

# The State of Analytics

## Great Lakes Data & Analytics Summit

June 10, 2022



**David Menninger**  
SVP & Research Director



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# Is This the Reality?



# Or Is This the Reality?



# The Reality Looks More Like This



# Agenda

1. Background to research
2. Good News
3. Bad News
4. Best Practices
5. Recommendations

# Vendor Independent Primary Market Research



## Recent research:

- Analytics and Data Benchmark
- Data Governance Benchmark
- Data Lakes Dynamic Insights
- Machine Learning Dynamic Insights

Our research includes thousands of organizations with broad demographics representing a cross-section of the market.

# David Menninger - SVP & Research Director



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**Passion:** Helping organizations understand and apply new technologies that leverage their data to improve operations.

**Expertise:** David is responsible for the overall research direction for data and analytics technologies with decades of experience in product management and marketing bringing to market leading edge technologies for helping organizations analyze data.

**Experience:** David has 30 years of experience, and previously the Head of Business Development & Strategy at Pivotal a division of EMC, VP of Marketing and Product Management at Vertica Systems, Oracle, Applix, InforSense and IRI Software.

**Research:** Leads data and analytics practice with technologies including: AI & ML, Big Data, Blockchain, Collaboration, Data Governance, Data Lakes, Data Preparation IoT, Natural Language and Information Management.

**Background:** David earned his MS in Business from Bentley University and a BS in Economics from University of Pennsylvania.

