

**BusinessConnect and SolutionsConnect**

It's time to make bold moves.

# THE NEW INFORMATION LIFECYCLE

The role of big data and analytics  
in today's IT landscape



**Big data and analytics, social, mobile, and cloud are driving fundamental change**



# Driving Competitive Advantage

## Big Data & Analytics

### What is needed...



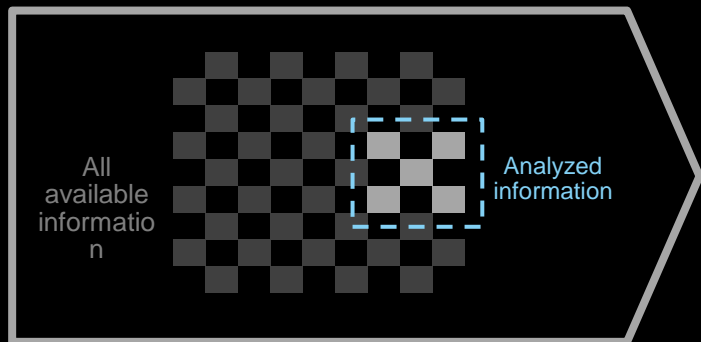
- Mine multiple data sets, apply range of analytics
- Capture time-value of data
- Embrace cognitive computing

# How is Big Data transforming the way organizations analyze information and generate actionable insights?

# Paradigm shifts enabled by big data

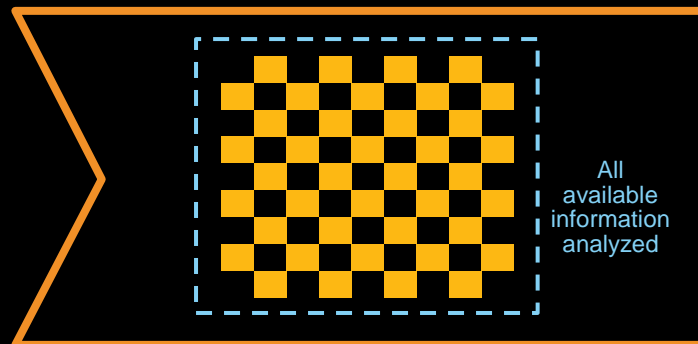
Leverage more of the data being captured

## TRADITIONAL APPROACH



Analyze small subsets  
of Information

## BIG DATA APPROACH

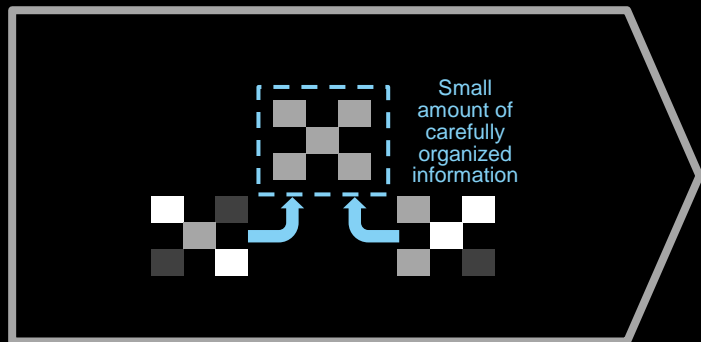


Analyze  
*all* information

# Paradigm shifts enabled by big data

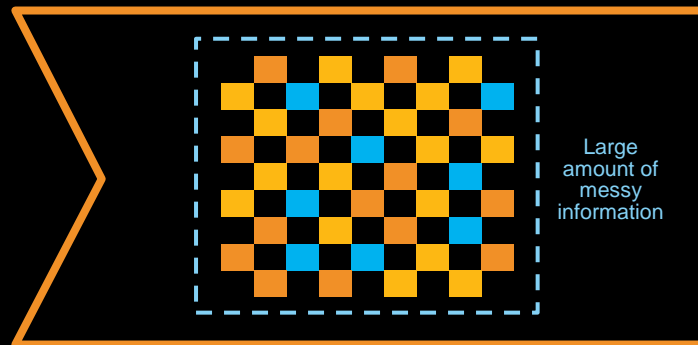
Reduce effort required to leverage data

## TRADITIONAL APPROACH



Carefully cleanse information  
*before any analysis*

## BIG DATA APPROACH

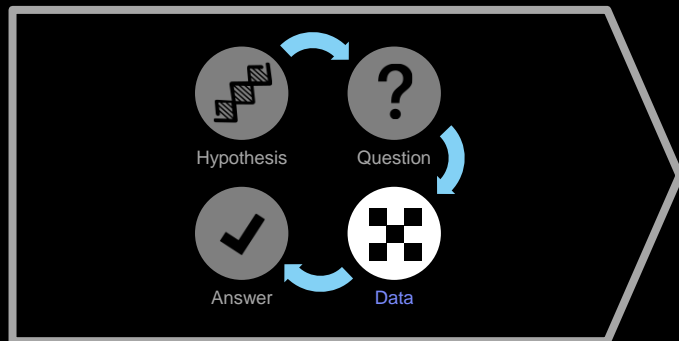


Analyze information as is,  
cleanse as needed

# Paradigm shifts enabled by big data

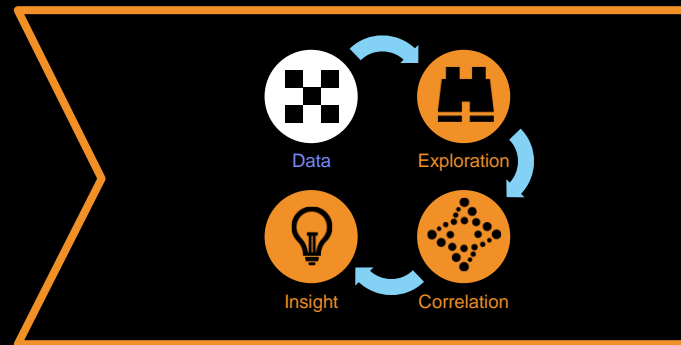
Data leads the way—and sometimes correlations are good enough

