

# Business Impact Brief

## Solving Data Demands with Certainty

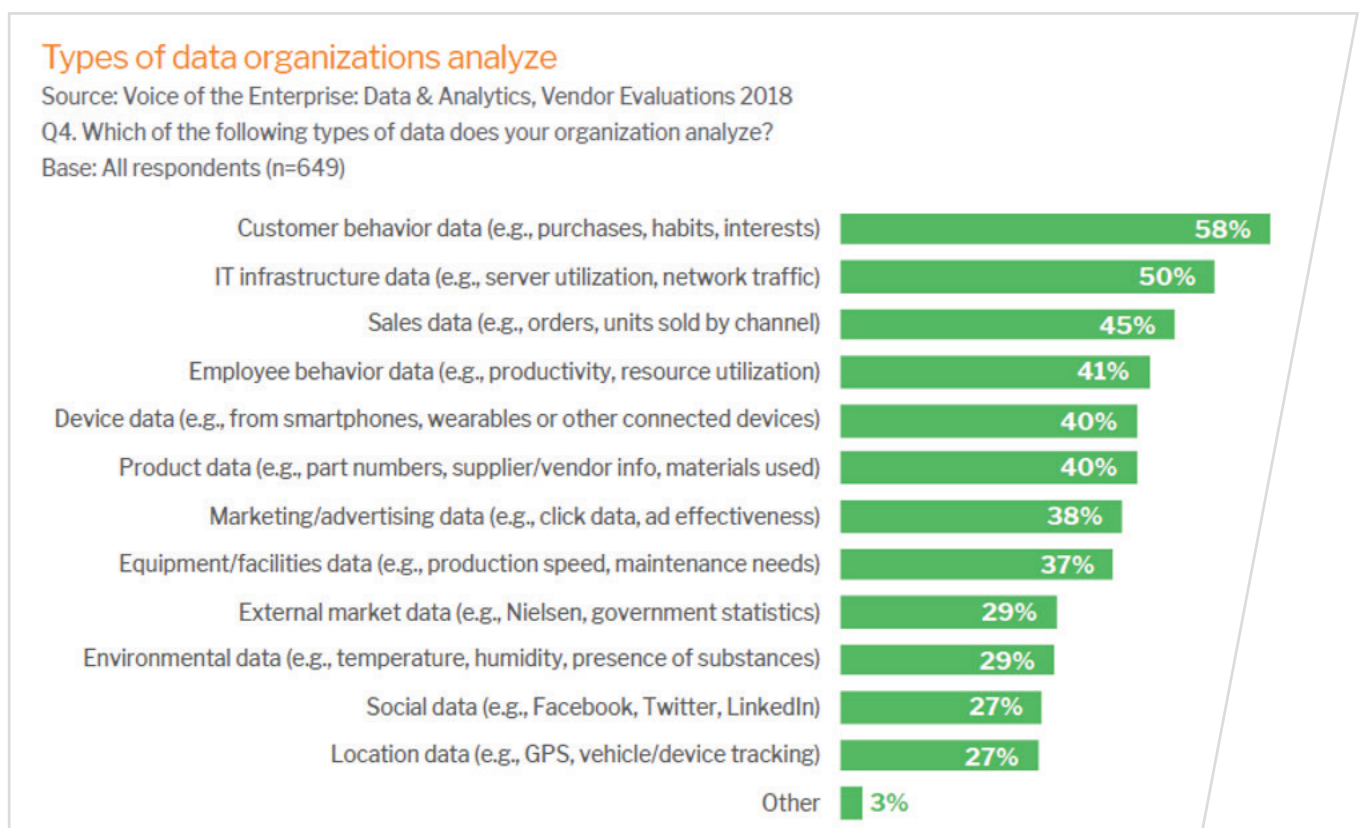


## Demands for Becoming Data-Driven

We are living in the data age. Enterprises today are generating data at an unprecedented pace and require the ability to store and utilize data like never before. Consider all the different data types that enterprises are analyzing (image below). The median data volume that companies currently have under management – in both structured and unstructured formats – is now greater than 630TB, with that number expected to exceed 820TB within two years.

Enterprises are proactively undertaking strategic efforts to use data to make more informed business decisions, operational improvements, organizational changes, and enhancements to the customer experience.

