

TERADATA[®]

THE BEST
DECISION
POSSIBLE™

Building the Next Generation Data Architecture with Hadoop, Data Warehouse & Data Discovery Platforms

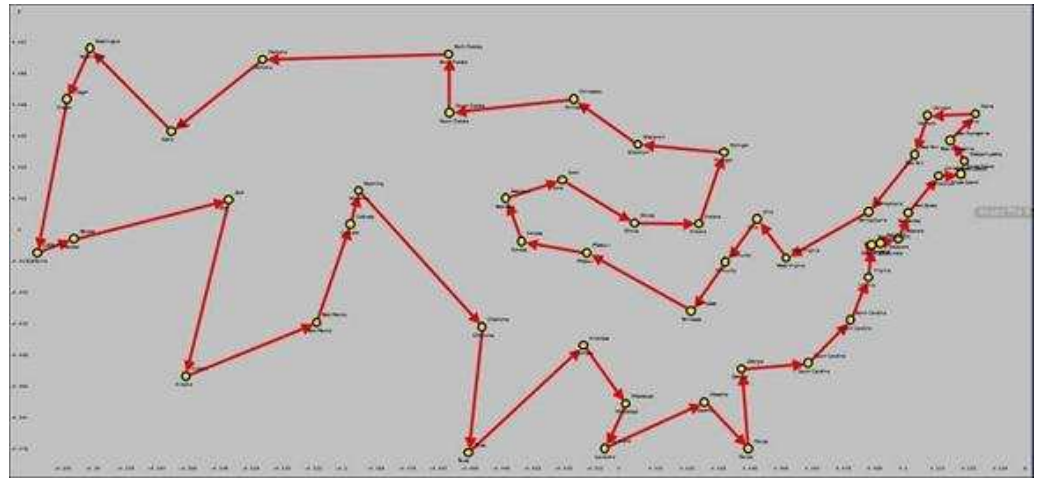
Bill Franks
Chief Analytics Officer, Teradata
February 2014

Agenda

- Analytics Trends That Drive The Need
- Laying The Groundwork
- The Case For Discovery
- A Unified Architecture



Changing How People Work ...



Blurring Industry Classifications ...



The first step to get started

[DOWNLOAD NIKE+ CONNECT](#)

Monetizing Data & Analytics ...



Making Analytics Operational ...

"Passengers should be able to get from curb to boarding gate with dignity. That means without stopping, stripping or unpacking..." – International Air Transport Association



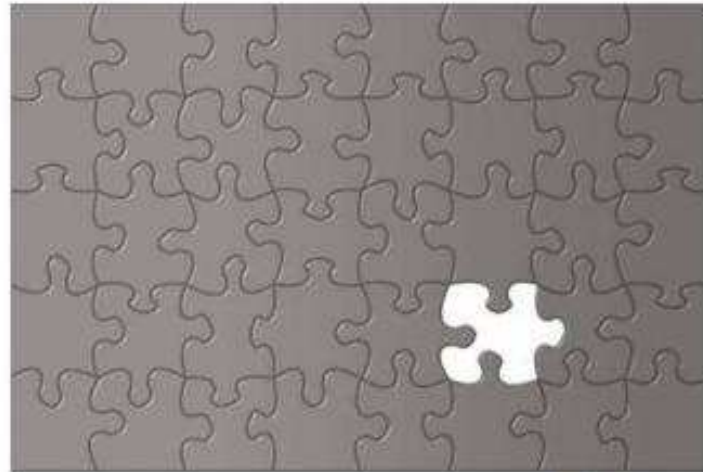
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Setting Your Big Data & Analytics Strategy

Big data must be another facet of your enterprise data & analytics strategy



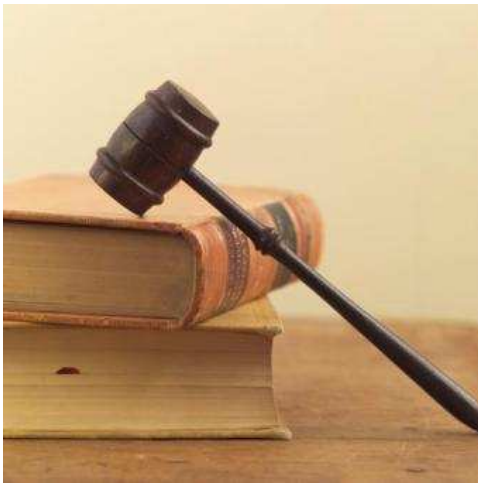
Enable Innovative Analytics ... Safely

- Discovery: Agility & limited constraints
- Deployment: Ensure quality & reliability



Adding Governance To Analytic Processes

- Too early: Innovation stifled
- Not addressed: Leads to trouble
- Have a framework: Utilize it minimally until implementation



How To Build Analytics Processes?



*There are many considerations
for analytics
tool and platform selection*

DATA Type

**ANALYTICS
METHODS**

Analytic Tool Investment

Business Requirements

**Analytics
Processes**

Skill Sets

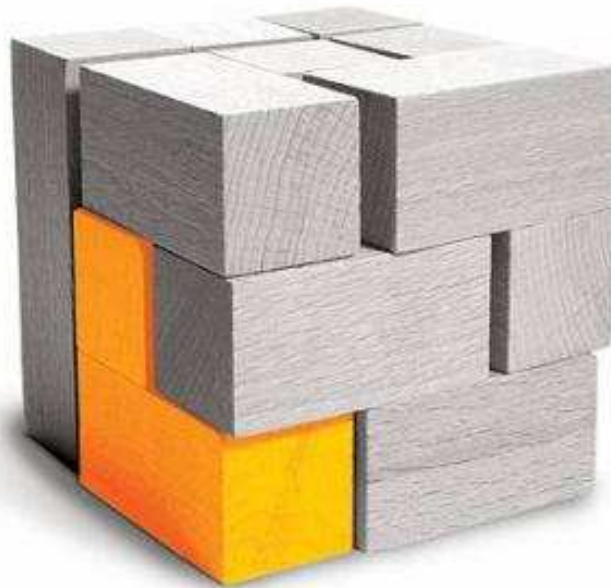
Total Cost of Ownership

Volatility

No Simple Answer

Be Sure To Account For *ALL* Costs

There are a wide range of costs to consider. License fees are only one piece of the puzzle



Choosing Which Tools To Use For What Purposes

- Don't get into debates about what tools can or can't do
- Experts can make almost anything work



You can't say "can't"!!!

The real question is:

How can you *most efficiently* solve your problem *today*?