## TRADITIONAL APPROACH



Start with hypothesis and test against selected data

## BIG DATA APPROACH

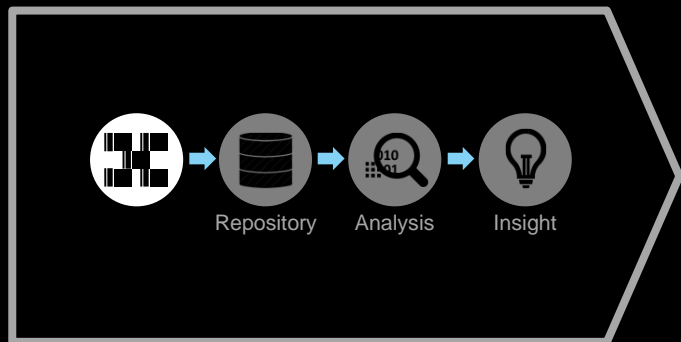


Explore all data and identify correlations

# Paradigm shifts enabled by big data

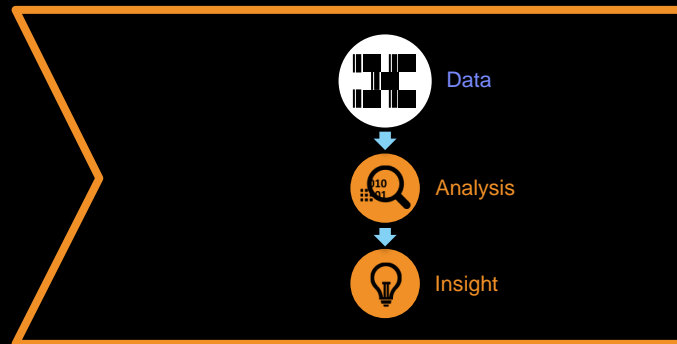
Leverage data as it is captured

## TRADITIONAL APPROACH



Analyze data *after* it's been processed and landed in a warehouse or mart

## BIG DATA APPROACH



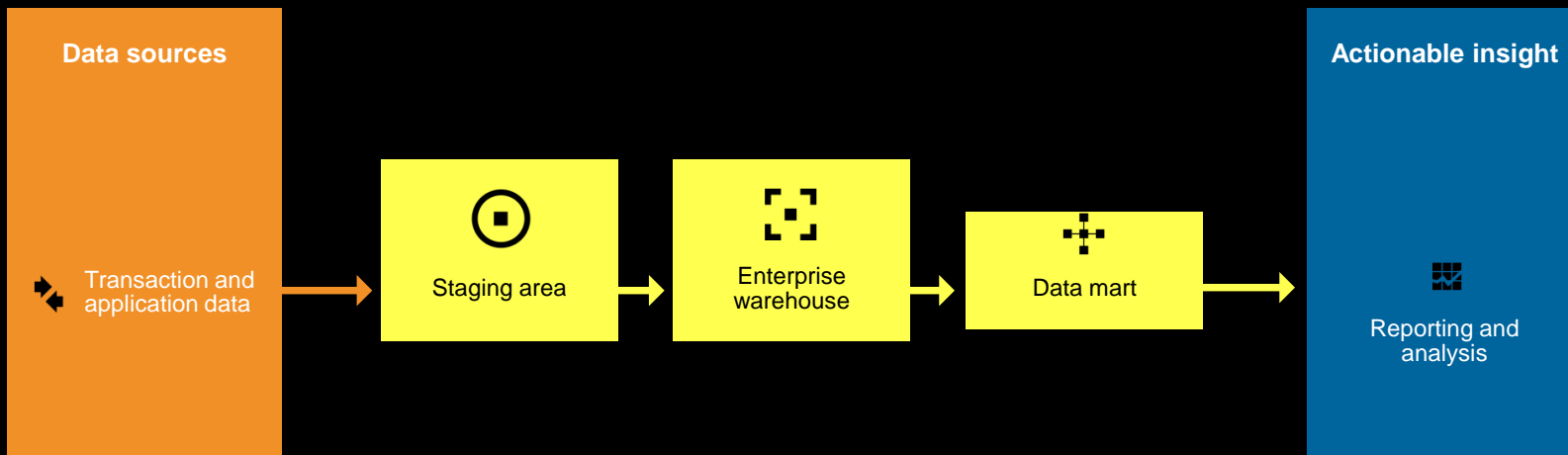
Analyze data *in motion* as it's generated, in real-time