# Trends in the Data and Analytics Markets

Relational model

Structured data

Historical data

BI

Visualization

On-premises

Parallel via multithreading

Difficult to try/buy

Preventing data access

Hand crafted orchestration

Manual design

Relational plus other

Structured & unstructured

Streaming data

AI

Conversational & personalized

Cloud-based & hybrid

Containerized / serverless

Easy to try/buy

Enabling data access

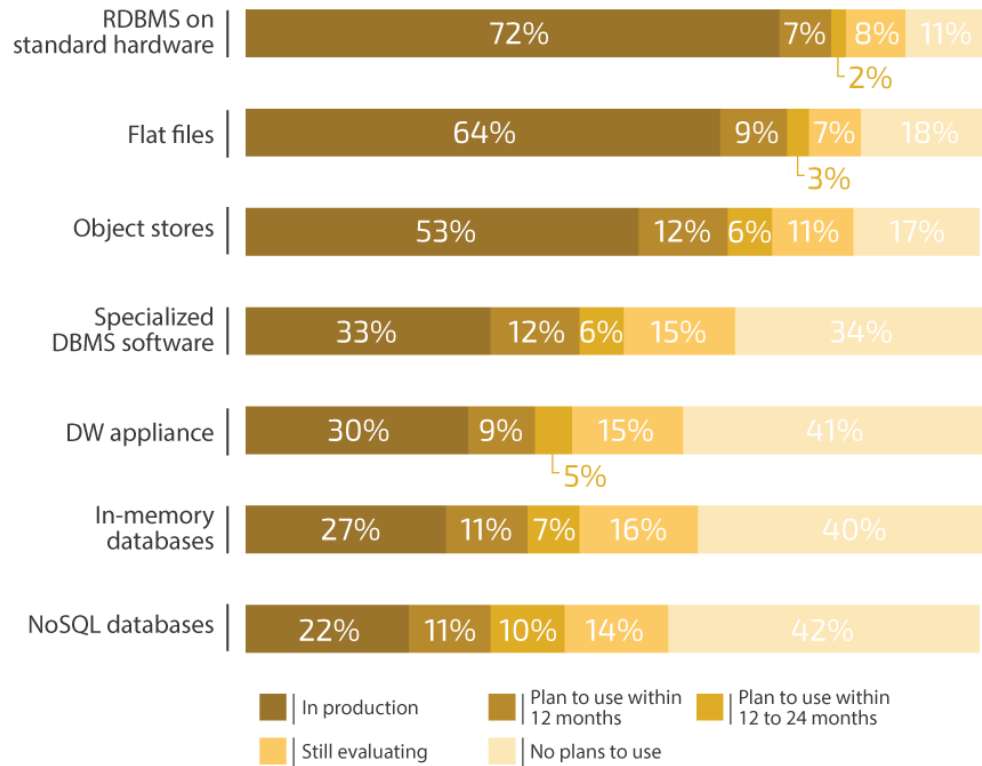
DataOps/AnalyticOps

AI/ML assisted design



# Data Platforms for Analytics

## Object stores gaining favor



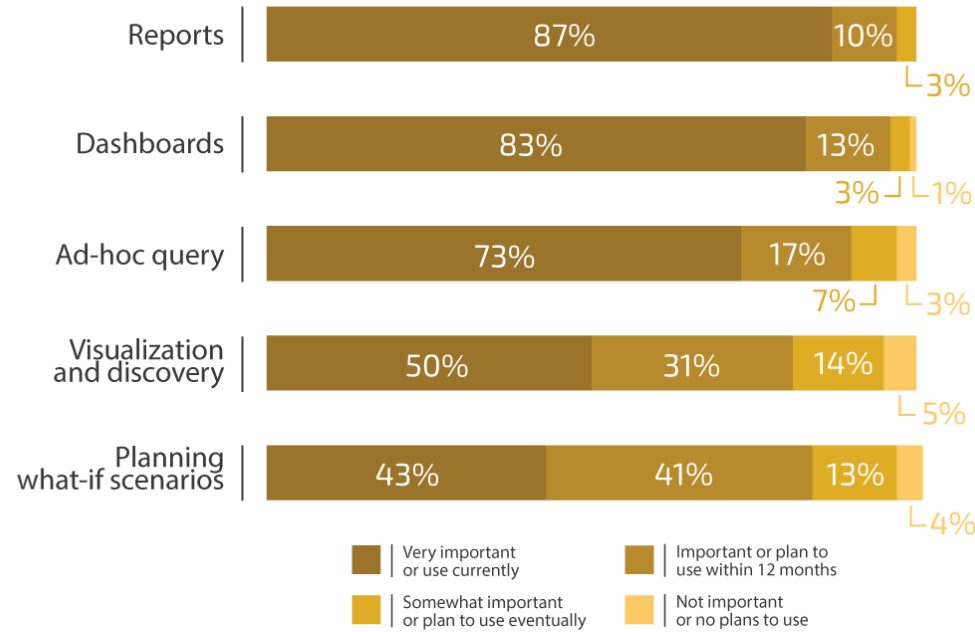
Source: Ventana Research Analytics and Data Benchmark Research  
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# Traditional Analytics Still Dominate



## Most Important Types of Analytics

Traditional reports and dashboards top list



Source: Ventana Research Analytics and Data Benchmark Research  
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# Insurance Company Case Study



# Faster Responses for Better Results



## Data is streaming into organizations

- IoT devices and sensors
- Machine data
- Market data
- Social media

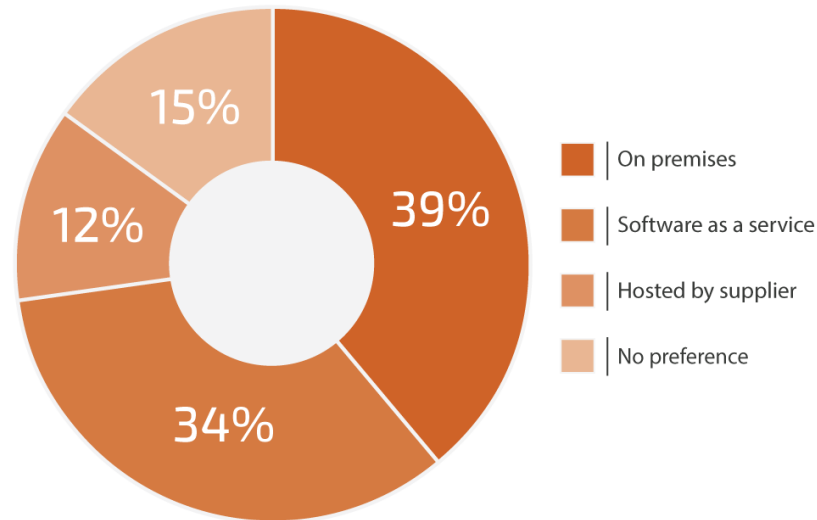
## Opportunity to react while you can influence the outcome

