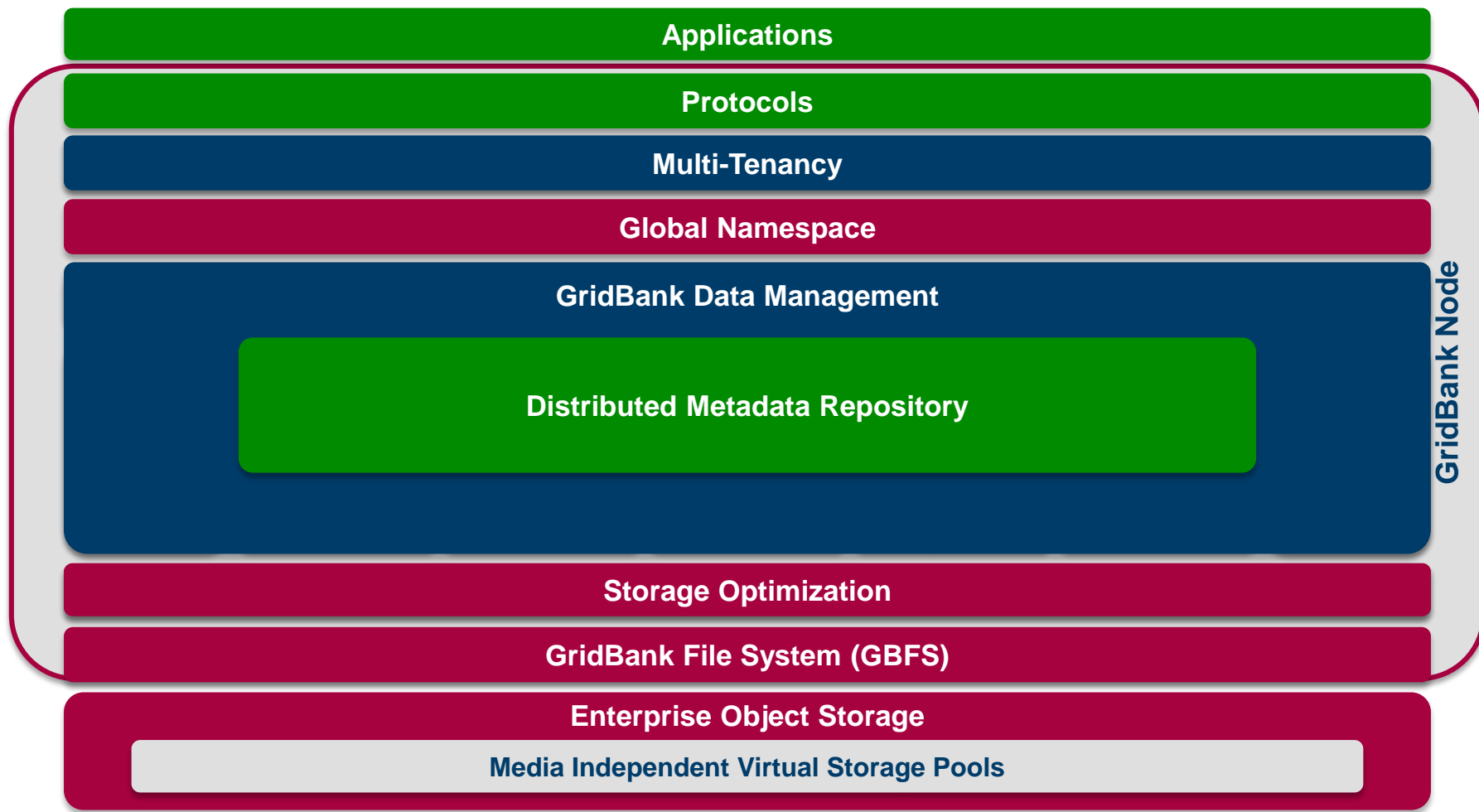- File, Email, SharePoint Archiving
- Information Governance
- Secure Enterprise Mobility (BYOD)

GridBank MetaBase

- File, Content & Custom Metadata Repository
- Enterprise Search & E-Discovery
- Foundation for Big Data Analytics

Diagram labels: Scale Out Storage, Cloud Storage, File, Email, SharePoint Archiving, Information Governance, Search & E-Discovery, Big Data Analytics Integration, GridBank

GridBank Solution

Applications

Protocols

Multi-Tenancy

Global Namespace

GridBank Data Management

Distributed Metadata Repository

Storage Optimization

GridBank File System (GBFS)

Enterprise Object Storage

Media Independent Virtual Storage Pools

GridBank Node

GridBank Solution

File	Exchange	SharePoint	IM/Social	Sync & Share	Hadoop	3rd Party

CIFS	NFS	HDFS	FTP	WebDAV	HTTP	REST	SOAP	S3	Cloud	Other

Multi-Tenancy

Global Namespace

GridBank Policy Engine

GridBank Node

Data Security

GridBank Search & Discovery	GridBank Query

GridBank MetaBase

Data Encryption	Data Integrity	Data Replication	Multi-Site Replication	Data Retention