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

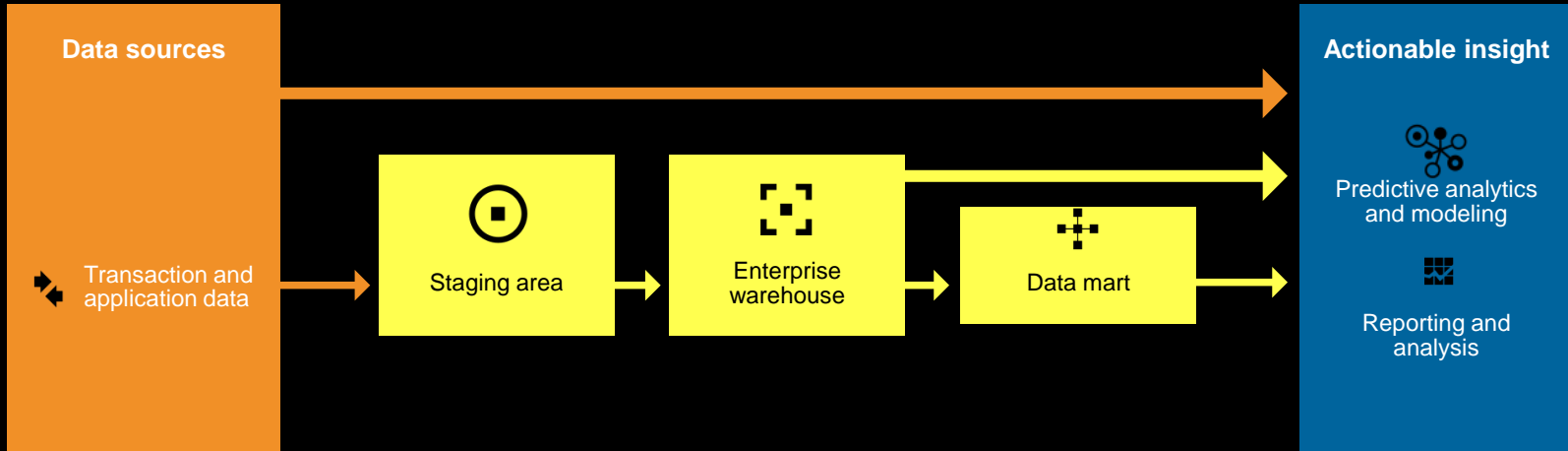
# Traditional enterprise data and analytics environments

Extract, normalize and provide guided, interactive access to operational data



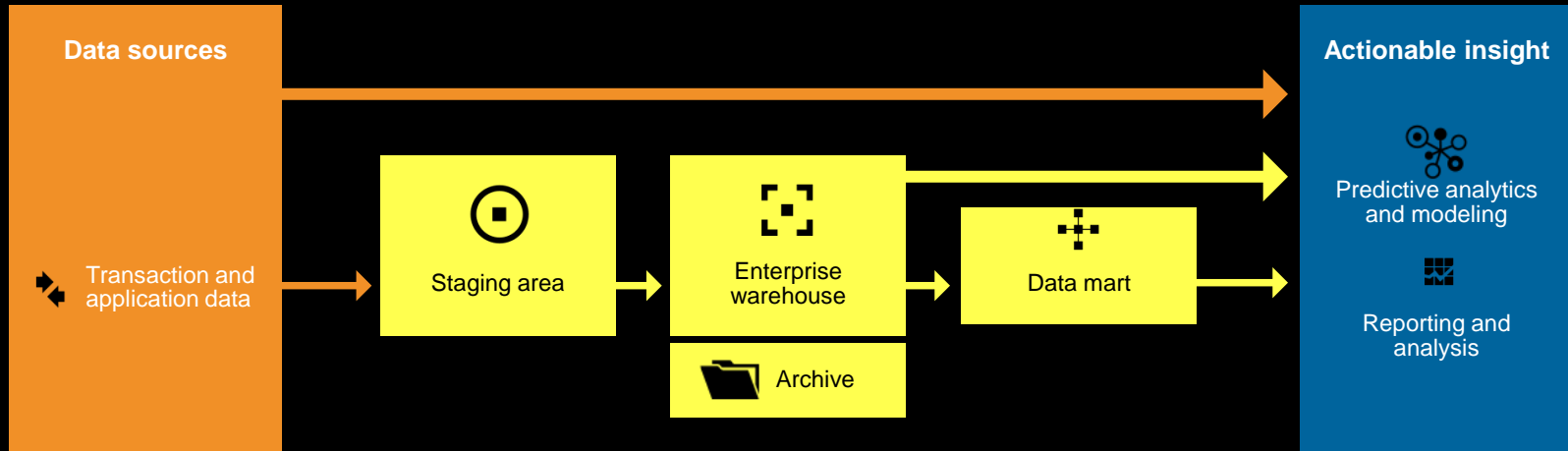
# Traditional enterprise data and analytics environments

## Deliver data for deeper analysis and modeling



# Traditional enterprise data and analytics environments

## Typical enterprise data management environment

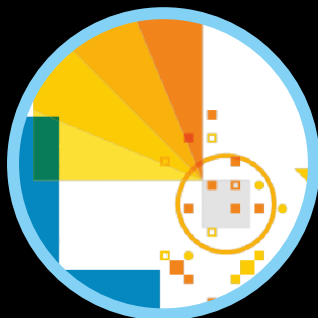


**How are leading companies transforming their data and analytics environment to provide faster, better insights at reduced costs?**

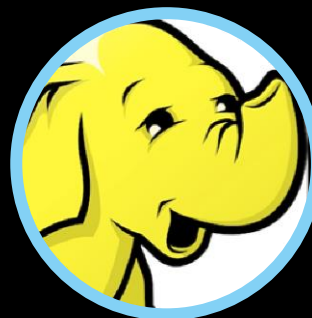
## Big Data Myths

- Big Data is primarily about **large datasets**
- We will have to **replace all older systems**
- Older transactional **data does not matter** anymore
- Data warehouses are **a thing of the past**
- Big Data is only for **internet savvy customers**
- We do not have the **need, budget or skills**

