



Unlocking the value of data in a data-first organization

Get started >

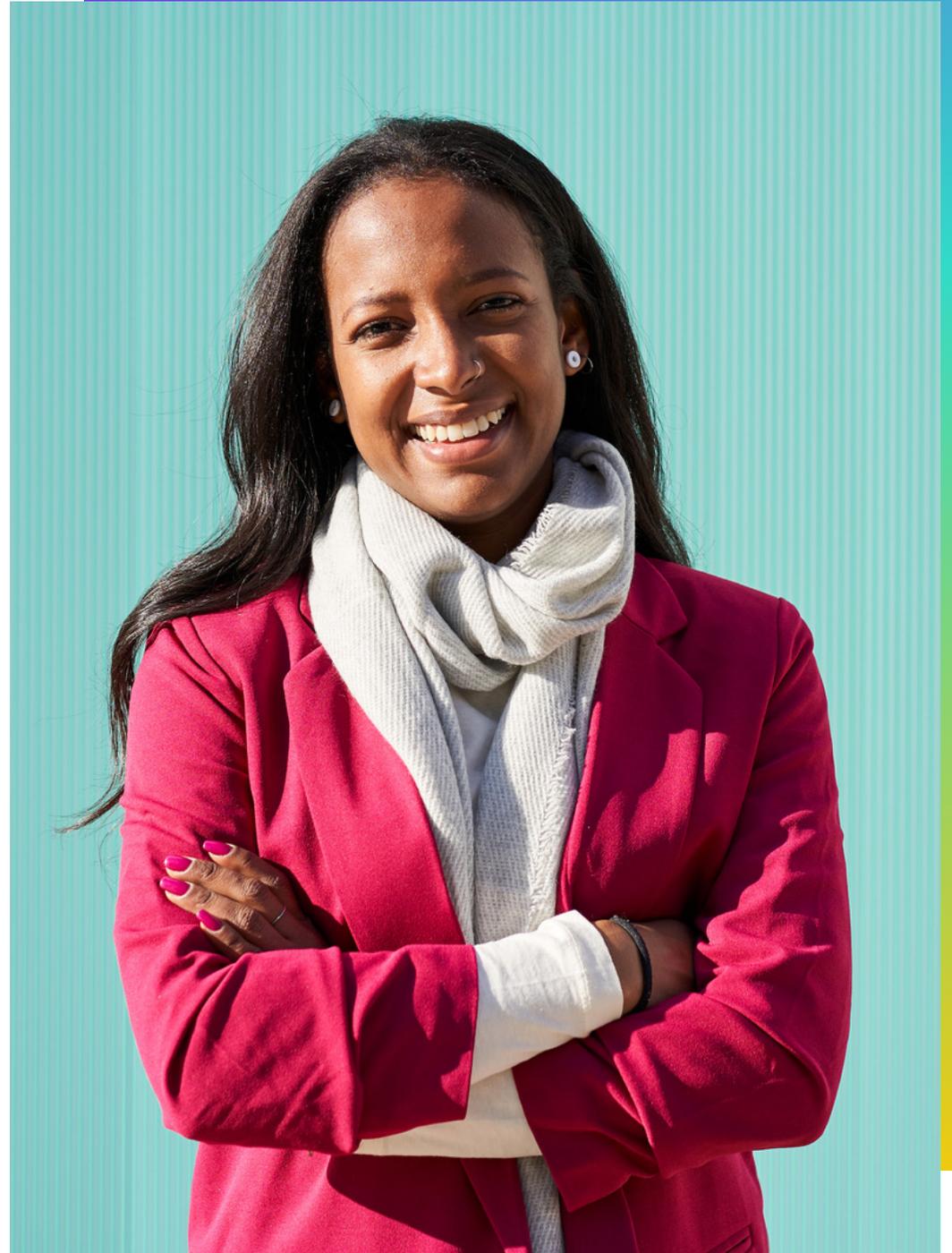


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Speed down the path to unlocking your data's value

A data-first modernization approach can help you every step of the way.

Data is the currency of digital transformation and if you can unlock that data's value, you enable your business to harness the power of data across edge to cloud. Data-first modernization is the key to accelerating as a data-first business. It is an approach from Hewlett Packard Enterprise that elevates data as the preeminent organizing principle for the business, with the entire organization—IT and beyond—focused on applying the right resources to cultivate, connect, manage, analyze, and act on data, wherever it lives.

