

REIMAGINING DATABASE MANAGEMENT

A FinServ Perspective

You've probably heard that data is the new oil. But in the FinServ industry, data is the new credit.

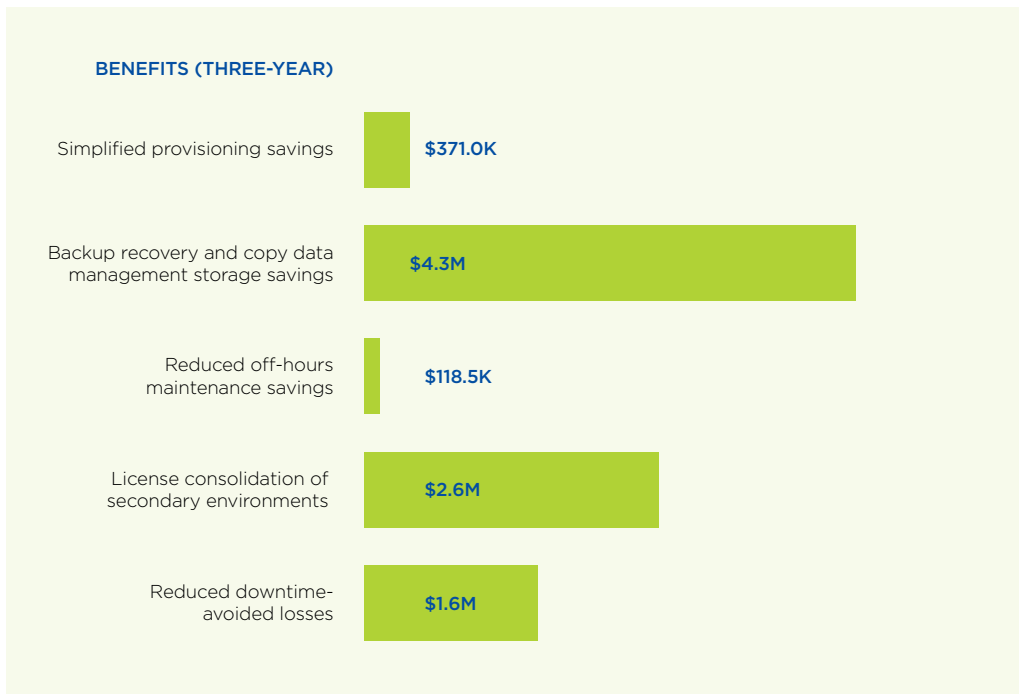
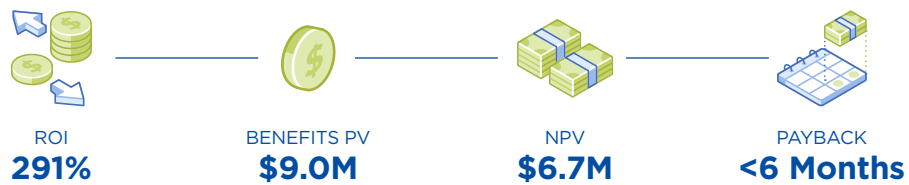
Financial institutions are crunching more data and analytics by the day to achieve alpha while complying with evolving regulations and changes in the ecosystem. As a result, data consumption and delivery requirements are shooting through the roof.

Running data-driven projects non-disruptively and on time while making the most of data has always been daunting given the prospect of modernizing databases built on complex, siloed IT infrastructure.

However, if you're a CIO or infrastructure architect at a FinServ company, you know the difference that software-driven hybrid cloud solutions can make to your data management and storage needs. In fact, a [Forrester Total Economic Impact](#) study commissioned by Nutanix on the economic benefits of [Nutanix Database Service](#), a cloud-ready Database-as-a-Service (DBaaS) platform, uncovered overwhelming, quantifiable benefits:

- **97%** faster database provisioning, with times reduced from two weeks to hours
- **60%** less storage requirements for backups and copies, saving \$800 per TB on average
- **50%** less DBA overtime, saving over 50 hours a month for productive DBA work
- **88%** reduction in downtime due to database patching, as low as 30 minutes per patch

The gains in simplified database operation management directly result in **an ROI of nearly 300%**. According to Forrester, this translates to a Net Present Value (NPV) of \$6.7 million over 3 years on an investment of \$2.3 million.