Data Security

Storage Optimization

GridBank File System (GBFS)

Enterprise Object Storage

SAN	NAS	JBOD	Cloud	Tape

GridBank Benefits:
Financial Institutions

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Reduce TCO	• Higher storage utilization with unified data management & administration
Extensible & Scalable	• Across all financial data transactions, content, applications & locations
Data Governance & Compliance	• Simple & efficient legal & regulatory compliance
Manage Corporate Risk	• End-to-end identity centric security inside & outside data center
Data Search & Discovery	• Unified search & e-Discovery across all consolidated data sources enterprise-wide
Business Agility	• Timely access to market & transactional data to drive decision making

GridBank File System for Reduced TCO

Consolidated Infrastructure for Operational Efficiencies

- Eliminates storage silos
- Increases utilization
- Massively scalable to multi-PB

Optimized Price Performance

- Distributed Object Dedupe & compression limits volume growth & footprint
- Flexible & dynamic multi-site features
- Automated, policy-based self-management

Simplified Administration

- Easy to operate & centrally managed
- Fault tolerant & self-healing
- Improved FTE/TB ratio

GridBank Data Management for Risk Control

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Retention & Disposal

- SOX & SEC Compliant Retention
- Legal Hold for Litigation Proceedings

Data Security & Integrity

- Prevent Unauthorized Access Across Any Device
- Tamper-Proof Encrypted Storage

Audit & Logs

- Real-Time & Historical Audit Records
- Object Insertion, Access, Deletion Audit

Reputation & Conduct Risk

- FCA & SEC Trust, Transparency & Governance
- Global Control for Risk Policy

Multi-Site Replication

- High Availability with Failsafe Replication
- Low Latency GridBank Site Data Access

GridBank MetaBase
for Business Agility

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Distributed Metadata Repository

- Ingestion & indexing file, full text index & custom metadata
- Application integration of Exchange, SharePoint, Social & LOB applications
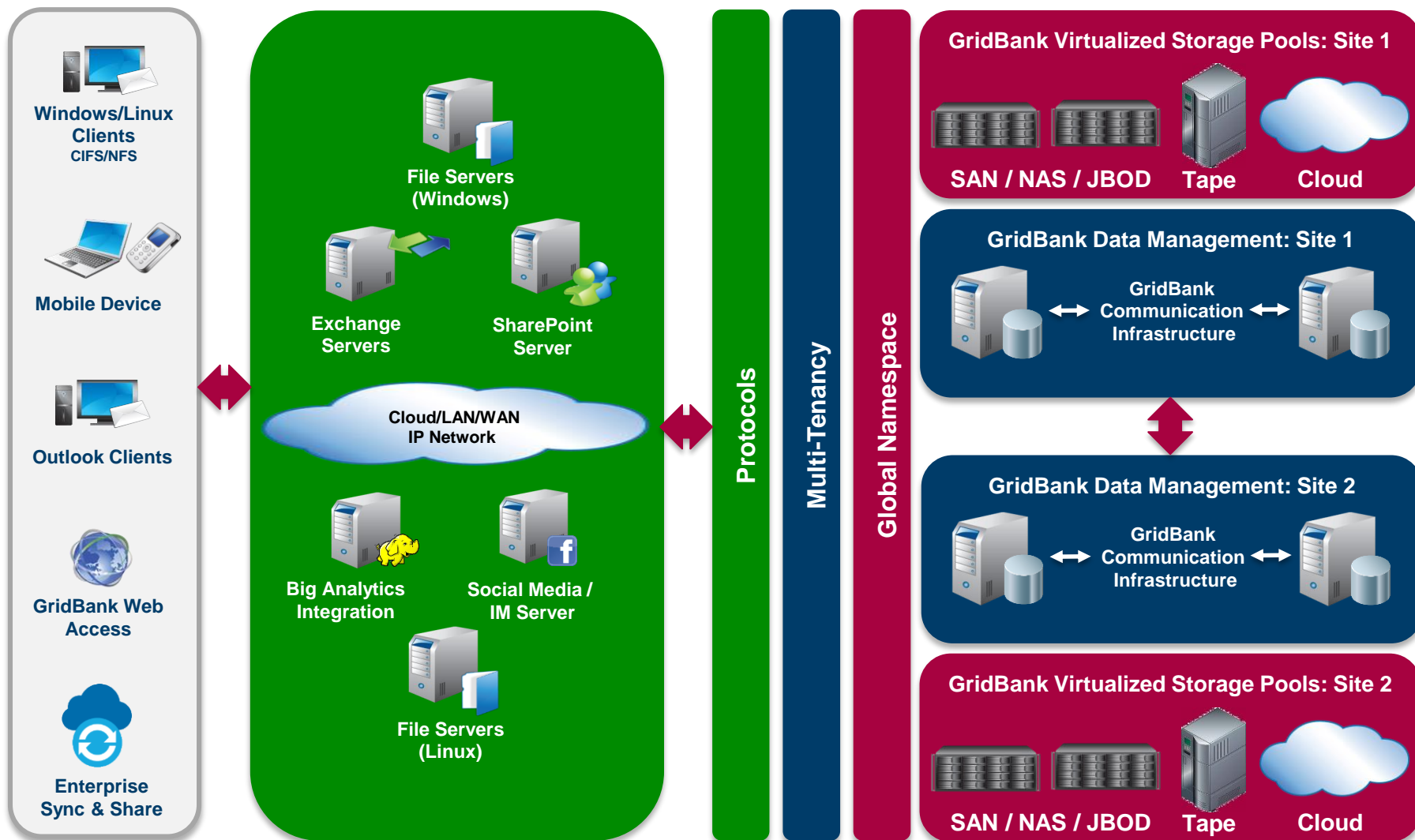- Support for over 550+ standard & industry-specific file types