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- **The Case For Discovery**
- A Unified Architecture

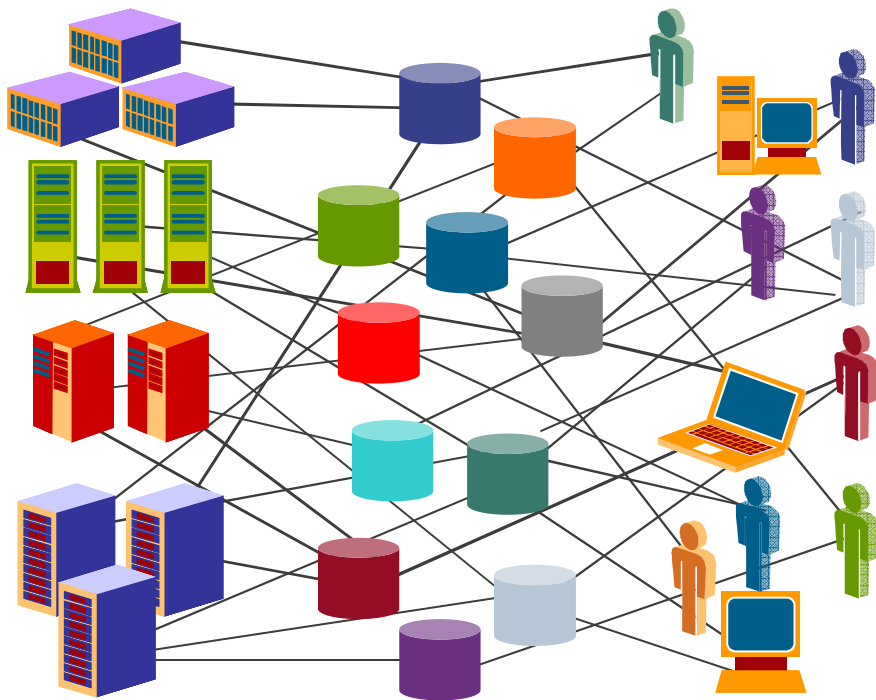


Historical Perspective: The Case For Data Warehousing

The Problem

OPERATIONAL
SYSTEMS

DECISION
MAKERS

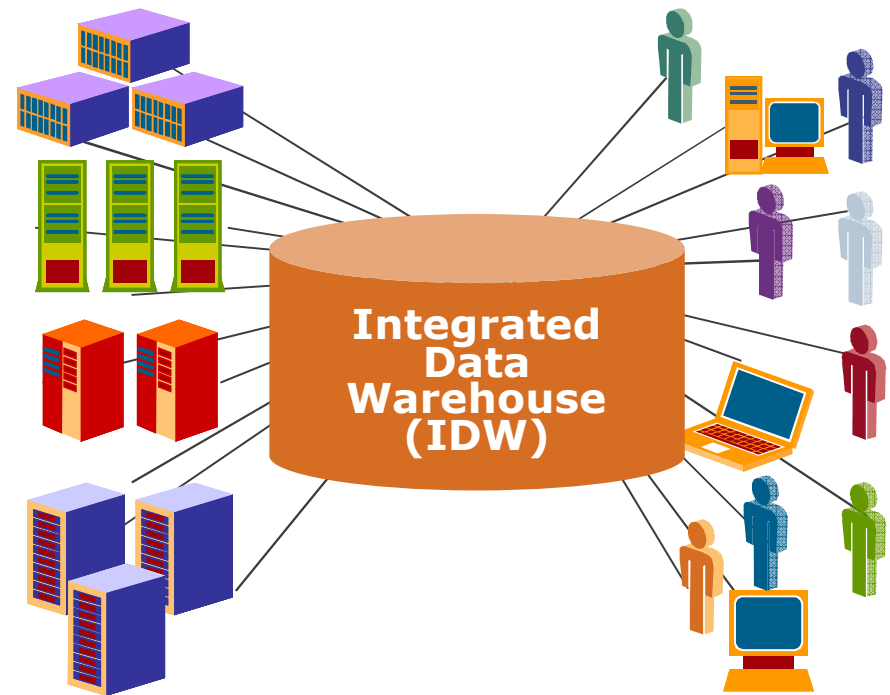


Proliferation of data marts has resulted in fragmented data, higher costs, poor decisions