- Abandoned shopping carts
- Location based interactions
- Dynamic pricing
- Predictive maintenance / system uptime

# Cloud: Hybrid / Multi-Cloud Continues to Grow



Deployment Preference for Analytics and Data  
On-premises still significant



Source: Ventana Research Analytics and Data Benchmark Research  
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Google Cloud



# Retail Case Study



# The State of Data Governance

## Established

- **More than two-thirds (69%) consider data governance very important; have implemented data governance policies (71%)**

## But room for improvement

- **Only one quarter (28%) say data is well trusted**
- **Similar portion (30%) are very confident in their data governance**

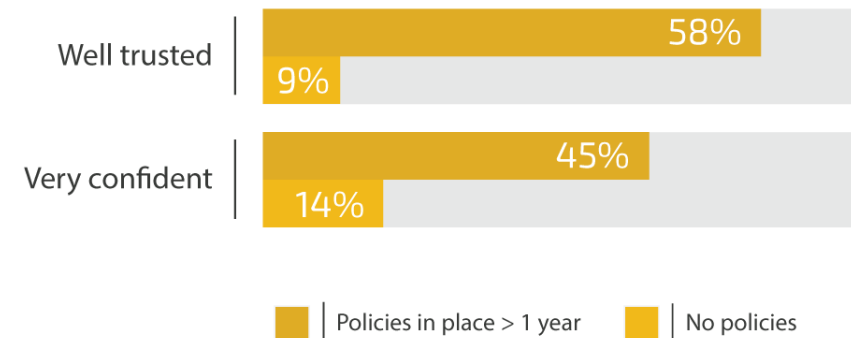


# Data Governance Works

The more often data governance tools are used:

- Report more confidence and trust in data
- Less likely to have challenges governing multiple data sources
- Less likely to report spreadsheets are a data governance issue

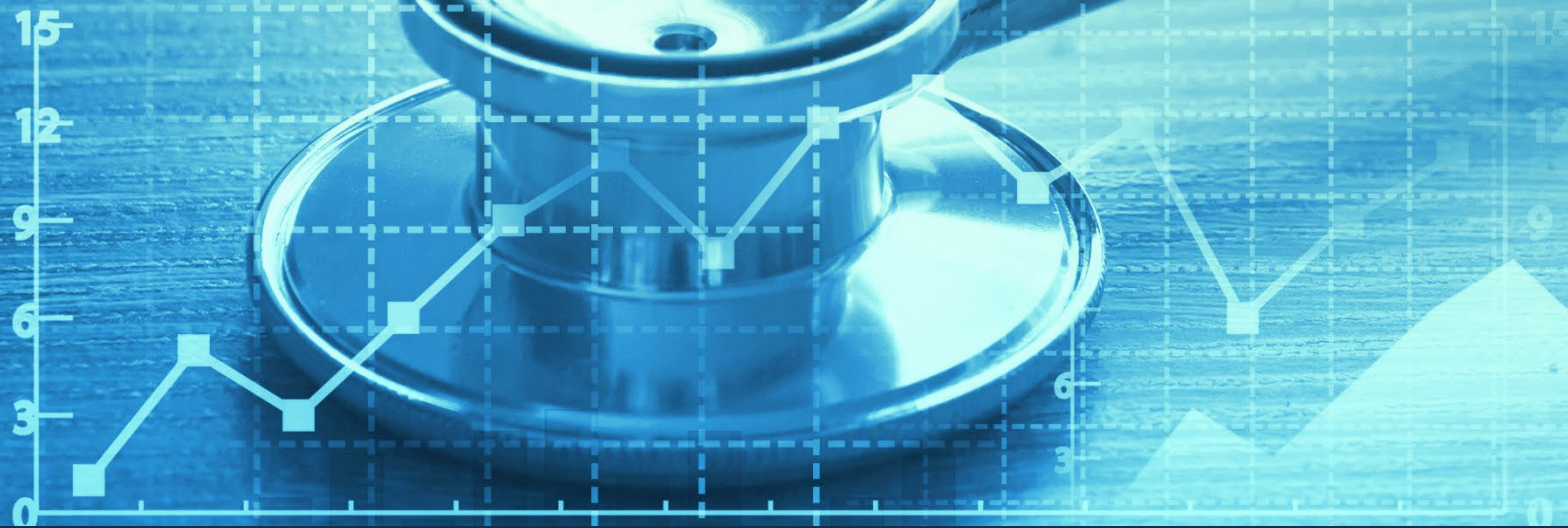
## Impact of Data Governance Greater Trust With Established Policies