**Big Data**



**Hadoop**



*“There’s a belief that if you want big data, you need to go out and buy Hadoop and then you’re pretty much set. People shouldn’t get ideas about turning off their relational systems and replacing them with Hadoop.”*

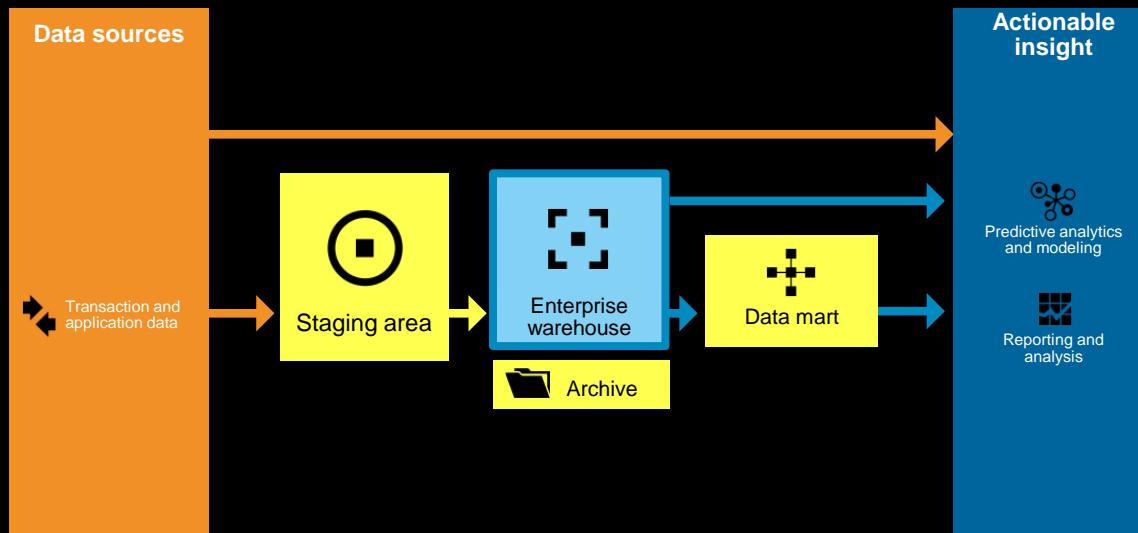


**Ken Rudin**

Head of Analytics at Facebook

# Better information through transformation

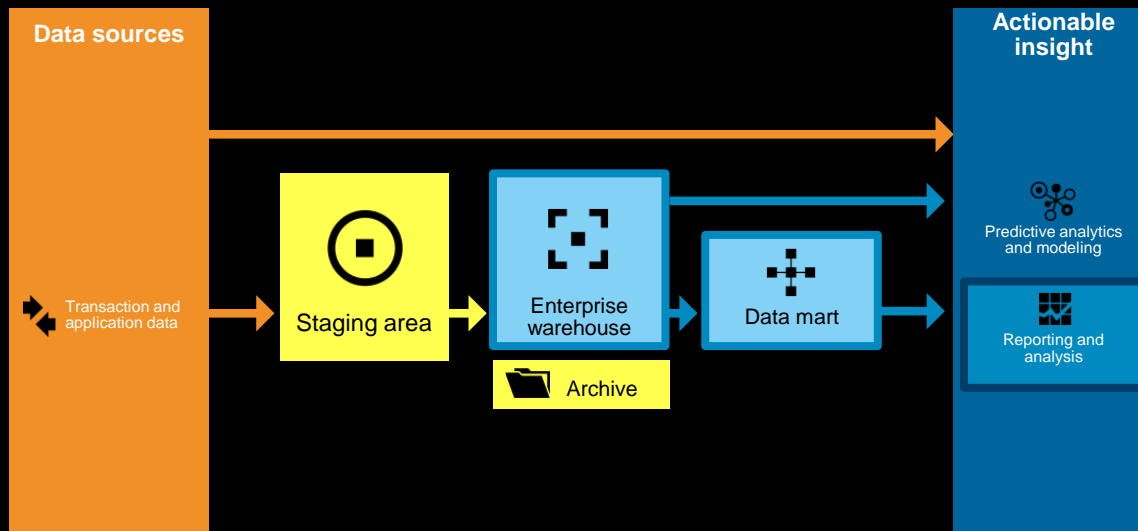
## Deliver faster, deeper insights while reducing costs