The Solution

OPERATIONAL
SYSTEMS

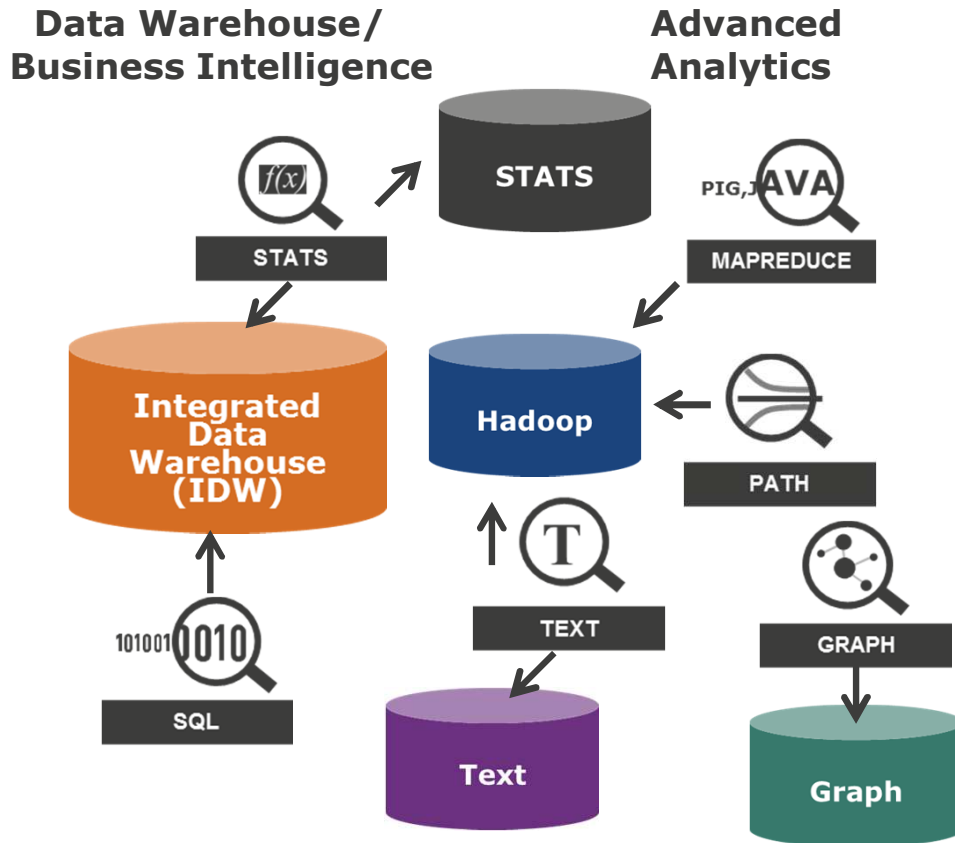
DECISION
MAKERS



Integrated data provides data consistency, lower costs, better decisions

Today's Perspective: The Case For A Discovery Platform

The Problem



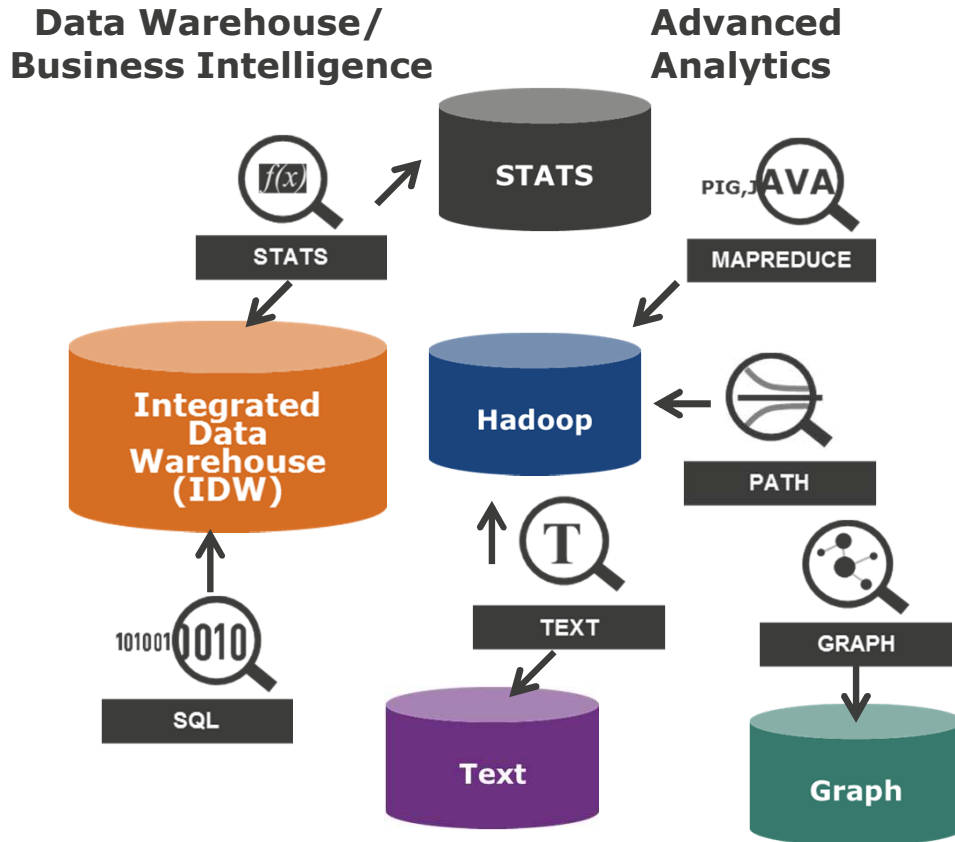
Discovery Platform Role:

- Doesn't require extensive data modeling and formatting
- Doesn't balance the books
- Data completeness and quality can be "good enough"
- No stringent SLAs
- Not part of production work streams

Proliferation of advanced analytics environments has resulted in fragmented data, higher costs, expensive skills, longer time to insight

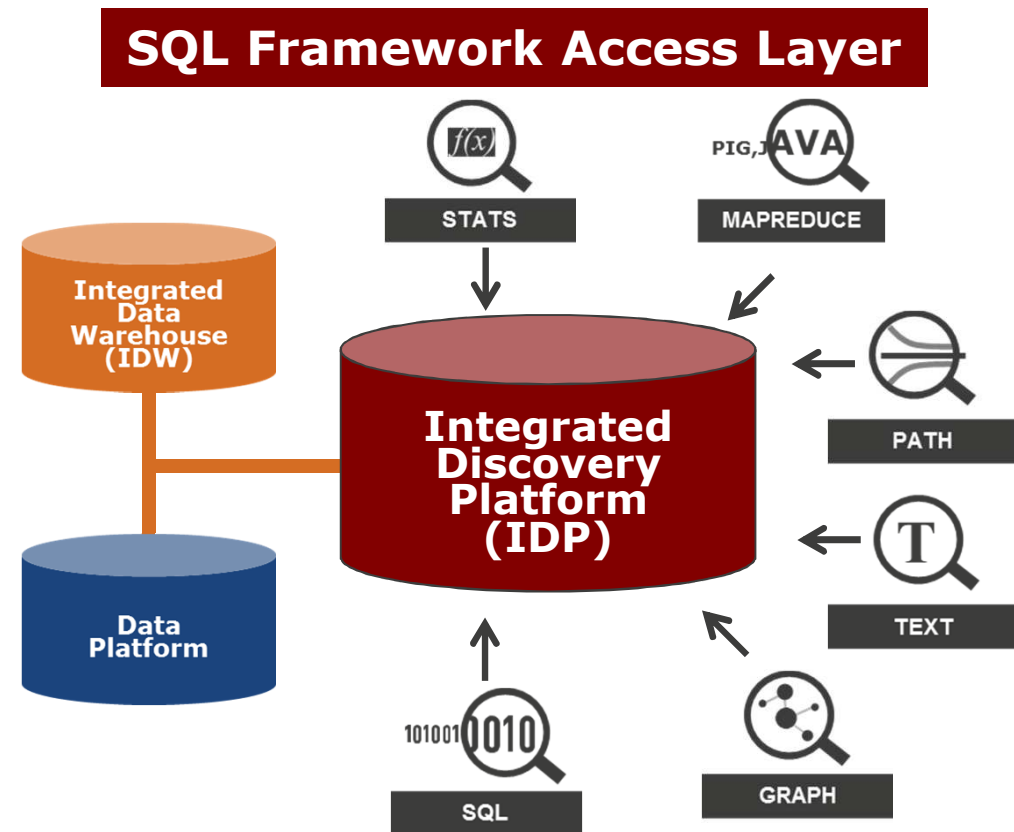
Today's Perspective: The Case For A Discovery Platform

The Problem



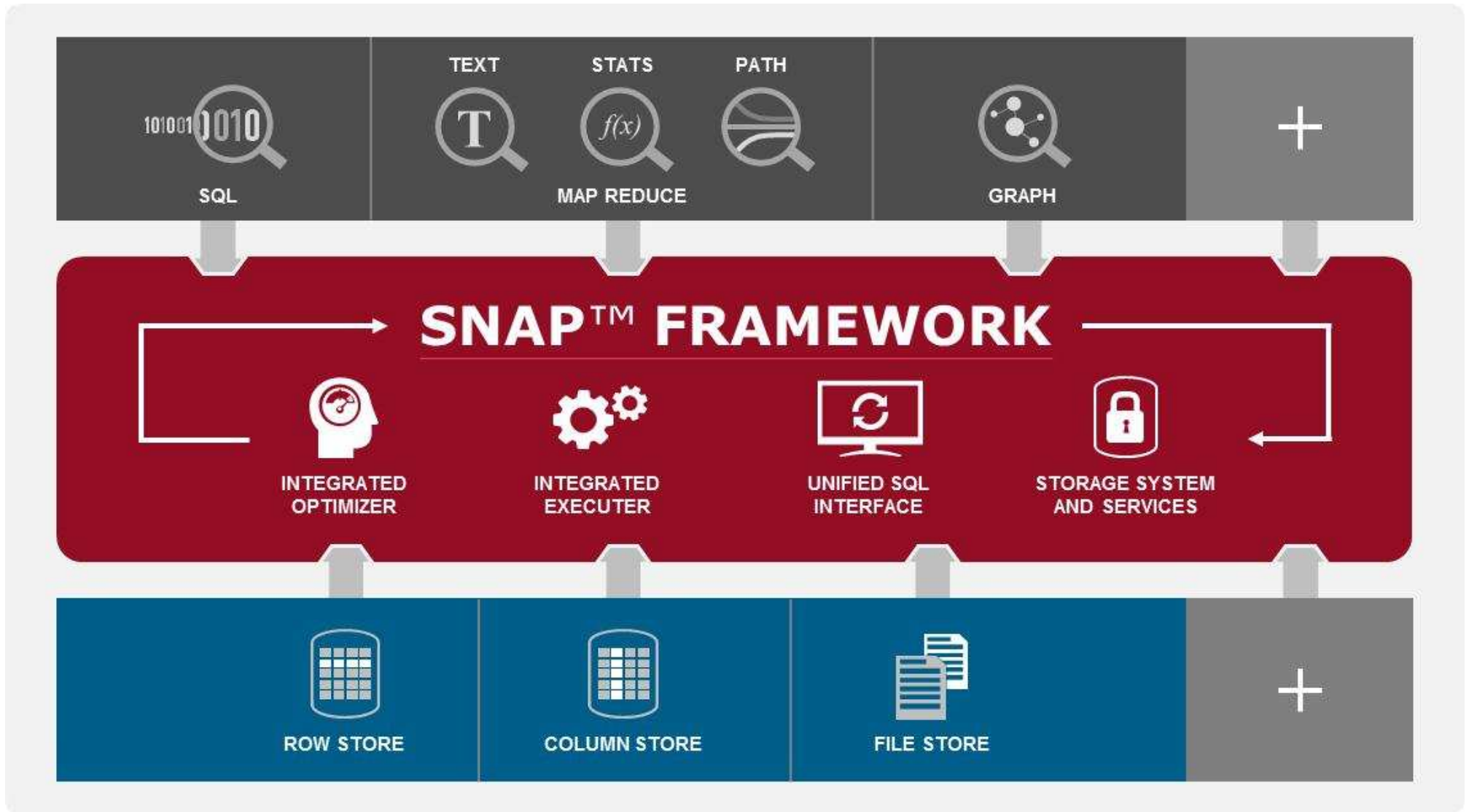
Proliferation of advanced analytics environments has resulted in fragmented data, higher costs, expensive skills, longer time to insight

