

Transforming Data Management for the Future

Create an Intelligent, Connected &
Flexible Flow of Trusted Data

THE BEST RUN



Transforming Data for a More Intelligent Enterprise

Data is the lifeblood of modern business. Organizations have access to more information than ever before. Business leaders have unprecedented visibility into everything from supply lines to customer behavior. This wealth of data gives us unprecedented power to analyze and optimize.

The truly data-driven business is within our reach. But most organizations aren't there yet.

Research shows that only 9% of organizations have reached transformational' levels of data & analytics maturity¹. What's worse, only 3% of corporate data meets minimum standards of data quality².

This guide will help your business reach its full data potential. Read on for the best practices we've developed at SAP, plus advice from industry experts.

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Choosing the Right Data Management Vendors

Section 1

Consolidating and Activating Data

“Data is the new oil. You don’t put crude oil in your car. You have to refine it for it to be useful.”

Neil McGovern, Senior Director of Marketing, SAP
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Data fragmentation has always been an issue for businesses, but data is far more scattered now. Many organizations have structured and unstructured data in multiple clouds, plus hybrid and on-premise storage. And that’s not to mention mobile devices, both personal and company-owned.

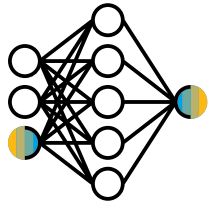
Activating data means integrating all of these disparate sources. It means consolidating, sanitizing, and reconciling to create a reliable, relevant source of data truth.



Finding Trust in a Data Driven World
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Reducing Data Complexity

The journey to activating data starts with creating a framework to understand and organize your organization's data sources. Master these three elements to get a handle on what data is the most valuable and where it resides.



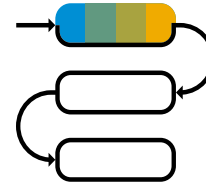
Data Landscape

Document every data source with what type of data resides there and how it is structured. Note where the data originates and how it moves through your organization. The goal should be to create a map of your enterprise data architecture.



Data Value

Assess each source to determine which data is most useful and for which purposes. Create policies to safeguard data value - for example, limiting who has privileges to edit each data source.



Data Accuracy

Start by standardizing data formats. Then cleanse the data — look for duplicate items, streams to consolidate and errors to eliminate. Match complementary data streams together to form a more complete view of the organization.

Learn how
McKesson cut
data preparation
time by 97%

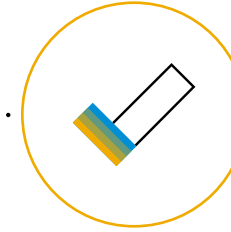
Read the
Study



Creating a Unified Data Delivery Platform

Organizations can expect to have more data sources over time, not fewer. The solution is not to eliminate sources, but to develop ways to view all the data in one place, regardless of where it resides.

A unified data delivery platform can increase the velocity of the organization, with faster, more accurate reporting, improved transparency, and more efficient use of resources.



Consider the following must-haves when creating your platform:

- Ability to search data and meta-data
- Ability to document and describe all data elements
- Master data management
- Data cleansing
- Abstraction for cleaner user interface

“The technology exists to build a unified platform... we can process internal and external data and we can integrate all those data sources seamlessly.”

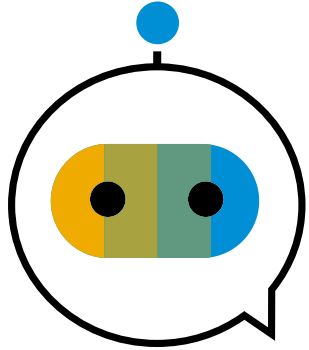
Rick Van der Lans

Founder of R20/Consultancy BV

Read More
from Rick Van der Lans



Making Data Intelligent



With the right data delivery platform in place, you can start putting data to work. The key is to work with live data. As soon as numbers are, say, copied from analytics into a spreadsheet, the data is already outdated.

Instead of moving data around, **connect** it to a platform that updates in real time. With data consolidated and active, you can **rationalize** multiple sources to deliver a single 360-degree view.

The final component is **delivery**. It's crucial to understand your end users, to know who needs which data and when. The right platform can help, enabling machine learning to deliver intelligent data in an easily-understandable format.