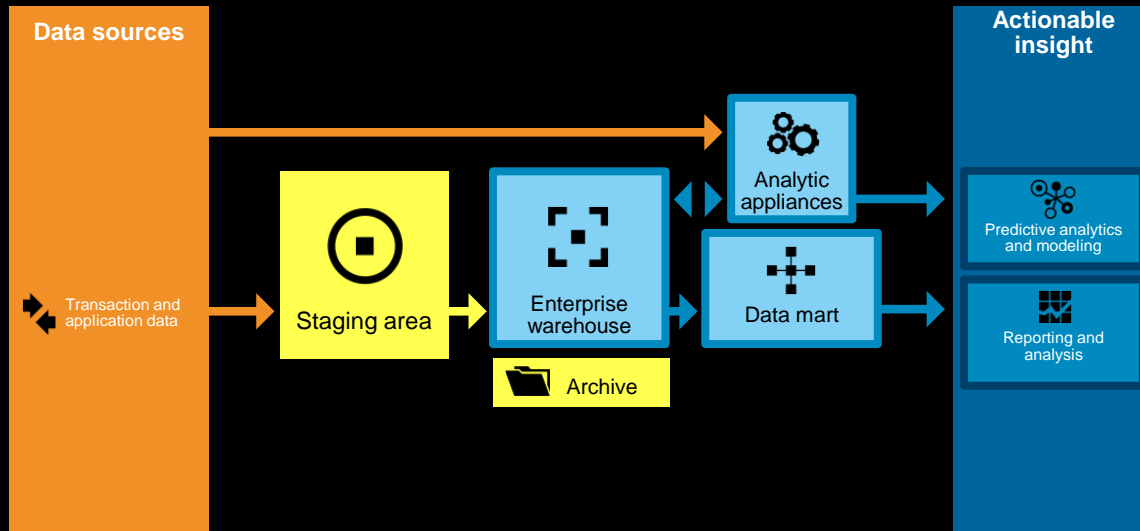
# Better information through transformation

Leverage column-store and in-memory capabilities to improve data mart performance



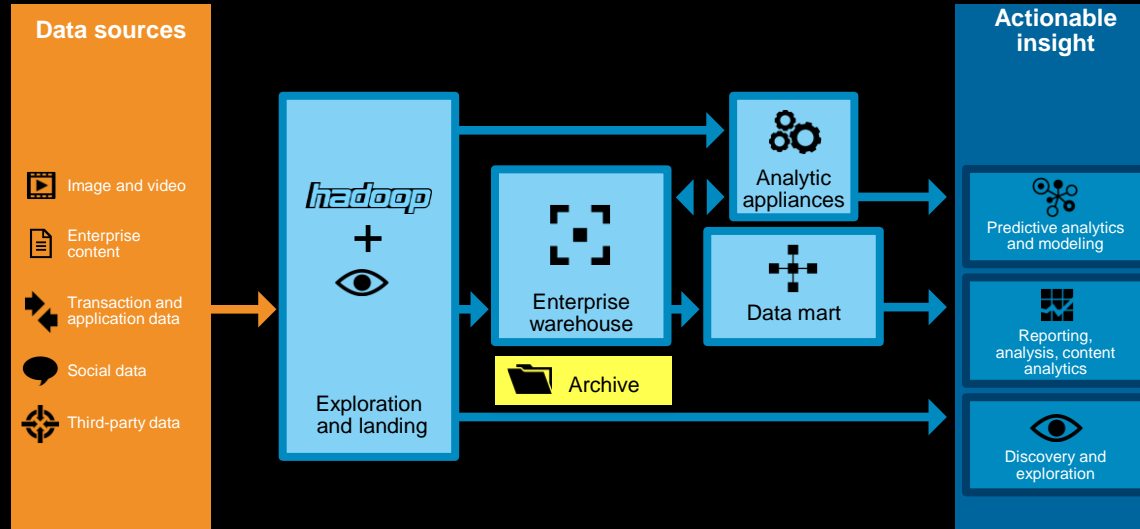
# Better information through transformation

Provide dedicated analytics processing for faster, deeper analysis and modeling



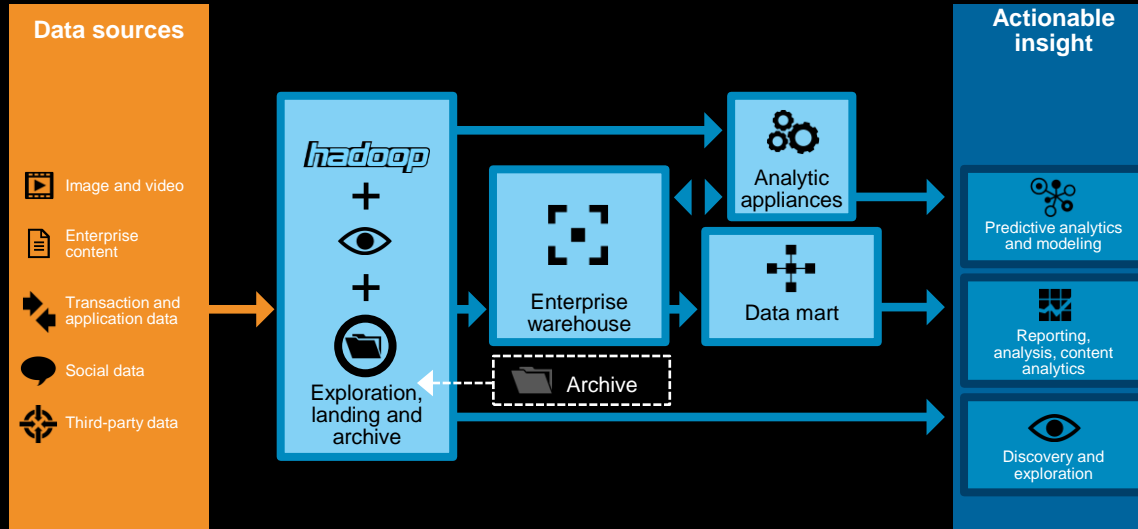
# Better information through transformation