Although each organization's digital transformation path will be unique, there are three actions that any organization can take to unlock the value of data. They are thinking, acting, and becoming data-first; empowering your data users; and modernizing and accelerating your data foundation.

We will consider each objective and actionable ways you can achieve them as you speed down the path to unlocking your data's value.

Key actions you can take to unlock your data's value



Think, act, and become data-first

A data-first approach will inform every plan, action, and investment as you transform your environment.



Empower your data users

The empowerment needs to span from edge to cloud as your data consumers seek to drive innovation.



Modernize and accelerate your data foundation

Implementing the right compute and storage solutions can enable you to unlock data's value in specific ways.



Think, act, and become data-first

The move to become data-driven will present new technology choices and considerations.

The choices you make in becoming data-first must align with the right business strategy and organizational readiness that will enable you to advance as a data-first business. As such, businesses recognize a new reality—the need to unify your data and your cloud experience, and extend it to wherever your data and applications reside.

Achieving that requires a modern data solution that addresses every facet of your data estate, from data ingestion, distribution, data processing, analytics, and data storage to data security, protection, and compliance.

The HPE experts can help you start your organization's data-first modernization journey through planning, building, and delivering a modern data platform. There are four main phases in the modernization journey:

1. Strategy alignment
2. Capability assessment
3. Planning and designing for agility
4. Data migration

The HPE expertise can help you with each of them.

The main phases in your modernization journey

- **Strategy alignment**—Bring your business, IT, and data teams together to establish a common understanding of a modern data platform, including analytical needs and data opportunities. This is also an opportunity to collaborate and create a high-level program plan.
- **Capability assessment**—Evaluate the attributes of your current data platform, the readiness of your organization, and the effort that will be required to achieve the modern data platform you need. Here you can gain a preliminary understanding of what to discard, what to save, what to modernize, what to consume, what to adopt that is new, and who needs access to what.
- **Plan and design for agility**—Develop a clear plan for an integrated, service-oriented data and analytics approach, including security, infrastructure and operations integration, datastore protection, and compliance. This also includes a detailed solution design based on your target use cases, functional and non-functional requirements, and your integration and consumption needs.
- **Data migration**—Identify and understand the potential challenges of an upcoming data migration project. This includes preparing your organization for transformation and transitioning your legacy data environment to successfully migrate your data, all leveraging the HPE data-first modernization approach.



Empower your data users

From the factory floor to the C-level, providing your data consumers access to data is critical.

Within any enterprise, the number of roles that require data access for everyday tasks continues to increase. As data spreads across multiple clouds, edge, and core environments, the challenge has been how to create unified access to data. Doing so requires a solution that provides direct access to multiple data types and formats residing across multiple siloed analytic architectures.

One highly effective way of doing this is to create a data fabric. A data fabric is a solution that combines native, diverse data sources and formats in a unified data platform that spans on-premises, cloud, and edge deployments. A data fabric delivers a global view to unify management, security, and data access, enabling you to meet even the most demanding data access needs of data engineers, data analysts, and data scientists.

Just as important as making data accessible is simplifying application and workload deployment by providing users with a cloud-like operational experience everywhere. Your data users will be more productive if they have the flexibility to deploy workloads wherever they need them, in configurations optimized for the performance of those workloads.

HPE provides solutions that allow you to confidently bring the cloud experience to your data users. You can do this readily by adopting solutions that let your users access data to analyze and deploy workloads with the ease and speed of self-service. It reframes IT as a service provider rather than an IT operator and helps reduce mundane tasks that take up your team's time.

HPE helps you connect your data users to your data seamlessly, with:

- **Cross-organizational collaboration** and data sharing from a single management view
- **A single management portal** that accelerates the creation, configuration, and management of large data and analytic systems with a 360° data view
- **Consistent access to data** through a global namespace that provides a single point of access for users, apps, and workloads to access existing and new analytic architectures such as data lakes, data warehouses, multiple clouds, and Hadoop solutions
- **Broad API support** to access multiple data types such as structured, unstructured, and Big Data without code modifications
- **Accelerated search and identification of key data sets** through a multi-modal database that supports document and column-oriented data and metadata enabling quick metadata queries or direct data access by data science teams
- **Edge-to-cloud processing and insight delivery** right where the data was created, reducing decision latency and bandwidth requirements, and improving edge operations



Modernize and accelerate your data foundation

The right compute and storage solutions can help your business thrive in today's hybrid, digital-first world.