*Learn how
Colgate-Palmolive
and SAP Work
Together to
Master Data*

**Watch the
Video**

Section 2

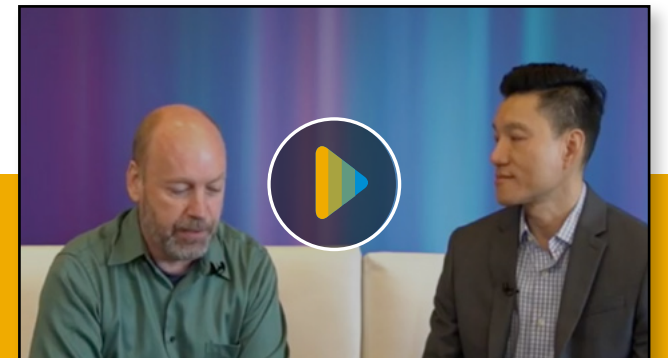
Data and the Cloud

“Focus on what is core to the business. Don’t boil the ocean.”

Eric Kavanagh, CEO, The Bloor Group

Businesses is evolving from a batch-oriented, long-tail process model to continuous up-to-the-minute live processing. The storage and processing power of the cloud enables this transformation.

Using the cloud for integrating and processing data can help your business streamline processes. For example, reporting that used to take hours of time monthly can run continuously and seamlessly in the background, with up-to-the-minute data ready at any time.



Data Management Trends
Watch the Video

How the Cloud Transforms Data Management

It's fair to say that the cloud has revolutionized the way businesses store and process data. Make sure your organization is taking full advantage of these benefits:

Consolidated Storage

Cloud storage is, from the end user perspective, virtually limitless and borderless.

Faster Processing

Cloud servers run on far more powerful hardware than an average business would keep in-house. That extra processing power enables faster calculations and more in-depth data processing.

More Analytical Capacity

The ability to store more data and process it quickly means cloud services can offer advanced analytics in minutes, not months.

Automation of Insight

Cloud servers can use their advanced processing power to run machine learning applications that can surface insights far more quickly than human actors could.



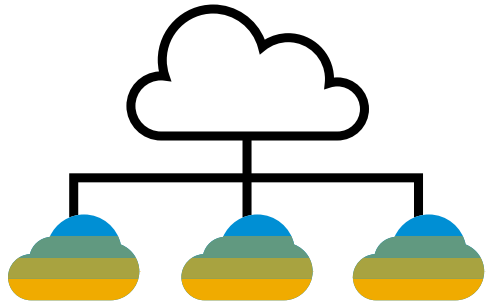
“The combination of cloud-based resources with advanced functions provide organizations with new opportunities to glean greater insights much quicker than previously possible.”

Tim Crawford CIO Strategic Advisor, Avoa

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Avoiding Data Sprawl in the Cloud



The benefits of cloud computing are undeniable. But data tends to expand to fit the container it's in; organizations that aren't vigilant can end up with sprawling, unwieldy data landscapes.

It's important to create a single unified view of your data to avoid this type of sprawl. Keep tight control on who has the power to access and change data, and make sure you have the ability to track changes.

As we've said, it's best to preserve data pipelines and integrate data without migrating it. Keep source databases unchanged, and only manipulate data in your single-view platform.

Solving Cloud-driven Data Sprawl and Complexity Issues,
by David Linthicum
Read More



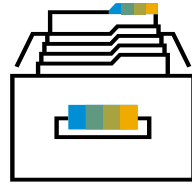
“Look first at your data complexity that may be creeping up as you move to the cloud, and then at your ability to proactively solve the problem. Few are prepared. All of us need to be.”

David Linthicum
Chief Cloud Strategy Officer,
Deloitte Consulting

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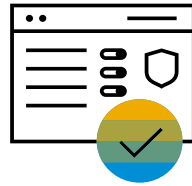
Crucial Elements of Data Security

The chief security challenge for cloud-based data storage is making the data easily accessible for authorized users, while protecting it from unauthorized users and bad actors. It's important for organizations to take an active role in data security, augmenting the efforts of cloud providers and vendor partners.



Catalog

First, catalog organizational data. It's impossible to protect data without knowing what the organization has and where it is stored.



Policies and Procedures

Second, set policies and procedures organization-wide around how data should be handled. This includes your organization's internal rules as well as compliance with state, federal, or global regulation.



Risk Management

Finally, it's important to take a risk management posture. Assume that a breach is possible, determine how likely it is to occur, and create a plan for mitigation and recovery.