The Solution



Integrated discovery analytics provides deeper insight, integrated access, ease of use, lower costs, better insight

Teradata Aster SNAP™ Framework



Leverage A Discovery Platform In Diverse Ways

Perform purely exploratory analysis alongside confirmatory analysis to maximize benefits

Exploratory Analysis

Full scope not defined

Interactively evolving hypotheses

Business problem is developing

Aim is to identify new theories

Confirmatory Analysis

Examining predefined problems

Assessing specific hypotheses

Business problem well defined

Aim is to validate a theory

Both approaches are quite valuable & necessary!



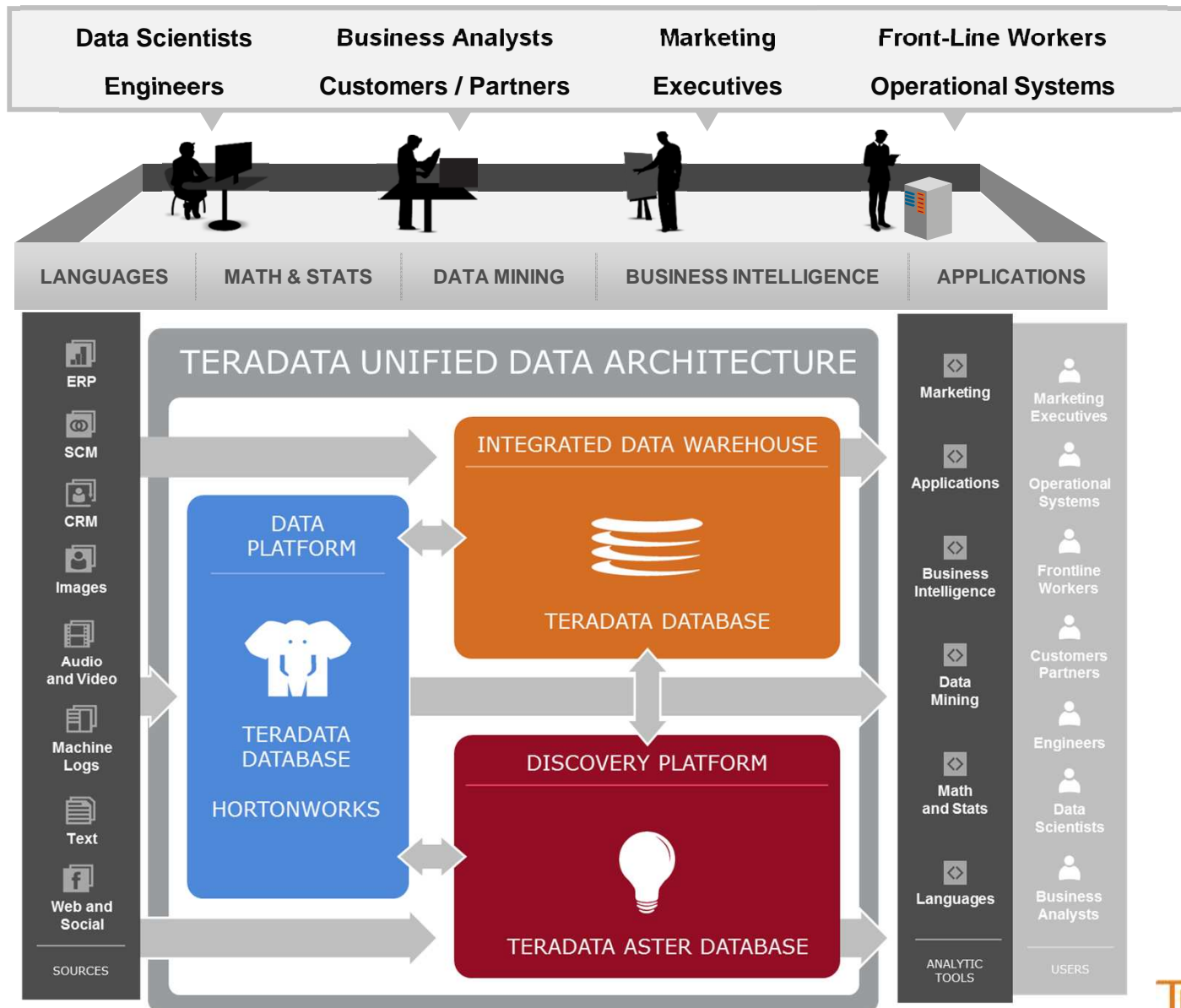
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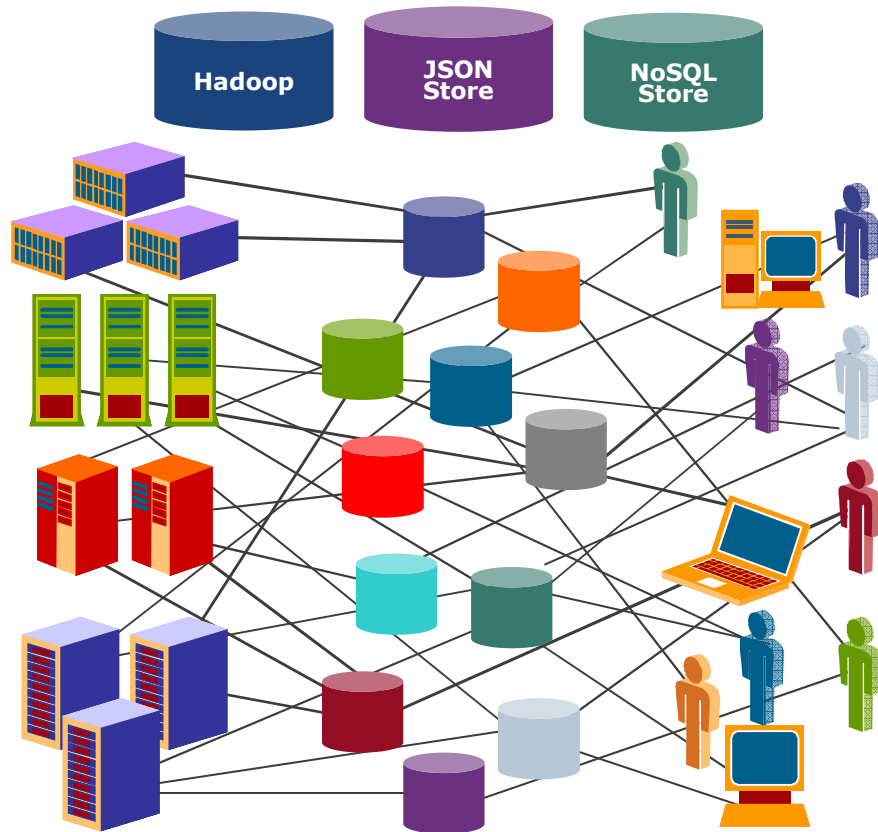
Teradata Unified Data Architecture

Your environment must enable any analysis against any type or volume of data at any time...