A foundational requirement to unlocking your data's value is that processing data must be closer to where the data is created and lives. With business increasingly taking place at the edge—and with data creation and utilization happening there in real time—centralized compute is no longer an effective architecture. Compute must be distributed, coexisting where data is created and stored, and powering the applications that rely on that data without delay or latency.

Another requirement is that your organization's infrastructure is simple to manage and operate. Distributed compute and storage cannot be managed with legacy tools and methods. It requires global visibility, virtualization, and automation—a cloud-based management approach that helps you work at the speed of business. This means creating a cloud operating experience everywhere.

Security and protection are must-haves. The complexity of multi-generational and hybrid environments, combined with an increasing volume of business-critical activity at multiple edges, has the potential to create significant risk exposure. Security and protection must be an integral part of a modern compute backbone, strengthening the entire environment and helping harden it against ever-increasing threats.

Workloads need to scale quickly and efficiently, and operate at performance levels. At the same time, application diversity requires an increasingly broad range of compute performance. General-purpose compute is giving way to demand for task-specific performance, such as the capability for advanced analytics, including compute that integrates GPU accelerators. And with the right storage, you can meet any service-level agreement (SLA) and lower risk with the highest level of availability, efficiency, and ultra-fast performance.

HPE provides optimized compute and storage solutions to help unlock your data's value and meet your business objectives. This includes the flexibility to purchase or consume as a service. For example, HPE solutions for infrastructure as a service (IaaS) on-premises can deliver strong business results and position you to propel your business ahead.

Moreover, HPE has provided a cloud platform that offers an innovative compute and storage foundation capable of unifying and modernizing your data estate no matter where data lives in your enterprise, from edge to cloud. The HPE solution for a cloud operational experience enables you to accelerate data-first modernization initiatives with full visibility and control over costs, security, and governance.



Unlock the value of your data with compute

A cloud operational experience provides global visibility and insight through a unified console to pivot your team from reactive to proactive.

When compute management is simple, unified, and automated, your team can focus more on unlocking your data's value and less on mundane tasks. The path to simplifying your control of compute from edge to cloud leads through a cloud-everywhere operating experience. The HPE solutions for that experience provide global visibility and insight through a unified console, enabling you to transform business operations as you pivot your team from reactive to proactive.

Similarly, you can deploy workloads with confidence when you know that your cybersecurity is fundamental and uncompromising. Compute security should span from silicon to software, from factory to cloud, and from generation to generation. For example, the HPE server solutions are engineered with a fundamental security approach to defend against increasingly complex threats through constant security advancements with a trusted edge-to-cloud security posture.

Moreover, IT must remain efficient, accelerated, and open to ensure that you can continue to provide optimal performance for workloads as your business grows. HPE offers solutions for compute that deliver the performance your business demands—from the data center to the edge—and are engineered for your hybrid environment. The HPE solutions enable you to deploy seamlessly while achieving optimal performance for demanding applications that require the most advanced graphics and data acceleration.

More broadly, compute needs to be secure, efficient, optimized, sustainable, and engineered for hybrid environments. The HPE solutions support distributed approaches, moving compute beyond centralized data centers and deploying it as a backbone throughout your operations—across multiple clouds, multiple data centers, and the edge. The HPE solutions for compute are easy to operate, with location-agnostic, cloud-based compute management helping ensure visibility and consistency despite increasingly diverse compute locations and workloads.



Simplify, unify, and automate



Deploy workloads with confidence



Be efficient, accelerated, and open



Use storage to unlock the value of your data

Providing a cloud operational experience everywhere is vital to reducing complexity.

To unlock the value of your data everywhere, you need to identify immediate ways to eliminate data management and infrastructure complexity—all while delivering a self-service cloud experience everywhere. The public cloud set the standard for agility and organizations now need to harness the benefits of the cloud operational experience wherever their workloads live—spanning edge locations to on-premises data centers to co-location facilities.

To help eliminate this complexity and unlock data's value, organizations seek to accelerate transformation with solutions like storage as a service (STaaS) from HPE. True STaaS changes the storage management game entirely—by bringing cloud operational agility and simplicity to data infrastructure across edge to cloud. Offering a flexible, as-a-service consumption model means you avoid over- and under-provisioning concerns and complex procurement cycles. You will be able to scale on-demand with buffer capacity for unexpected workloads or usage demands.