Leverage Hadoop and enable exploration of data prior to normalization



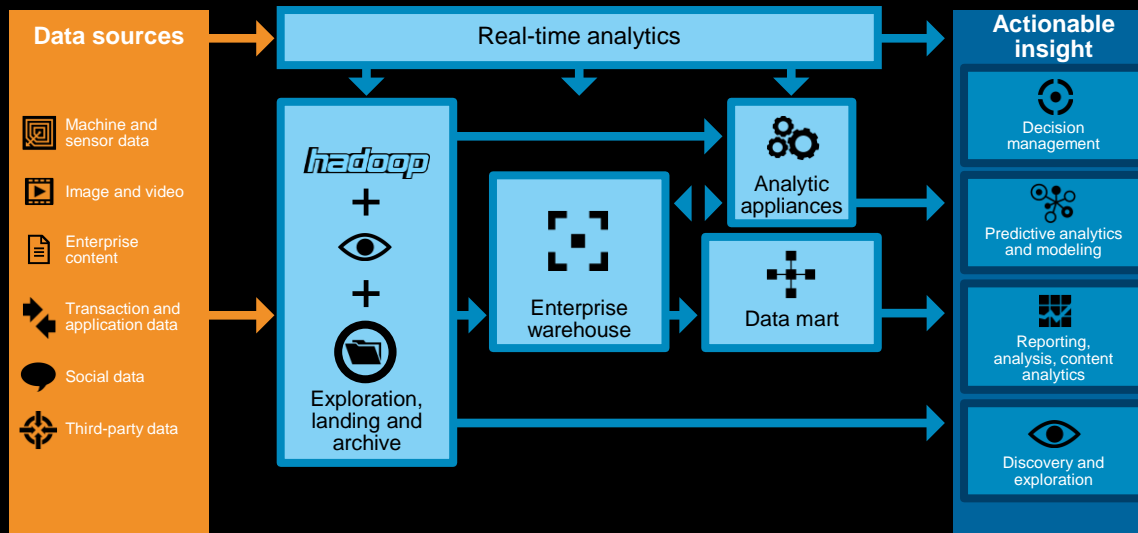
# Better information through transformation

## Leverage Hadoop for archive



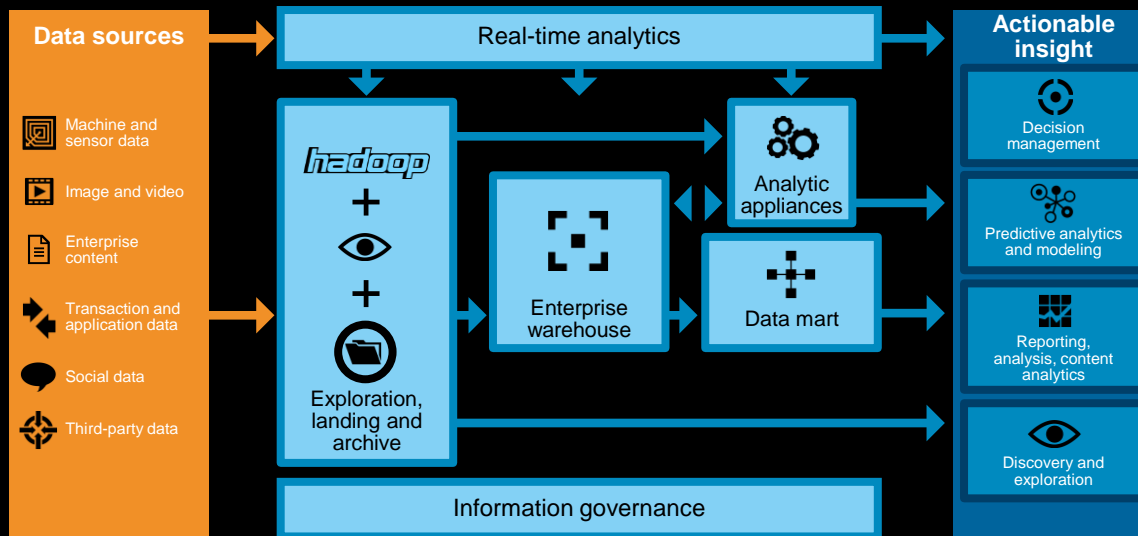
# Better information through transformation

## Leverage data in motion



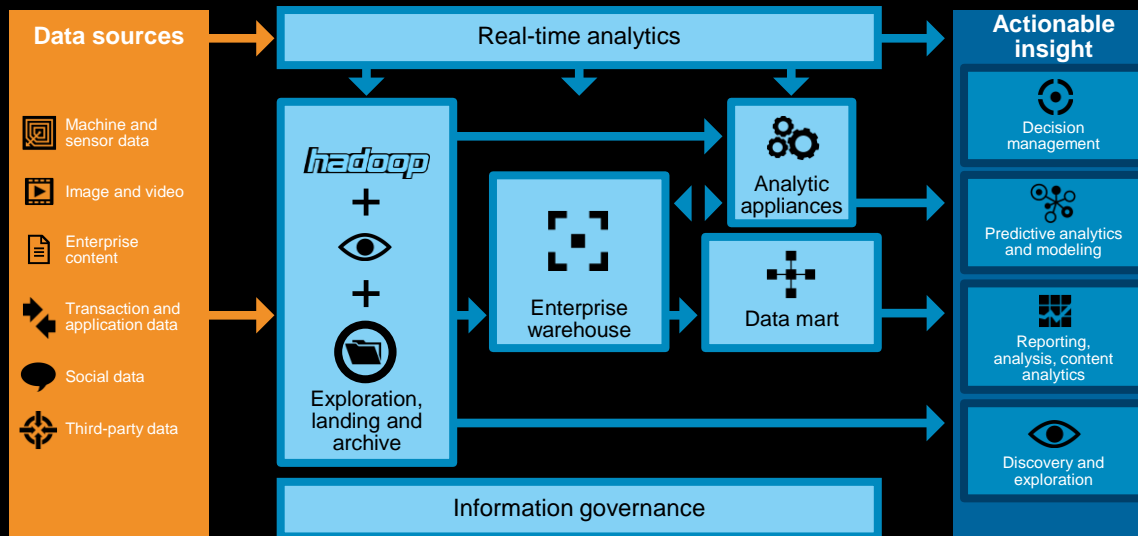
# Better information through transformation