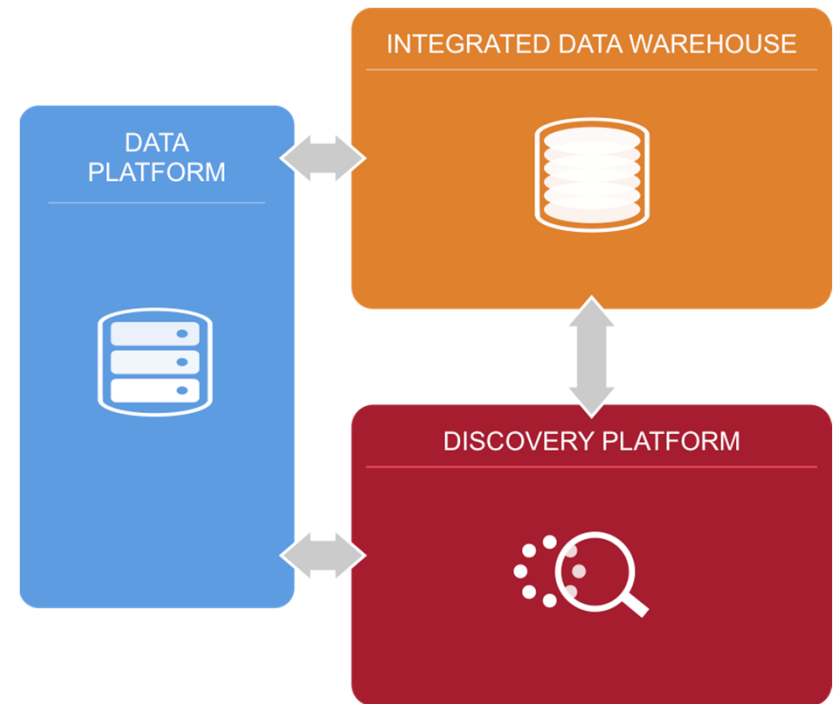
Today's Perspective: The Case For A Unified Data Architecture

The Problem



The problem has even gotten worse with the introduction of Hadoop and NoSQL databases - fragmented data, higher costs, poor decisions

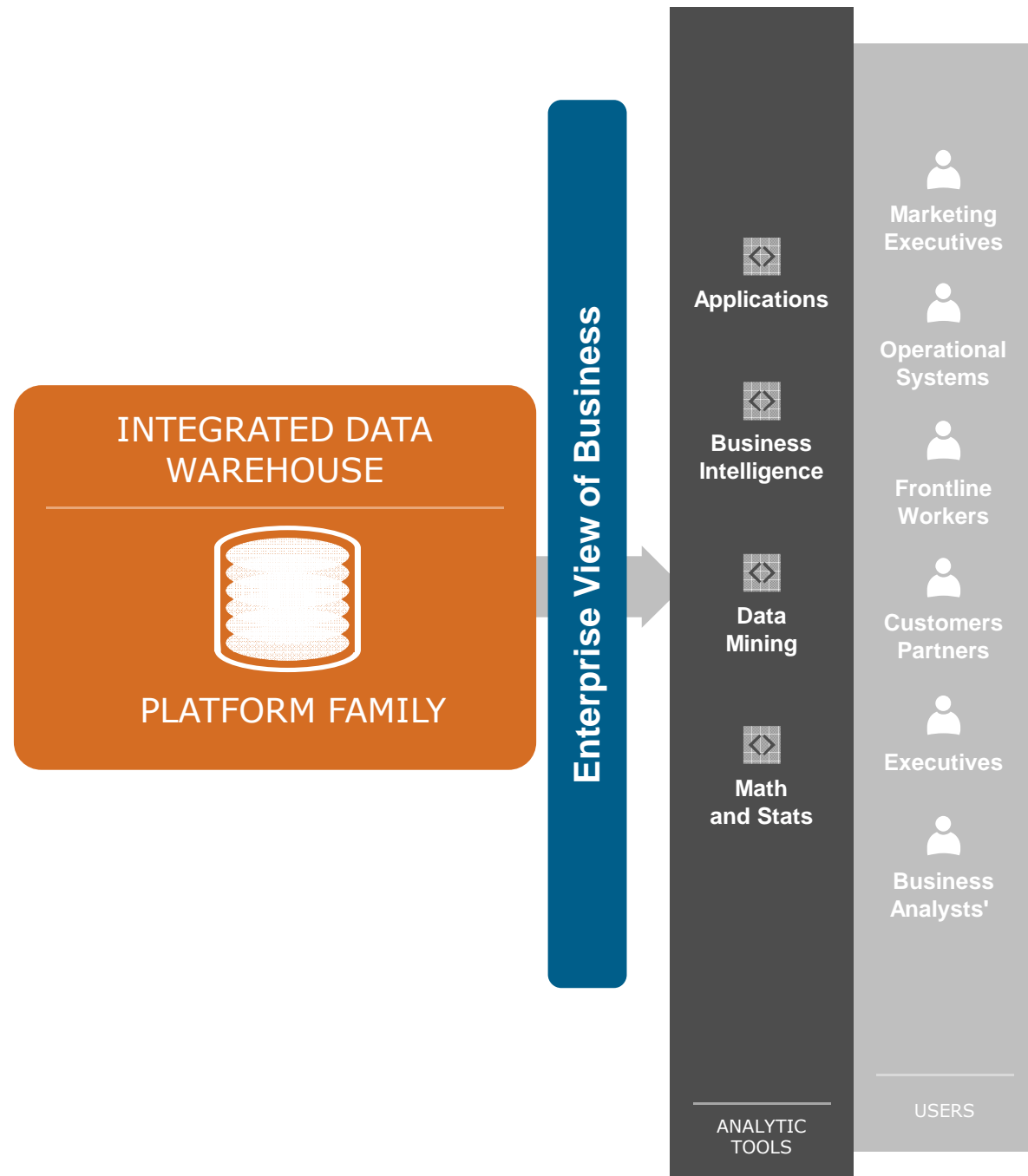
The Solution



The Unified Data Architecture provides a compelling package to deliver the solution to getting value out of Big Data