But where is the data going? Everywhere. For many enterprises, data sprawl is a real challenge. Thanks to modern technology advancements, the complexity created by data sprawl is compounded by an enterprise's continuing need to manage legacy systems, deploy modern systems, and respond to changing business conditions in a timely fashion.



Storing data in disparate data platform technologies is often referred to as polyglot persistence. This may work well for certain niche applications but when done at scale, it can raise administrative and infrastructure cost as well as complexity headaches as IT tries to manage multiple platforms and systems that often require specialized skills.

The best way to address polyglot persistence is with multi-model data platform systems – systems that can store different data types within its storage layer, negating the need for multiple, specialized systems. A multi-model system could store financial data and reporting data (using a relational model), product data and user data (with a document model), GPS data (in a spatial and geodetic model), and device data from IoT devices (in a time series model). This all happens within one multi-model capable data server, such as HCL OneDB.

## Multi-Model Business Impact

- **Fewer overall systems to manage** - multi-model systems fulfill more business use cases with fewer systems and less overhead. Fewer systems provide: the ability to provide a single security model instead of maintaining multiple ones; the need for fewer database administrators, which helps align resources to other needs; and simplified efforts to upgrade, apply system patches, and maintain connected applications.
- **Eliminate the movement of data** - multiple systems requires data movement. But it also often requires manipulation or applying ETL processes to the data as it moves from system to system. Multi-model not only reduces the need to move data but also eliminates the time penalty to move it.
- **Ease the ILM burden** - An enterprise is often under a regulatory burden to have an Information Lifecycle Management (ILM) strategy in place to manage data through the entire lifecycle, including its archive and retirement. By reducing data sprawl, the burden of moving data through the ILM lifecycle, and the burden of associated cost, is reduced.
- **Bridge legacy with modern systems** - many enterprises struggle to integrate legacy systems with new data platform systems, due to ever-changing data types and models. Relational data has been around for 50 years, but JSON data is quickly becoming popular. Both these formats can easily be stored in a multi-model system that can be easily queried for actionable intelligence.
- **Ability to develop converged workload applications** - with data centralized in a single storage layer, application developers can leverage multiple data formats from a single application, streamlining workload processing.
- **Enable efficient data access** - Multi-model systems reduce data access challenges. Because they are centralized, they provide broader access with more efficient management. OneDB offers all of these benefits, along with high security and speed.
- **Total Cost of Ownership (TCO)** - The biggest business impact of adopting a multi-model system such as HCL OneDB is it significantly reduces the TCO of implementing and maintaining a data-driven infrastructure. With limited budget identified (see chart in next section) as one of the biggest barriers to becoming data driven, adopting a multi-model platform becomes a no-brainer. With elimination of the need to have multiple systems, efficient data handling and significantly low administrative requirements, the investment in OneDB will pay for itself in several months of operation.

## Barriers to Becoming Data-Driven

Barriers vary between organizations, but the journey always begins with a strong data platform foundation. For example, data privacy concerns and regulatory compliance requirements are cited as significant barriers among respondents from companies that consider themselves highly data-driven. Among less data-driven enterprises, a limited budget is the biggest barrier, followed by a lack of skilled resources.

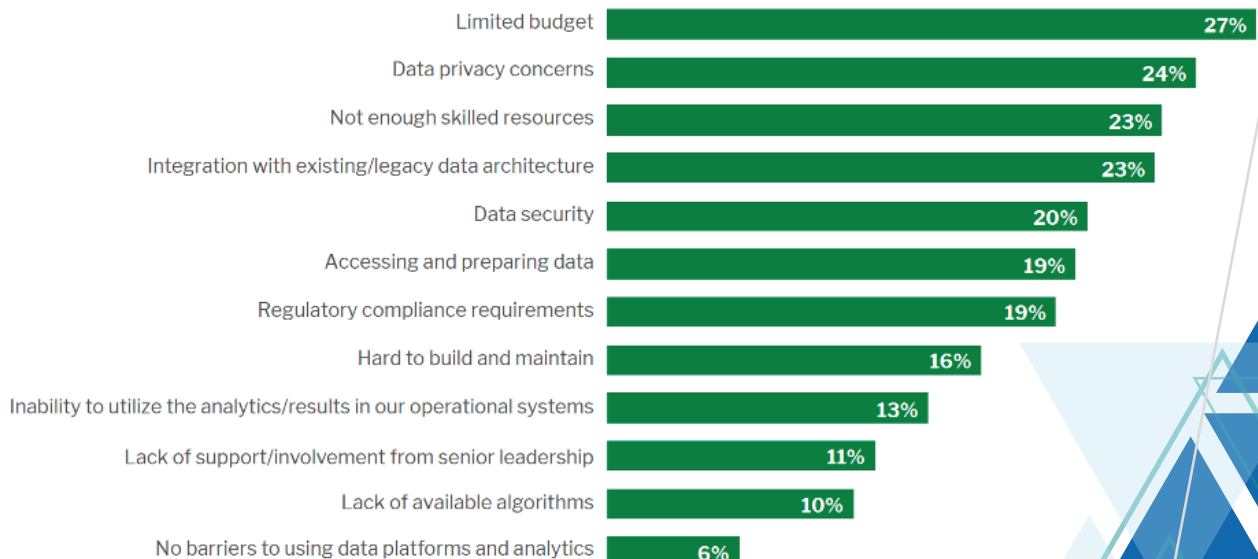
**Figure 3: Barriers to Being More Data-Driven**