There's no better example of a penny saved is a penny earned.

As business models in FinServ evolve, you need IT models that keep pace with the data deluge. This starts with upgrading your legacy database platforms, simplifying your database operations, and scaling your storage infrastructure without disrupting business operations or daily transactions. With cloud-like database management solutions from Nutanix, you're in a position to do just that, regardless of the current state of your IT infrastructure.

Moving Database Administration to Hybrid Cloud

[A Bloomberg report](#) found what tech architects have known all along: moving database operations to cloud-based solutions and away from deployed ones (or at least running them as a complement) improves agility, maximizes resource utilization, and drastically reduces TCO.

FinServ firms are already overcoming big data delivery, processing, and storage challenges by divvying up data stores intelligently among public and private components of hybrid cloud environments. The hybrid cloud approach entails putting business-critical or frequently used data on-prem or in a private cloud for maximum security and role-based access. On the other hand, public or general information (non-critical data) or archived data is moved to the public cloud.

FinServ companies need a stronger focus on deploying enterprise-level database architectures that facilitate the creation of smart datasets and fulfil the promise of big data analytics if they want to increase the efficiency of investment strategies across multiple asset classes.

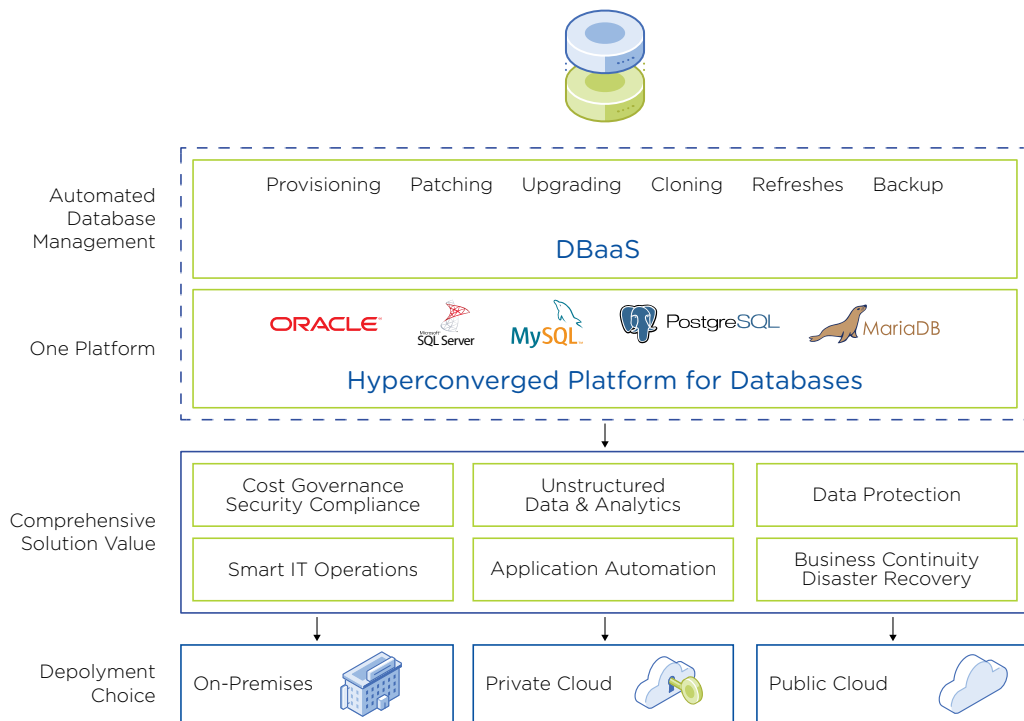
A hybrid cloud platform simplifies deployment of this underlying infrastructure with a unified data management plane. It gives you a simple way of provisioning across heterogeneous storage systems and lets you stick to the three fundamentals of data management:

- **Data virtualization:** Applications and users retrieve and manipulate data without requiring technical or metadata on its physical location or format.
- **Data gravity:** Data, records, or files aren't moved unless absolutely necessary. Workloads are pushed to where data is stored.
- **Single source of truth:** Copies of data are minimized to bare necessities and data entropy is eliminated. Everyone accesses the same data from a single source.