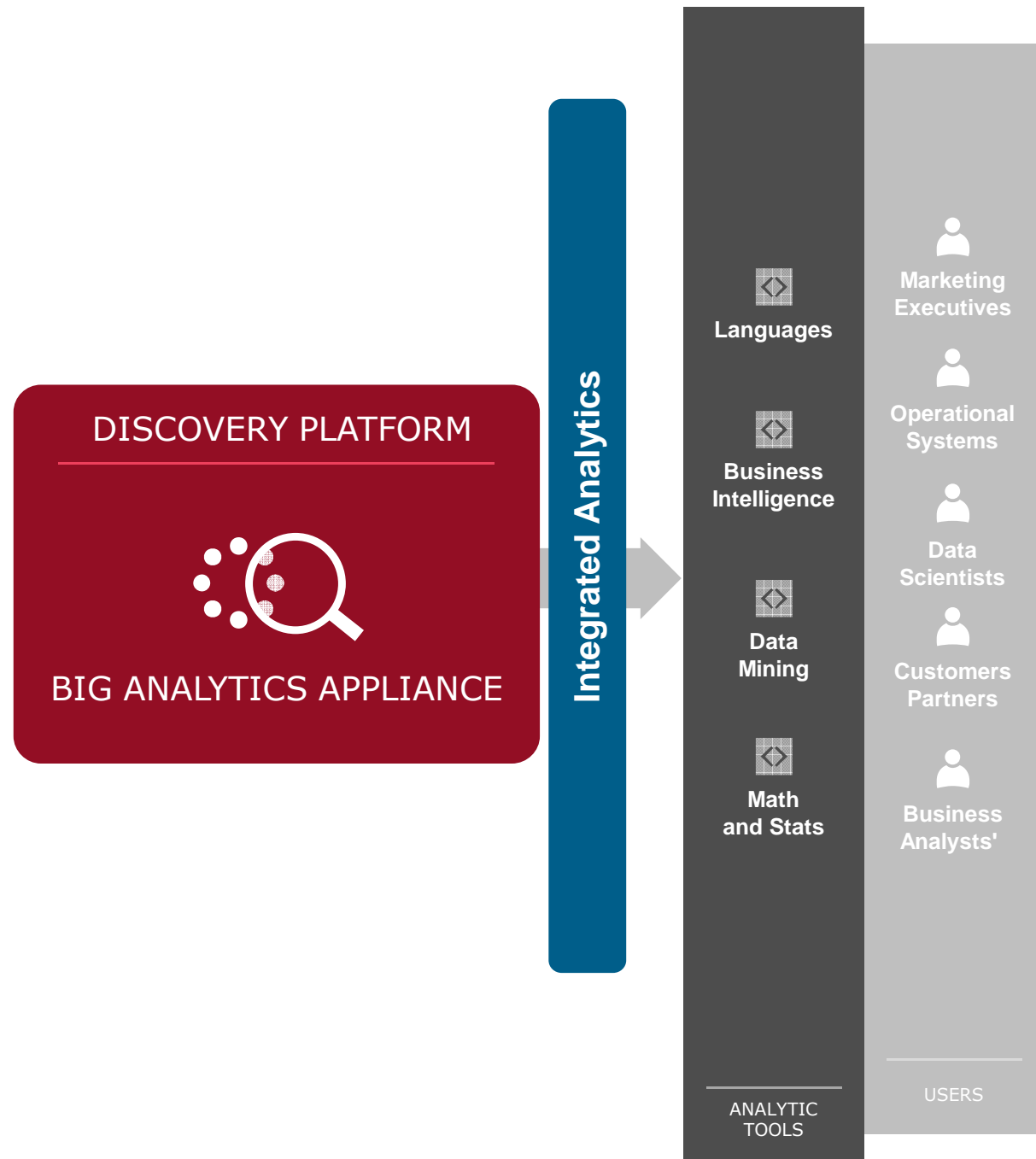
Operationalizing Insights In The Enterprise

- Enterprise “Single View” of your business
- Cross-functional analysis
- Shared source of relevant, consistent, integrated data
- Fast time-to-market for new apps
- Load once, use many times
- Low total cost of ownership
 - > \$/Query, \$/User, \$/App



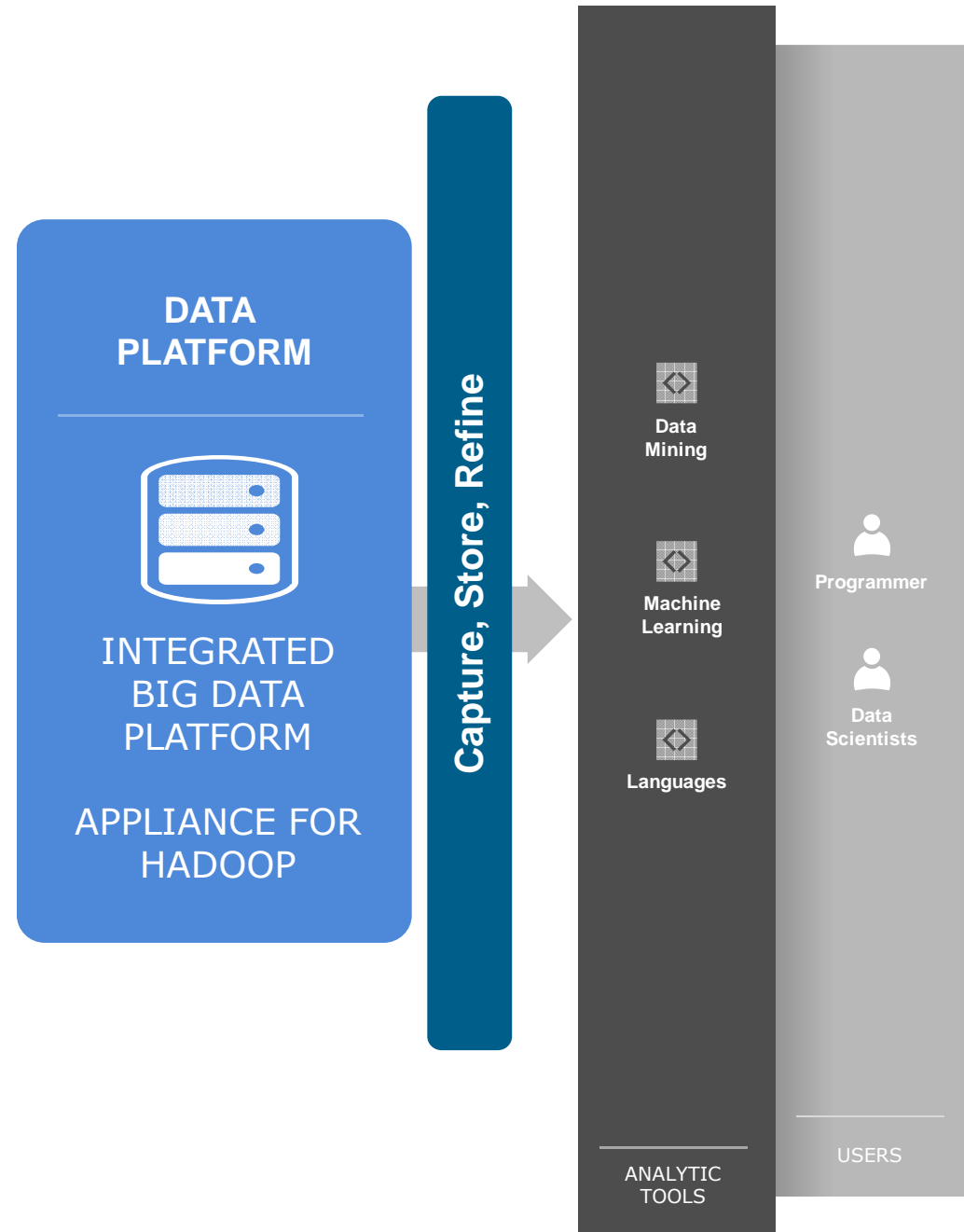
Unlocking Hidden Value In Any Data

- Interactive data discovery
 - > Web clickstream, social
 - > Set-top box analysis
 - > CDRs, sensor logs, JSON
- Flexible or evolving schema
- MapReduce, SQL, Statistics, Graph ...
- Structured and multi-structured data
- Patented SQL-MapReduce
- Low time & \$/insight