Source: Ventana Research  
Data Governance Benchmark Research  
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# Healthcare Case Study



# Challenges Remain

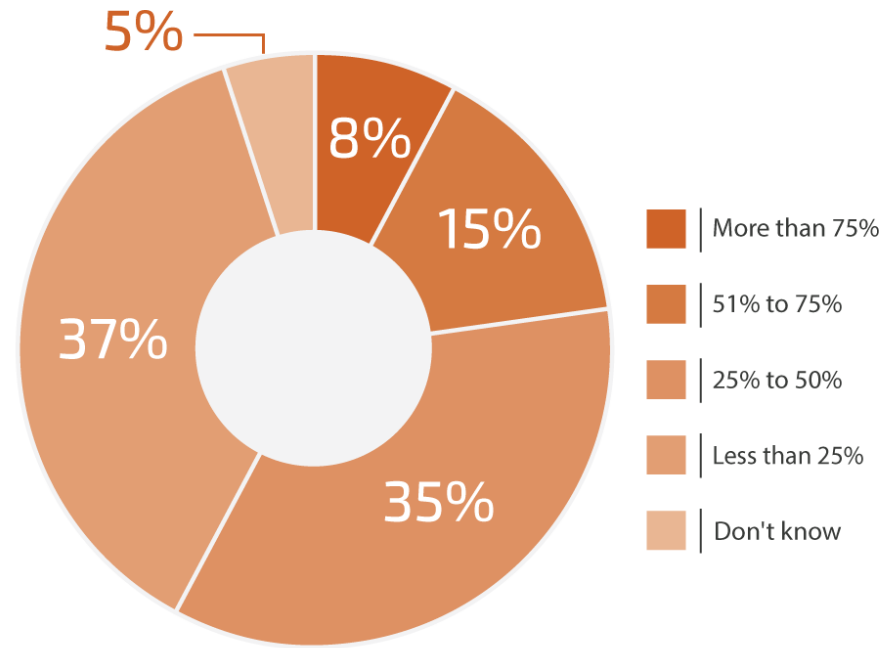
- Enabling more of the workforce
- Embracing newer analytics
- Improving data access, preparation and quality
- Working across the aisle between IT & LOB
- Focusing on outcomes not technologies



# Majority of Workforce Not Using Analytics

## Percent of Workforce Using Analytics

Half or less in most organizations



Source: Ventana Research Analytics  
and Data Benchmark Research  
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# Embedded Analytics Delivers True Self-Service

- “Self-Service” has been targeted at analyst persona
- LOB have been left behind
- Embedded analytics focuses on LOB
- Organizations recognize its value
  - Three-quarters (73%) consider it important to embed in operational apps
  - 2<sup>nd</sup> in importance only to big data