“The concept of data gravity suggests that services and applications are pulled in the direction of where the data resides,” said James Eiloart of Tableau. So as data moves to the hybrid cloud at an accelerated rate, database services are bound to follow.

Time and again, the immediate demand is just for more flexible, web-based data management tools that lend agility and provide point-and-click utility to database deployments, acting as a complement to the current infrastructure rather than replacing it totally with cloud solutions. This is where the Nutanix solution comes in—database professionals can now deliver self-serve capabilities that let independent asset teams provision a database in minutes and run their workloads without delay.

At the core is a hyperconverged platform that virtualizes the infrastructure for all your databases, regardless of the engine. It provides software-driven control of database workloads, pooling and allocating storage, networking, and compute resources as needed. It also enables on-demand, linear scaling in sync with growing database demands.



Nutanix Database Service is a platform that enables management with a few clicks across public, private, and hybrid clouds. It offers one-click provisioning, patching, snapshots, backup, and upgrades across all major database engines including Oracle, MySQL, and SQL Server. Nutanix Database Service provides simplicity, security and standardization on-prem as well as across the hybrid cloud.

“With Nutanix, we can provide a faster turnaround and a more highly available service for our customers. Database Service provides a cloudlike experience on-premises that maximizes the investment we’ve already made in our infrastructure, and it answers the challenges that we have as a database administration team,” says a database architect at a Nutanix client interviewed by Forrester for the TEI Study.

KEY BENEFIT

Simplified Database Management

Traditional database management is time consuming and frustrating. A staggering 72% of IT budgets are spent on maintenance rather than innovation. Database administration is one of the biggest culprits responsible for unnecessary IT overheads.

The Nutanix Database Service solution frees up database admins from the dreaded weekend overtime by freeing up over 50% of their management tasks. This time and effort can instead be channelled to support new business and IT initiatives across the board.

Take the case of [RBL Bank](#), a digital leader in India with rapidly growing credit card offerings. One of their biggest issues was DBAs constantly playing catch up with maintenance tasks—they typically spent at least 70% of their time handling user acceptance testing (UAT) requests, leaving little time to work on strategic projects.

Post implementation of the Nutanix HCI platform and Database-as-a-Service (DBaaS), time spent on UAT went all the way down to 30%. Nimish Valia, Head of Center of Excellence, Strategic Technologies at RBL Bank, could hardly mask his relief and joy: "I've never had it before where one administrator can do everything—database setup, virtual machine setup, and platform management. I had to figure out how to re-allocate the staff from our infrastructure teams. It was a great issue to have," he said.



Simplify Database Management

87% reduction in database administration

50% increase in DBA bandwidths

58% reduction in UAT

KEY BENEFIT

Better Performance for Demanding Business Needs

One of the worst areas where legacy database solutions lag behind is provisioning. And this is where solutions like Nutanix Database Service steal the biggest and most obvious march over traditional database systems such as Oracle and Microsoft SQL Server.

One-click database operations from a single-view platform enable you to provision, patch, clone, refresh and backup in times ranging from a few minutes to a few hours. RBL cut their new database provisioning time by an unbelievable 90% and were able to create zero-byte DB clones in under 4 hours, allowing them to introduce new financial products or services to the market in 4 to 6 hours as opposed to 2 to 4 days previously. What's more, they saw a 6X uptick in performance for call-center applications and databases with login times reduced from 180 seconds to a mere 30 seconds.

In another instance, Danish Publisher **Gylendal** saw a 5x improvement in SQL Server performance when they used the Nutanix Cloud Platform to consolidate 350 databases distributed over 40+ server instances onto a single Microsoft SQL cluster, despite previously employing an all flash solution with NVMe acceleration (as legacy database vendors frequently advise).