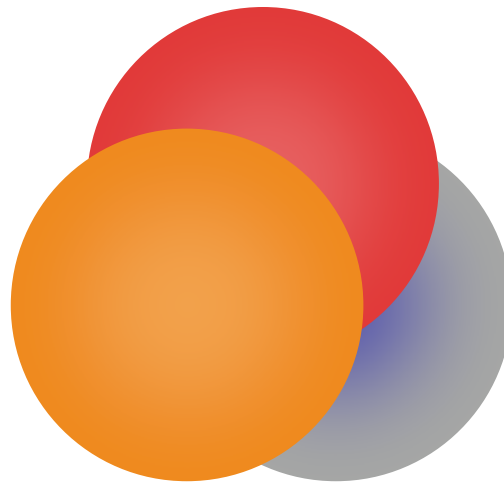
Capturing Data for Storage and Refining

- Land/source operational data
 - > Single extract from source systems
- History or long term storage
 - > Low cost storage
- Preprocess data
 - > Sessionize data, remove XML tags
- Transformations
 - > Structured and semi-structured data
- Simple Math and Batch Processing
- Low \$/Terabyte

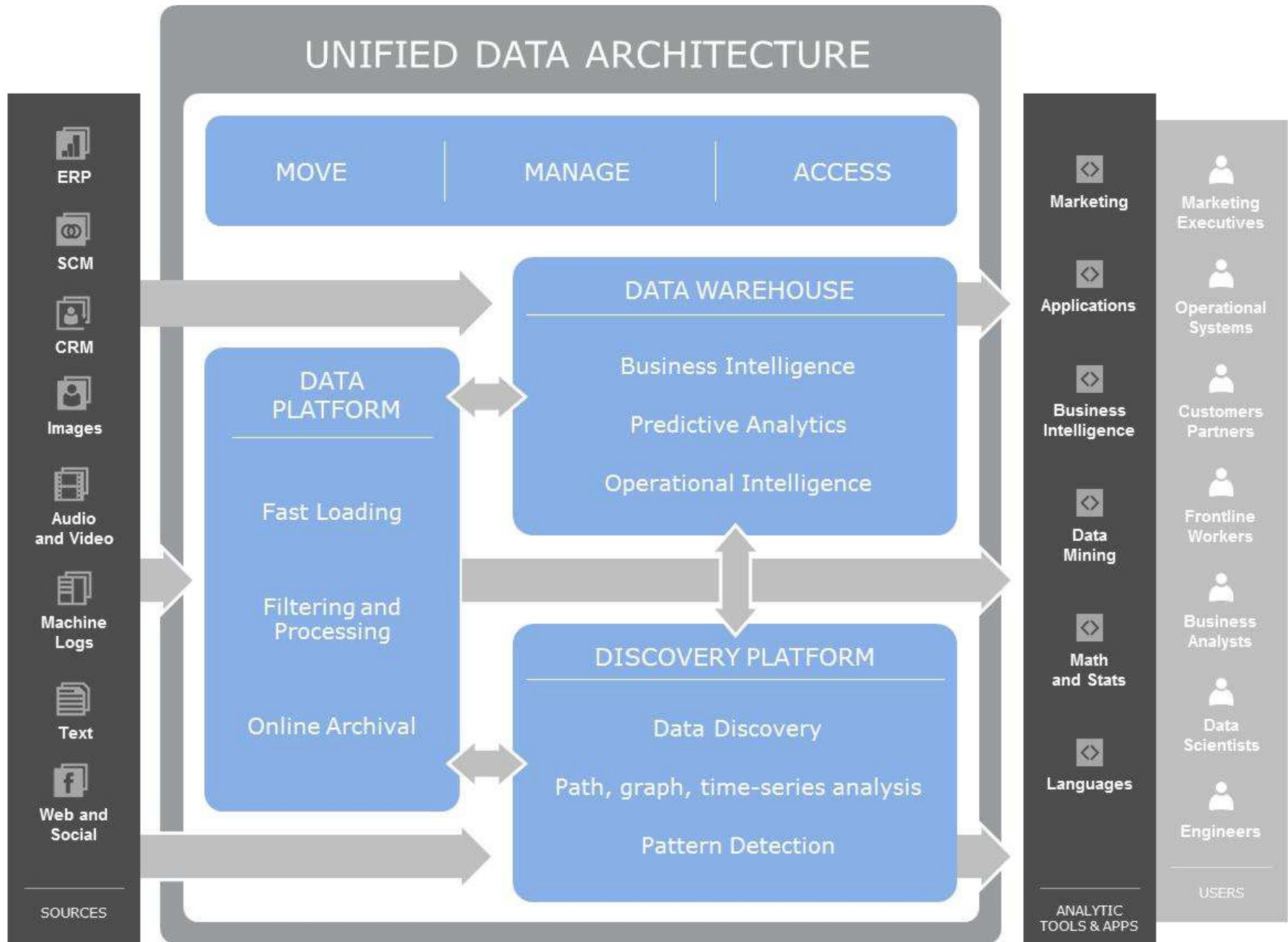


It Isn't An "Either / Or" Choice!

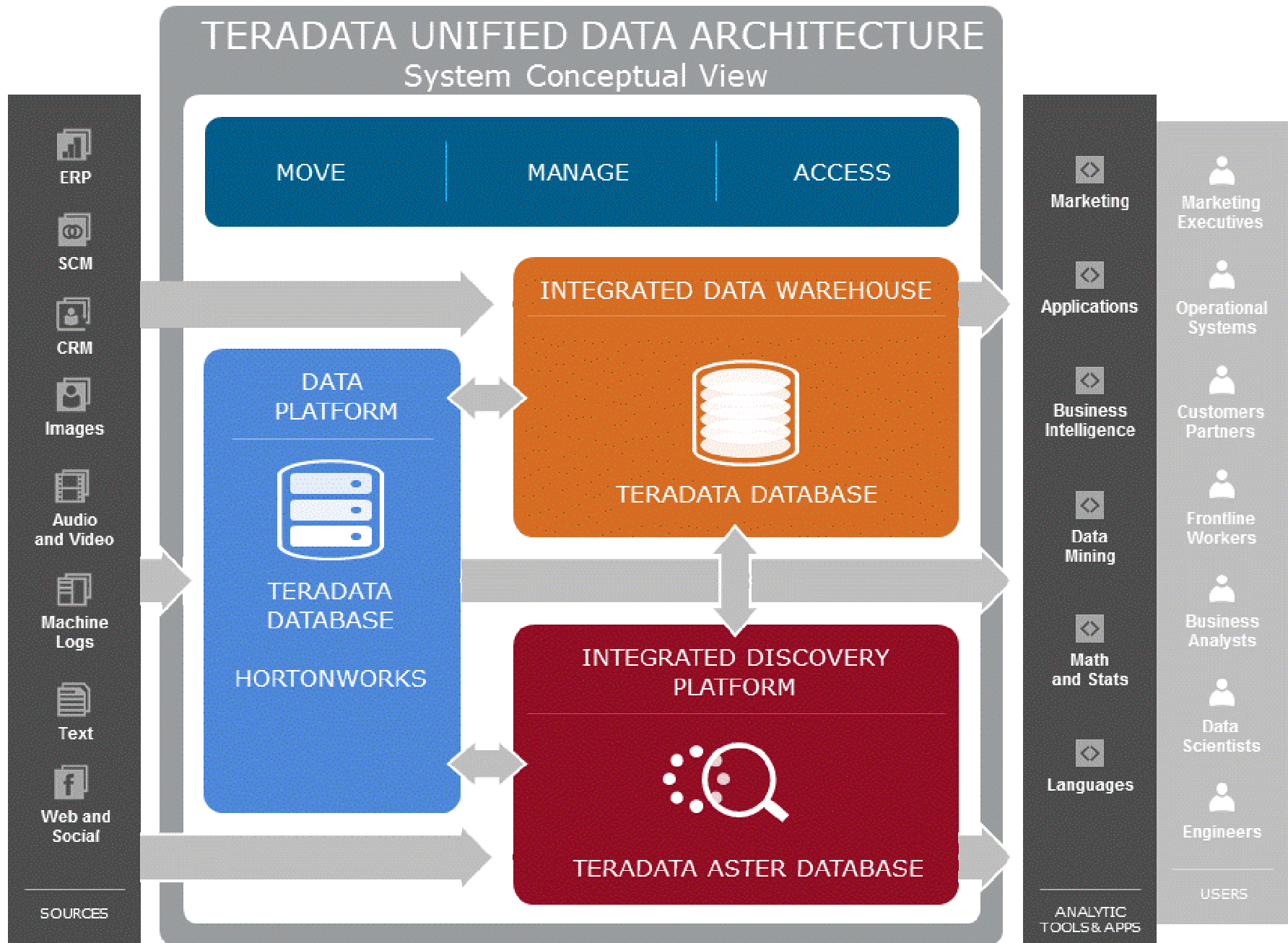
- Multiple platforms, tools, and technologies can be used together to maximize results
- Each can each enhance the others
- Over time, the interaction between the components will be more and more seamless