Section 3

Choosing the Right Data Management Vendors

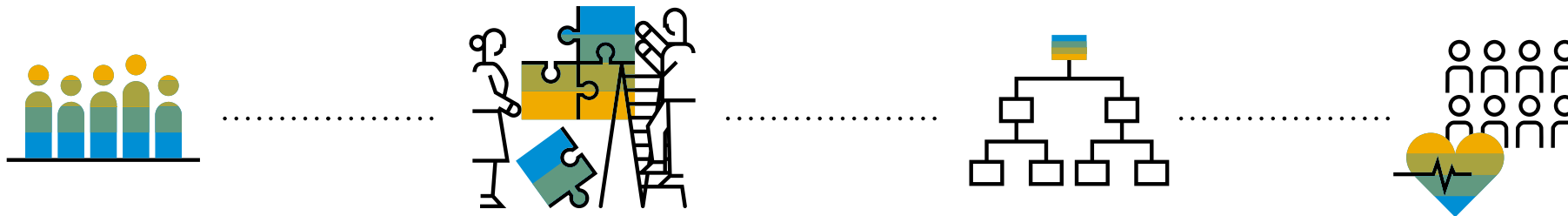
As you've seen, the key to making use of your organization's data lies in creating a unified view of your data landscape, a single source of data truth. The complexities of modern data — cloud and on-premise, structured and unstructured — require a robust solution with the memory and processing power to bring everything together.



"In an ideal world, you'd want a data management suite that can handle both the sophisticated analytical requirements of a data scientist while also accommodating the data management needs of business users as well."

Lillian Pierson CEO, Data-Mania LLC

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Enterprise Data Applications: Open Source or Vendor?

Enterprise-level businesses have more options for data management than ever before. Just a few years ago, available solutions were rigid enough that many enterprises found them unsuitable. These organizations turned to open source software for a degree of customization they couldn't get from vendors.

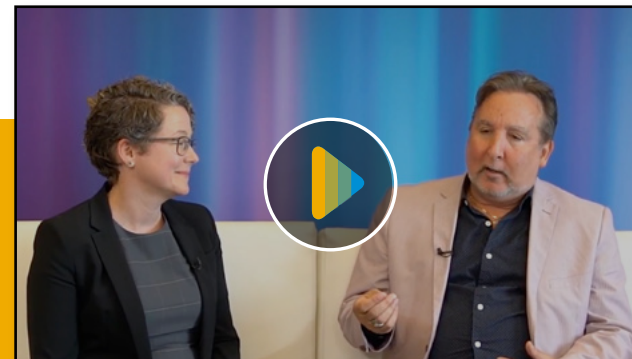
Unfortunately, the customization led to complex custom builds that were resource-intensive to maintain. Now, however, cloud-based

applications can offer enough customization to meet enterprise needs, without the development overhead of building your own.

Commercial solutions offer access to next-level AI and analytic applications that would be time and resource-intensive to develop in the open source architecture.

See how SAP HANA DMS compares to open source systems for client Avalon Consulting:

Watch the Video



Must-haves for Your Data Management System Vendor

The right DMS vendor can be a strategic partner in your data management initiative — or they can lock you into an infrastructure that doesn't let your organization reach its full potential. Make sure the vendor you choose offers these features:

Data Anonymization

The ability to abstract sensitive data without removing identifying markers at the data source.

Simplified Data Management

Create a single source of data truth updated in real-time by live connections to a wide variety of data sources.

Perhaps most importantly, look for a vendor that offers a high-powered, **In-Memory Data Platform**. Your data solution should be able to process a consistent data flow to generate actionable insight in real time, combining analytics, transaction data, and algorithmic processing. Delivering advanced analytics in real time is crucial for acting before the competition.

Cloud Neutral Architecture

Compatible with many cloud services, rather than locked into a single vendor.

Configuration Flexibility

Configure and reconfigure your system to match requirements as they evolve — don't get locked into a system too big or too small.

Learn how SAP HANA Data Management Suite enables sophisticated data anonymization:

Watch the Video



The Business Impact of Data Management

Businesses are looking to data management systems to increase efficiency and lower costs. But these two factors aren't the only imperatives driving the process. Here are just a few ways that data management is crucial for the future of business.

AI and Machine Learning

AI and machine learning have the potential to transform entire industries, but training these systems requires massive amounts of trusted data. Data management is essential for developing AI and machine learning.

Data as a Business Asset

Businesses are increasingly aware of data as a business asset — that is, low-quality data is a liability, while improving data quality is an investment in the business' future.

Delivering Data to End Users

Simply delivering data to end users can be a complex challenge for global enterprises. Data management systems can leverage cloud services to make data available more quickly and easily.

Data Modeling

Data modeling used to require days — even weeks — to analyze data, create the model, and share it with stakeholders. Modern businesses need answers far faster than that. The right data management system can deliver models in hours, not weeks.



Learn more about the business impact of data management:

Watch the Video

For most businesses, the modern data landscape is sprawling, siloed, and disorganized. Business that can better manage their data can realize a host of benefits, from increased efficiency to the ability to develop new revenue streams.

SAP HANA Data Management Suite is a comprehensive data management solution for trusted, intelligent, connected data with cloud and architecture flexibility built in.

Explore SAP HANA Data Management Suite

Learn what makes SAP a data industry leader:

Read the Gartner Magic Quadrant Report.

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