Source: 451 Research's Voice of the Enterprise: Data & Analytics 2H19

Q. What are the most significant barriers your organization faces in attempting to be more data-driven?

Please select up to three.

Base: All respondents (n=361)



Enterprise data growth is expected to remain high going forward. Having a platform strategy for how to handle this mass of data should be a priority when enterprises choose their data platform systems. Unfortunately, collecting significant amounts of data often creates data sprawl, which can lead to other data management challenges. These include: high costs, inefficient use of resources, poor data governance, and security risks.

One way to address the challenge of data silos is by implementing a multi-model data platform system – as opposed to implementing disparate data platform technologies (or polyglot persistence). Polyglot persistence may work well for certain niche applications, but when done at scale, it can raise administrative complexity headaches. However, multi-model systems like OneDB are designed to handle different data models. They are effective at running varied workloads while also reducing overall administrative costs because there are fewer systems to maintain.

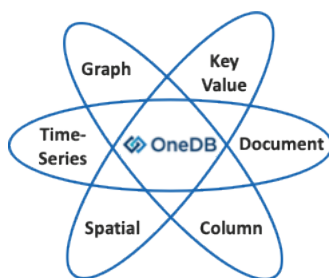
## Moving Past the Barriers

The systems, data types, and the analytical processes enterprises needed to execute against their data, are likely to evolve. While it would be difficult to pre-dict what will be popular in the future, we do know that machine learning will see significant adoption over the next few years. Machine learning thirsts for data; multiple data types from numerical, text, images and more are used to train and build machine learning models.

For enterprises, it's imperative to take the long view on data and data platform systems. It is rarely feasible to adopt and implement every new technology or system that comes along. As such, enterprises would do well to implement systems that can handle legacy data and adapt and manage new data formats as they come along. It's been proven repeatedly that polyglot persistence might be good for one-off workloads, but that model soon breaks down at scale. HCL's cloud native, multi-model database, OneDB, is designed to overcome those limitations and scale to meet future data demands, while significantly lowering TCO.

## Why HCL OneDB?

- **High performance and powerful scaling:** OneDB can support over 2 million transactions per second with full consistency. It's fast, with unbound on-demand scalability, parallelized sharding and data sharing.
- **Cloud-native:** Deploys quickly in any public or private cloud. Available as a Docker container and runs in Kubernetes.
- **Multi-model:** simplified, streamlined, and automated. OneDB has high availability and reliable data access.
- **Security:** native encryption with all configurations. OneDB is highly secure and minimizes risk.



OneDB is a safe, cost-effective and efficient choice for data management. To learn more about how the HCL OneDB data platform will support multiple use cases from within the same application, visit us at <https://hcltechsw.com/products/onedb>.



### About HCL Software

HCL Software is a division of HCL Technologies (HCL) that operates its primary software business. It develops, markets, sells, and supports over 20 product families in the areas of DevOps, Automation, Digital Solutions, Data Management, and Mainframes. HCL Software has offices and labs around the world to serve thousands of customers. Its mission is to drive ultimate customer success with their IT investments through relentless innovation of its products. For more information, please visit [www.hcltechsw.com](http://www.hcltechsw.com).

