

# Magic Quadrant for Data Integration Tools

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## Data Integration Tools

You always defer data integration, then wonder why it costs so much?

- By 2020, 50% of new data transformation flows will integrate one or more machine learning algorithms — resulting in erroneous interpretations of data.
- By 2020, 50% of organizations will reject solutions from new vendors that contractually inhibit their ability to extract their own data.

**Ineffective data collections, poor use of machine learning and attempts to control data flow will combine to increase the demand for aggressive approaches to data integration.**

Sources: ["Predicts 2017: Data Distribution and Complexity Drive Information Infrastructure Modernization,"](#) (G00316518)  
["100 Data and Analytics Predictions Through 2021,"](#) (G00332376)

# State of the Data Integration Tools Market

- Market revenue was \$2.7 billion (constant currency) end of 2016, +5% from previous year. Expected \$4 billion in 2021.
- Purported resurgence of custom code is mostly a "myth" — 8% of organizations reported any broad use in 2016.
- Low-cost, simple development; acceptance of basic functionality is on the rise for **business/citizen integrators** and **self-service** data preparation.
- **Data virtualization** adoptions grow and are being embedded in other platforms and offered as stand alone but old issues are re-emerging for those that fail to consider appropriate use cases.

# Data Integration Tools Magic Quadrant



- One prevalent question in 2018 is, "Will this data be used in adjacent use cases?" and the answer is always "yes."
- Cloud providers are now encountering the same connectivity and management issues ...
- The practice of using smaller, more targeted solutions in data integration practices continues to grow.
- Deferring data integration to post application deployment is a growing "technical debt." That debt grows at a rate of  $(n \text{ systems}) \times (n \text{ systems} + 1) / 2$ .

# Two Significant Rising "Niche" Categories: Virtualization and Data Preparation

## Challengers:

Adeptia  
Attunity  
Microsoft

## Niche Players:

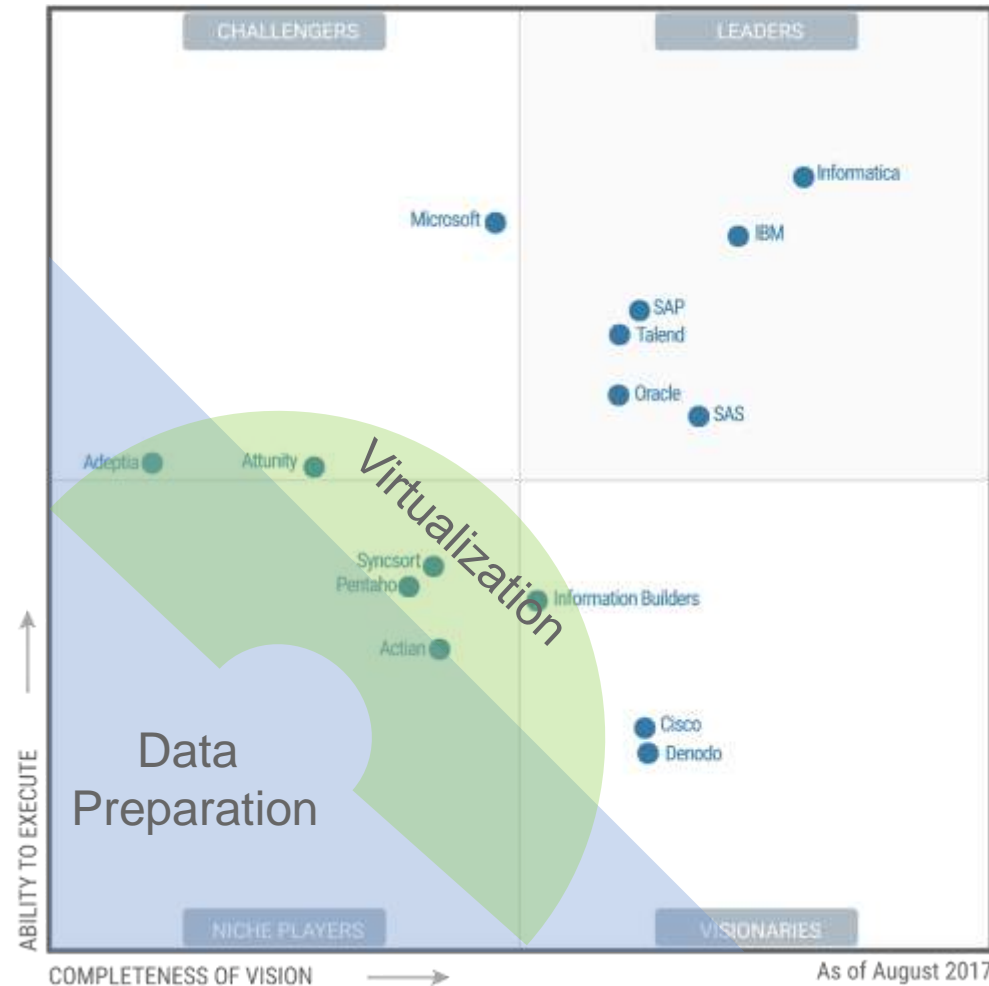
Action  
Hitachi Vantara  
(Pentaho)  
Syncsort

## Leaders:

IBM  
Informatica  
Oracle  
SAP  
SAS  
Talend

## Visionaries:

Cisco  
Denodo  
Information Builders



# Market Dynamics Are Shifting

## New Changes By 2020

- Dynamic recognition of **data diversity** coupled with **machine learning** of data types.
- **Combined application and data integration** platform capabilities.
- Shared services management for **partner networks** with enhanced registry and orchestration capabilities.
- **Adaptive pricing**, shifting from perpetual-, unit to modular/modality-oriented models.

## Through 2020 and Beyond

- Data integration tasks to **run anywhere** — divide processing and distribute data transformation workloads in Hadoop, cloud and IoT ecosystems.
- Demand to **blend all integration styles** will increase: Batch, virtual, message, replication, synchronization, streaming.
- Tools that serve **multiple "personas"** from citizen to infrastructure expert in demand.
- **"Smart" metadata**-driven development and introspection increasing in demand.
- Extensive enablement of **hybrid integration platform** capabilities.

# Recommendations

- ✓ Architect a mix of variable latency, granularity, physical and virtualized data delivery.
- ✓ Align application and data integration in a complementary fashion.
- ✓ Provide for pervasive integration needs with capabilities of both enterprise-class standard tool and focused/limited functionality tools for targeted use cases.
- ✓ Review vendor/supplier customer support, documentation and community-based developer networks as part of your decision.
- ✓ Demand services deployment capability, accessible metadata, built-in optimization recommendation engines.

# Recommended Gartner Research

- ▶ [Magic Quadrant for Data Integration Tools](#)  
Mark A. Beyer, Eric Thoo, Mei Yang Selvage and Ehtisham Zaidi (G00314940)
- ▶ [Critical Capabilities for Data Integration Tools](#)  
Eric Thoo, Ehtisham Zaidi, Mark A. Beyer and Mei Yang Selvage (G00319933)
- ▶ [Modernize Your Data Integration Architecture for Digital Business by Combining Data Delivery Styles](#)  
Ehtisham Zaidi, Eric Thoo and Ted Friedman (G00327623)
- ▶ [The State and Future of Data Integration: Optimizing Your Portfolio of Tools to Harness Market Shifts](#)  
Eric Thoo, Mark A. Beyer, Rick Greenwald and Ted Friedman (G00297000)
- ▶ [Research Library: Fundamentals for Data Integration Initiatives](#)  
Ehtisham Zaidi, Mark A. Beyer and Others (G00310058)

For information, please contact your Gartner representative.