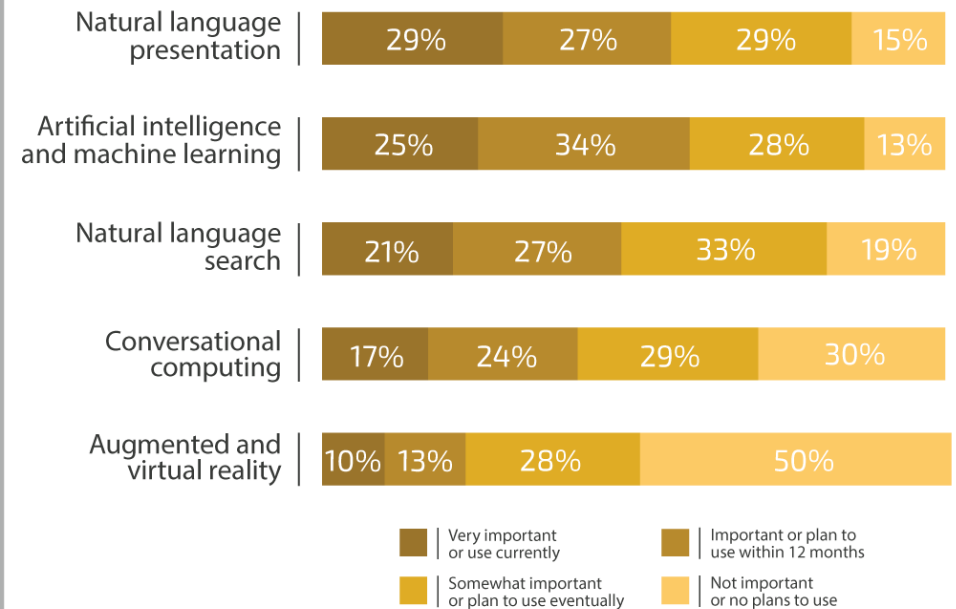


# Continue to Invest in Augmented Intelligence



## Less Common Types of Analytics

Newer techniques lagging



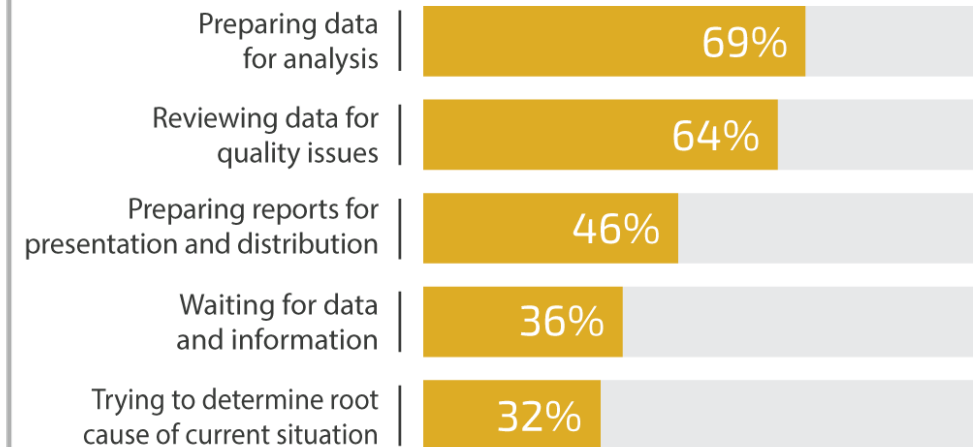
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# Data Challenges are the Biggest Time Sink

- Data preparation still requires the most time in the analytics processes
- Data quality a close second
- Governance issues noted earlier
- Most analytics are prepared by others; self-service is lacking

## Most Time In Analytics Process

Data preparation and data quality top list



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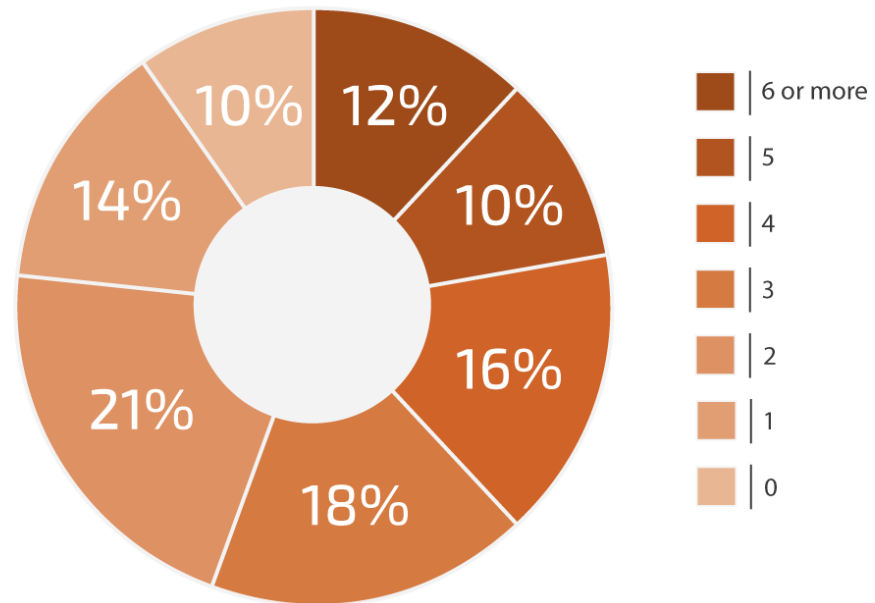
# Embedded Analytics Case Study



