

# Modernize Your Data Warehouse to Gain a Competitive Advantage



It's no secret that data has become a mission-critical element for organizations to grow. Without a solid data strategy, you quickly lose ground to your competitors. Data should be providing valuable insights into your business, giving you the ability to be more efficient, productive, and profitable.

To get there, you need infrastructure that enables you to gather, store, and analyze your data efficiently. Still, deciding when to modernize your data warehouse can be challenging.

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# WHAT IS A **MODERN DATA WAREHOUSE**?

## And how does it differ from a traditional data warehouse?

Whether you're part of a large organization that hasn't undertaken a major data transformation in over a decade or a smaller company that wants to move to the cloud, there are common considerations to examine before you begin.

There is no concrete definition of a modern data warehouse, but rather themes that occur in the modern data warehouse space.

### 1. Moving to the Cloud

Modern data warehouses almost exclusively live in the cloud, regardless of which platform they are built on. In contrast, most traditional warehouses are located on-premises, with all the data warehouse's hardware and software infrastructure installed and maintained on site.

### 2. Data Refresh Rates

There is an increasing shift to higher data refresh rates for more accurate insights. Traditionally, organizations could move along just fine with data being refreshed overnight or even weekly. Modern data warehouses implement more frequent intraday and even real-time refreshes.

### 3. More Data Sources

In the past, data sources were relatively straightforward because organizations worked mostly with files and relational databases. Today, organizations work with multiple data sources containing various, disparate data types like CRMs, marketing platforms, email automation tools, business intelligence applications, and more—often all connected through a range of APIs. In fact, according to a recent survey, almost 20% of companies rely on twenty or more internal data sources alone. Throw in external sources, and that number really climbs.





#### 4. Automation

While traditional data warehouses require numerous manual processes, modern data warehouses can automate many of them, including processes in

- ✓ Design
- ✓ Development
- ✓ Documentation
- ✓ Deployment
- ✓ Data Governance
- ✓ CICD
- ✓ Testing

#### 5. Emphasis on Data Governance

Data governance was mostly an afterthought in traditional data warehouses; organizations considered it only after everything else was up and running. Modern data warehouses dictate a completely different approach, with data governance implemented from the beginning of their design. Because cybercrime is increasingly prevalent, people are now demanding that their data is held safe. New privacy laws and regulations require proper data governance.

# WHY YOU NEED A **MODERN DATA WAREHOUSE**

Data has taken center stage for most successful organizations today, driving essential processes and effective and productive operation. The amount of data generated and the rate at which generation increases are staggering. Without the right infrastructure, all that data quickly becomes overwhelming. This shift in day-to-day operations has many companies scrambling for a better solution.

## **1. More Data Use Equals Greater Complexity**

To manage all this data successfully, more types of data analysis—executed more frequently—are required. The data growth trend shows no sign of slowing down; in fact, the need for data analytics is expected to increase in the coming years.

## **2. Traditional Data Warehouses Can't Keep Up**

IT professionals and data engineering teams need to be able to adapt to more types of data in greater quantities, faster than ever before. This poses a significant challenge for teams still using traditional data warehouses, as the technology and hardware weren't made to scale and evolve with an organization's changing needs.

## **3. End Users' Needs Have Increased**

End users are increasingly sophisticated. Whereas a dashboard and a few reports would have once sufficed, now users need functionality like integrated analytics, custom workflows, and unlimited data access. Traditional data warehouses struggle to deliver this.

## **4. Upgrading Saves Money**

On-prem infrastructure is expensive to implement and maintain, while the cost of cloud storage has dropped considerably in recent years. Infrastructure costs for managing cloud-based data centers is relatively cheap compared to physical hardware. When an organization's traditional data warehouses reach end-of-life, or when their servers need upgrades and software licenses need to be renewed, a modern data warehouse implementation will pay off rather quickly.



# WHEN IS IT TIME TO IMPLEMENT A MODERN DATA WAREHOUSE?

To know when it's time to make the switch, first identify where you are in terms of data maturity.

<b>ROOKIE</b>	<ul style="list-style-type: none"> <li>↓ Decisions by guessing</li> <li>↓ No data leverage</li> <li>↓ No access to data</li> </ul>	<b>Rookie: What data?</b> If there is data, decision makers don't have access to it, and it's providing zero value. Decisions are made by instinct or guesses.
<b>BEGINNER</b>	<ul style="list-style-type: none"> <li>↓ Decisions take time</li> <li>↑ Good data, but work intensive</li> <li>↓ No access to data</li> </ul>	<b>Accessible data not providing value.</b> Organizations that haven't modernized their data warehouses often have access to data but it's not delivering actionable insights due to low user engagement. Decisions about what forms to offer data in—reports, websites, dashboards, or something else—happened without getting input from the people who could benefit from it. If end users don't have input about how data is offered to them, they won't engage with it as much as they could. Then it doesn't matter how pretty your dashboards are; you still have low-value data, only now it's more expensive.
<b>SKILLED</b>	<ul style="list-style-type: none"> <li>↑ Decisions by estimate</li> <li>↓ No data leverage</li> <li>↓ Low user engagement</li> </ul>	<b>Valuable data hard to access.</b> Here, access to data isn't smooth and progress slows. When data is largely inaccessible, a hodgepodge of desktop and business intelligence tools are required to get through the silos and pull any insights from out. The time spent gaining access leaves organizations unable to make data-based decisions, and data can't drive the business and its processes.
<b>PROFESSIONAL</b>	<ul style="list-style-type: none"> <li>↑ Decisions by data</li> <li>↑ Good data leverage</li> <li>↑ Good user engagement</li> </ul>	<b>Strategically used data.</b> A modern data warehouse solution gives repeatable, reliable access to well-structured data. When that's a given, all decisions can be data-driven and much can be automated, freeing leadership for more strategic initiatives with greater impact.
<b>EXPERT</b>	<ul style="list-style-type: none"> <li>↑ Best data governance</li> <li>↑ Secure data leverage</li> <li>↑ Great measurable engagement</li> </ul>	<b>Data-driven organization.</b> Secure data. Exceptional data governance strategies and tools. And the ability to add new data sources on demand. Organizations in this zone are receiving full value from their data, putting it to work to propel them toward their goals and beyond. This doesn't happen overnight, but the first step to get here is implementing the right infrastructure.



## THE BOTTOM LINE

In a world where optimal data use is absolutely essential for businesses to thrive, it's vital to know the current state of your data warehousing solution. If you're anywhere below where you want to be, it's time to plan your next move toward transformation.

**Click here** to learn how a strategic engagement with Resultant can help drive better data, better insights, and better results for your organization.

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