Summary: Component Roles



Summary: Teradata's Offerings

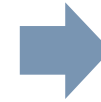
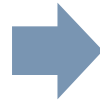


Spread Your Bets!

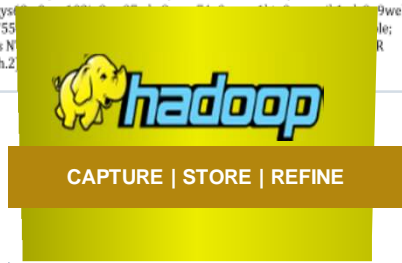
- Who knows what the future holds?
- Don't place all your chips on an architecture that assumes specific outcomes
- Hedge your bets with an architecture that can adapt to whatever the future holds!



A Day In The Life



```
96.255.99.50 -- [01/Jun/2010:05:28:07 +0000] "GET /origin-
log.enquiste.com/d.js?id=a1a3af-
ly61645&referrer=http://www.google.com/search?hl=en&q=budget+planner&aq=5&aqi=g
10&aql=&aq=budget+&gs_rfai=&location=https://money.strands.com/content/simple-
and-free-monthly-budget-planner&ua=Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 6.0;
SLCC1; .NET CLR 2.0.50727; .NET CLR 3.0.30618; .NET CLR 3.5.30729;
InfoPath.2)&pc=pgys
6xy8q8sa&r=0.0755
MSIE 7.0; Windows N
3.5.30729; InfoPath.2
```

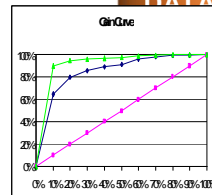
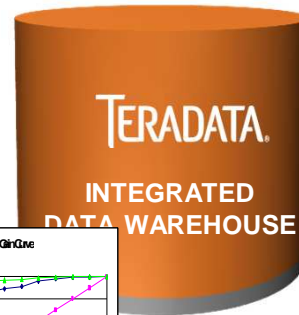


Customer
Browses

Web Logs
Captured

**This is the critical
step to drive value!**

Deployed To
CRM, BI, &
Enterprise Apps



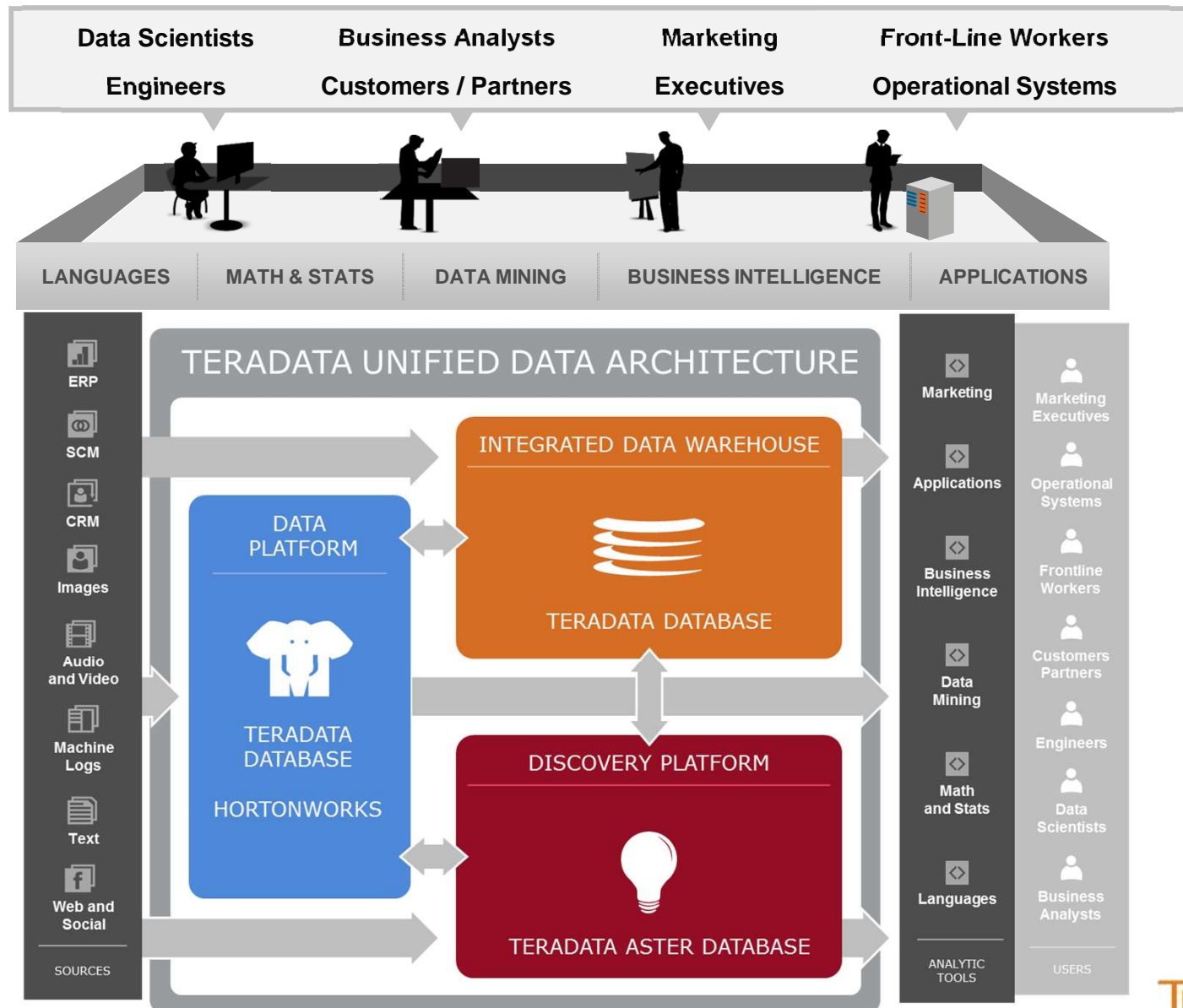
Churn Model
Developed



Data Discovery

Teradata Unified Data Architecture

Your environment must enable any analysis against any type or volume of data at any time...



Contact Information

> If you have further questions or comments:

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