# External Data Increases Number of Data Sources

## Number of External Data Sources

Most Using Multiple Sources



Source: Ventana Research  
Analytics and Data Benchmark Research  
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# ...but Also Provides Significant Benefits

Organizations using external data in their machine learning analyses reported significantly higher:

- **Customer experience**
- **Competitive advantage**
- **Increased sales**
- **Faster responses**



# Commercial Lender Case Study

## Commercial Loan Application Form

### PERSONAL INFORMATION

Co-Borrower's Name

Social Security Number

Address

Date (mm/dd/yy)

Street Address

City, state

Home Phone (incl. Area code)

Business Phone (incl. Area code)

Married  Unmarried

Separated  Single (never married)

Own

Check if different

# Data Operations

## *Market Assertion*

Through 2025, awareness of DataOps will continue to increase as organizations adapt their data integration and engineering processes to the growing need for continuous and automated data ingestion, transformation, and delivery.



VENTANA  
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**Matt Aslett**  
VP & Research Director

# DataOps / AnalyticOps Provides Agility

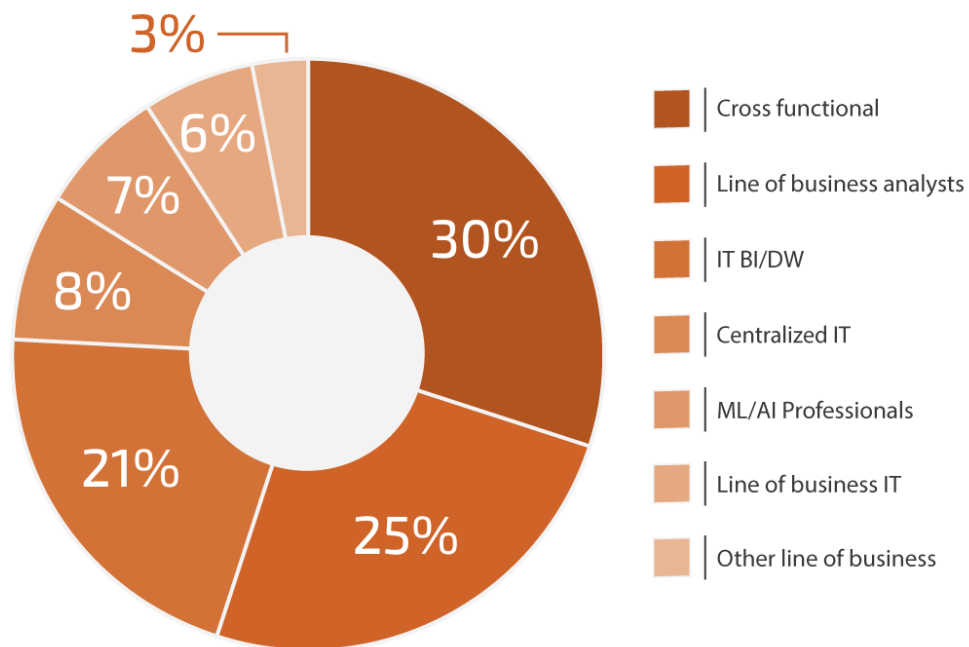
- Metadata and AI/ML are the keys to automation
- Detect and automate changes in sources, targets and uses
- Identify where data on a subject or individual exists
- Identify anomalies in data
- Flag sensitive data
- Detect unusual usage



# Working “Across The Aisle” with Cross-functional Teams

## Team Leading Analytics and Data Efforts

Variety of Approaches



Source: Ventana Research  
Analytics and Data Benchmark Research  
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# Recommendations

1. Recognize requirements of different personas, especially line of business.
2. Explore and adopt augmented intelligence.
3. Make data access and preparation easier.
4. Incorporate cloud into information architecture.
5. Bring IT and LOB together for better results.



# Engage and Learn More



Participate in Analytics and Big Data Research

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My Analyst Perspectives

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