Extend transformation, matching and security capabilities to ALL data



# Next generation architecture

## For delivering information and insights

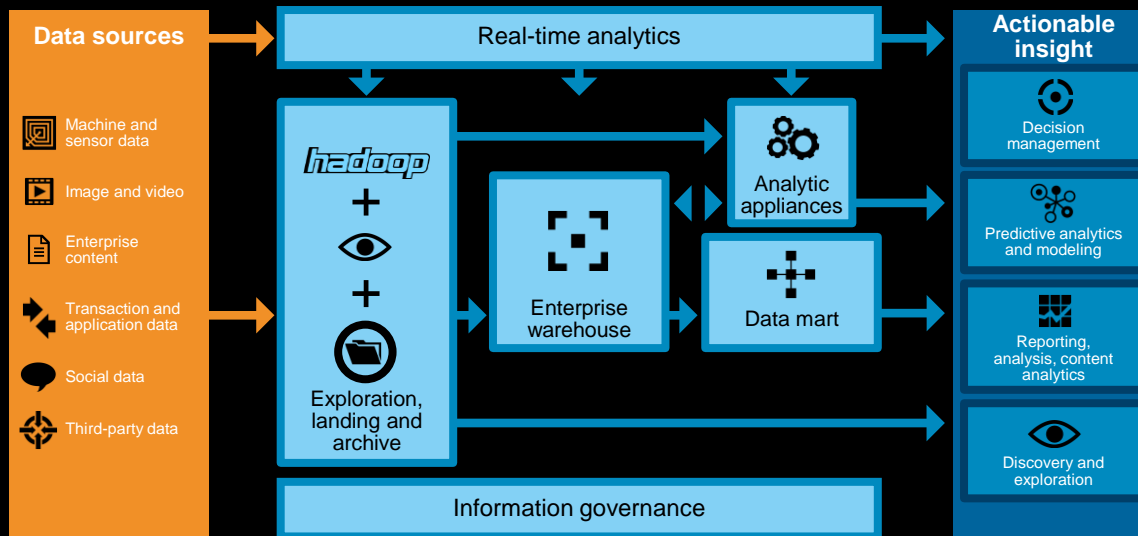


# How do leading companies transform their analytics environment to outperform in their industry?



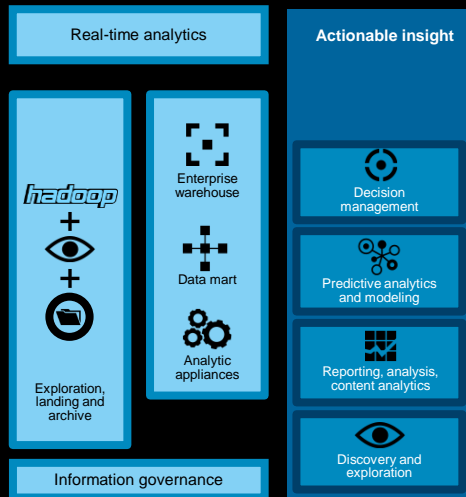
# Infuse analytics everywhere

## People—Processes—Systems



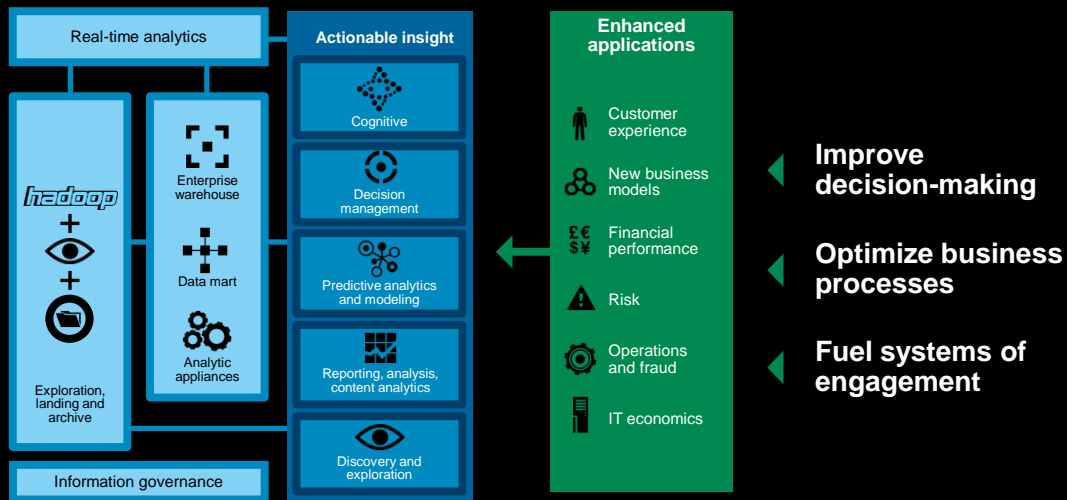
# Infuse analytics everywhere

## People—Processes—Systems



# Infuse analytics everywhere

## People—Processes—Systems



# Infuse analytics everywhere

## Expand questions analytics can answer



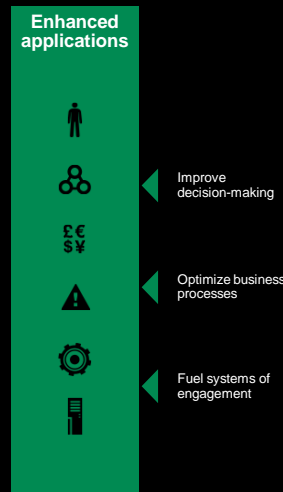