Accelerate Access & Discovery

- On-demand high availability access across entire data estate
- Unified search across all consolidated data sources
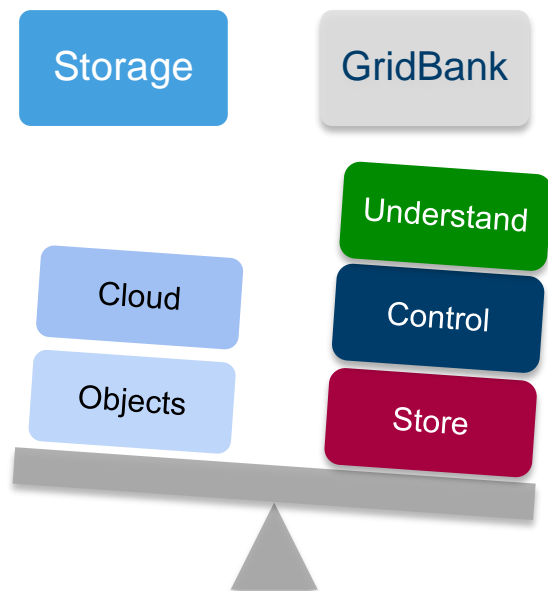- Reduce cost & risks with fast & accurate e-Discovery

Maximize Return on Data

- Gain business agility & improved operational efficiencies
- Big analytics integration framework for insights & decision-making
- Increasing returns to data volume; more data == more value

GridBank Deployment Diagram

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Windows/Linux Clients
CIFS/NFS

Mobile Device

Outlook Clients

GridBank Web Access

Enterprise Sync & Share

File Servers (Windows)

Exchange Servers

SharePoint Server

Cloud/LAN/WAN IP Network

Big Analytics Integration

Social Media / IM Server

File Servers (Linux)

Protocols

Multi-Tenancy

Global Namespace

GridBank Virtualized Storage Pools: Site 1

SAN / NAS / JBOD   Tape   Cloud

GridBank Data Management: Site 1

GridBank Communication Infrastructure

GridBank Data Management: Site 2

GridBank Communication Infrastructure

GridBank Virtualized Storage Pools: Site 2

SAN / NAS / JBOD   Tape   Cloud

Financial Institutions Use Cases

Storage

GridBank

Cloud

Objects

Understand

Control

Store

Core Banking Services Provider Use Case

- Scalable, Globally Distributed Data Storage
- Archival of Billions of Check Images & Exchange Emails
- Data Compliance, Risk Mitigation
- Litigation Preparedness, Granular Legal Hold & E-Discovery

Global Investment Bank Use Case

- Backup Optimization, Search & Discovery
- Replace Proprietary Hardware Backup Deduplication
- Index Backup Content & Store Objects as Separate Files
- Search, Discover & Retrieve Backed Up Files Individually

Tarmin Solution

- Unified Global View of Unstructured Data
- Media Independent Storage Abstraction Layer
- Information Governance across Diverse Storage Pools
- Metadata Content Indexing for Rapid Search & Discovery

![TARMIN — Where Data Defines Value.]

Endorsements

"The rapid growth of our company is generating more and more data…
GridBank allows us to store and protect our G&G data and create a
platform for improving business efficiency while reducing TCO"

David Edwards, Group Head of Information Systems, Premier Oil, Plc.

PremierOil

"The latest capability enhancement of Tarmin's GridBank [product]
further solidifies its innovation leadership [in the market] and helps
banks and financial institutions to meet regulatory compliance"

Finextra Research

Finextra

"GridBank's massively scalable model allows businesses to
consolidate their data globally across silos to reduce cost…and
enhance the value of data."

Ashish Nadkarni, Research Director, Storage Systems, IDC

IDC *Analyze the Future*

GridBank Benefits

Data Defined Storage

- Takes a single, holistic, comprehensive data centric approach
- Consolidates application data across large, distributed locations & cloud
- Provides big data insight & analytics & application integration

Data Consolidation

- Massively Scalable Architecture
- Reduce TCO
- Enhance Operational Efficiencies

Data Management

- Simplify Data Management
- Enforce Compliance
- Reduce Business Risk

Data Value

- Improve Business Agility
- Drive Revenue Growth
- Increase Competitive Advantage

Thank You!

Questions & Answers

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