As you confront the data management complexity that thwarts your advancement, it's important to take into consideration the wide variation in service requirements for different workloads. Most on-premises and public cloud STaaS offerings are not suitable for mission-critical applications requiring six-nines or even 100% availability. HPE offers unique STaaS solutions that can deliver guaranteed 100% data availability for mission-critical apps, along with 99.9999% uptime for all other workloads.²

Additionally, with HPE you can extend data protection across your environment with enterprise-grade, cloud-based data protection that enables instant restores, rapid recovery on-premises, and cost-effective long-term cloud retention for your enterprise. With HPE solutions for bringing a self-service cloud operational model to on-premises workloads, your organization can speed accelerate down the path to unlocking your data's value.

91%

of IT professionals agree that mature cloud operations on-premises is the single most important step to eliminate complexity¹



¹ Why Being a Data-first Leader Matters, 2022. Data referenced was derived from ESG's Data Management Maturity Study of 750 IT Decision Makers, commissioned by HPE, November 2021, as summarized in this eBook.

² "3 ways HPE GreenLake for Block Storage transforms on-prem STaaS," HPE, June 2022.



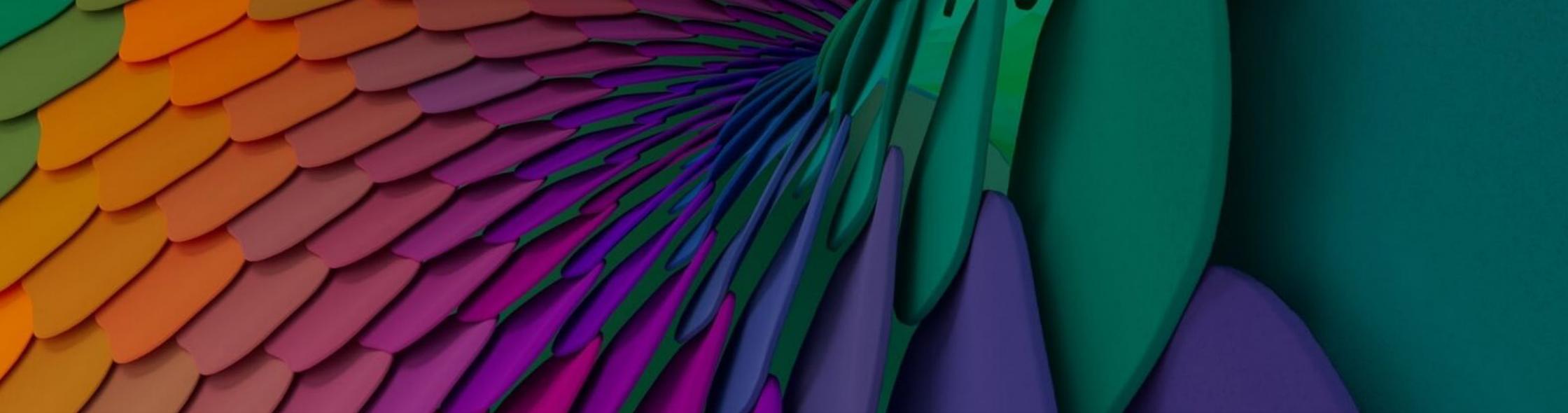
Let data-first modernization help you unlock your data's value

Data-first organizations recognize the importance of unlocking the insights data can generate. They apply the right resources to capture, cultivate, manage, and analyze their data across edge to cloud as they transform and modernize their environment. Achieving data-first modernization ambitions requires wide-ranging strategies, tactics, plans, and technologies.

Since every business is at a different point in the journey, knowing your starting point and what success looks like is critical. If you are looking for adaptability, you might focus on areas such as enabling a data-driven culture, data transparency, and governance. To adopt a data-first approach at the enterprise scale, you might focus on functional data strategies, such as adopting enhanced data visualization solutions or leveraging swarm learning. If you have already moved beyond enterprise functional capabilities, you should examine extending your modern data architectures and data fabric while considering the consumption of data by all stakeholders, internally and externally.

Regardless of where you are on your journey, HPE can help you take meaningful actions toward becoming a truly data-driven business and unlocking your data's value. The HPE advisors can help you map all your potential options and identify the relevant considerations to form a complete picture of what data-first means for your business, and we can help you determine the modern foundation for all your data across edge to cloud.





Learn more about how:

- HPE expert advisors can help accelerate your transformation
- HPE can help you unify your data with [HPE Ezmeral Data Fabric](#)
- HPE can help you modernize your data foundation with [HPE Compute](#) and [HPE GreenLake for Compute](#)

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