*What did I learn, what's best?*

*What action should I take?*

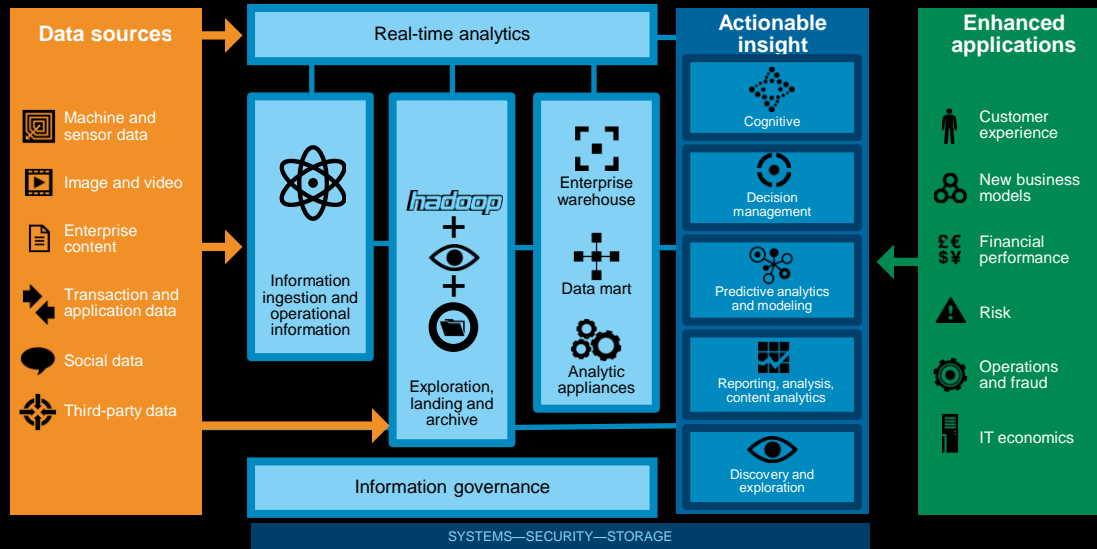
*What could happen?*

*Why did it happen?*

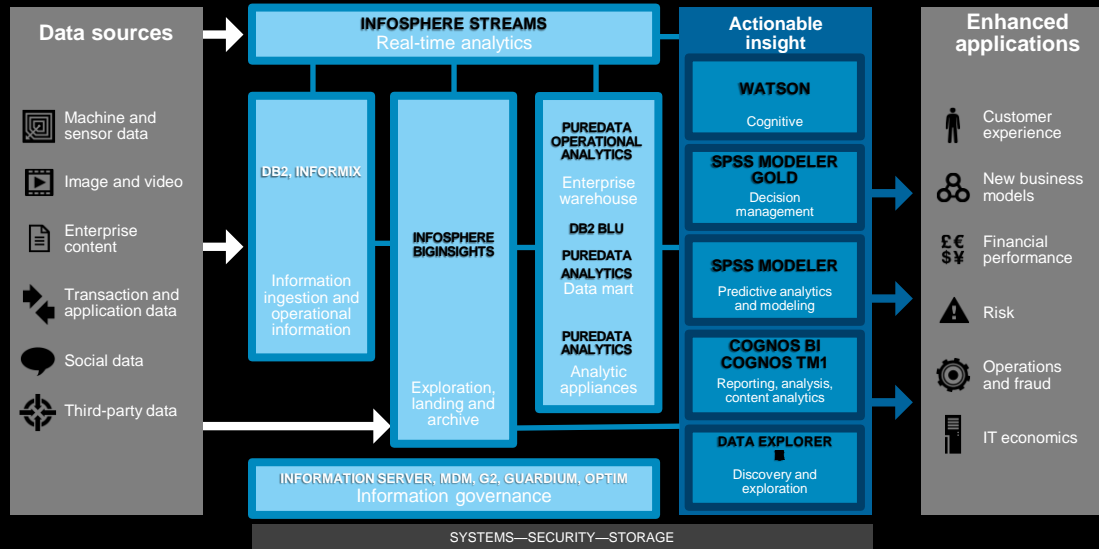
*What is happening?*



# Next generation architecture and capabilities



# IBM Big Data & Analytics offerings



# Three Steps for Strategic Action

## Imagine it.

Build a culture  
that infuses  
analytics  
everywhere

## Realize it.

Invest in a big  
data & analytics  
platform

## Trust it.

Be proactive  
about privacy,  
security and  
governance

# BusinessConnect and SolutionsConnect

It's time to make bold moves.

# THANK YOU