Satisfy Business Needs

8X faster time-to-market

10X dev/test acceleration

5X improvement in database performance

KEY BENEFIT

Uninterrupted Business Continuity

Maximizing business agility with fast deployments and super fast time-to-market isn't enough; staying open for business and achieving zero downtime is what separates the good from the great.

In database parlance, business continuity translates to backup and recovery. [Bauer Built Tire](#) upgraded its legacy infrastructure of blades and SAN storage to Nutanix NX systems. In the process, they reduced the time taken to generate business intelligence models from several minutes to 45 seconds—a key competitive advantage in the industry—enabling business analysts to run through scenarios they didn't even contemplate previously. Further, remote desktop logon times came down by 50% while user response times shot through the roof.

The best part? “In the four years we've been running all of our production workloads on Nutanix, we've had zero downtime,” declared Charlie Kavaloski, Director of IT at Bauer Built Tire.

Hemant Dua, VP of Technology at [The Phia Group](#), a cost-containment and consulting firm, has a similar story to share. They used a legacy three-tier architecture with a VMware-based DR environment that had a recovery point objective (RPO) of 24 hours. After switching to the Nutanix Xi Leap DR solution, their RPO fell drastically to just 1 hour and time taken to recover halved to 4 hours.

“Nutanix Xi Leap has eliminated all of the complexity of deploying and managing multiple point solutions for DR. It's great to know that we'll be back in business very quickly during any emergency,” said Dua.

When it comes to business continuity and performance [boosted by hybrid cloud storage](#), examples of successes with Nutanix simply keep piling on. Moving to a hyperconverged architecture for databases enabled [Delaware Valley Community Health](#) to reduce the processing time taken by their most critical software module from 5 minutes to a mere 15 seconds, speed up recovery time from 24-48 hours to 6 minutes, and accelerate 1+ TB backups that ran over 4 hours every night to about 30 minutes.

As the pandemic unleashed its waves, this solution enabled DVCH to shift 75% of its 310 employees to work from home in a matter of days—often the difference between remaining in business and going bust in FinServ.

“If you can’t provide the technology your workforce requires, they can’t work,” said Isaiah Nathaniel, CIO of DVCH. “I’m extremely proud of the fact we haven’t laid a single person off and have been able to fully fund our entire workforce. We have actually hired two additional people. If we didn’t have a system in place that enabled us to continue our business, I don’t know where we would be.”

Talking of people, database management is one of the most complex skills in IT. But as SBT Corporation, an ICT service subsidiary of the SoftBank group found out, that needn’t stop you modernizing your database or storage infrastructure. With Nutanix Database Service, SBT was able to design and deploy a totally new Database-as-a-Service (DBaaS) system in place of their legacy 3-tier architecture-based database in less than two months.

“Transitioning our database system to Nutanix enabled us to resolve a whole host of operational issues at once. It simplified database deployment, enabled automated backup, and cut restore times,” said Naoki Endo, Senior Engineer in the Data Management group at SBT. “It makes database operations so simple that even those without special database management skills can serve as admins. This will hopefully help resolve our shortage of qualified personnel.”



Keep the Business Running

Minutes to backup and recover

50% reduction in disaster recovery time

0 downtime on production workloads

KEY BENEFIT

Hefty Reductions in Database and Storage TCO

It's no secret that traditional database operations are disjointed, complex, and therefore, highly cost-inefficient. As more and more FinServ businesses turn to cloud-hosted database solutions, they find that the agility comes with significant operational changes and consequently, much higher costs than anticipated.

Nutanix Database Service provides a middle-of-the-road on-premises alternative to public cloud solutions at significantly lower OPEX and CAPEX thresholds, reducing database TCO by an average of 62% across deployments.

These advances in database infrastructure and management tools have resulted in [significant, quantifiable cost savings](#) owing to operational benefits such as:

- Highly scalable operations
- Shrinking idle times due to optimized resource usage
- Lower licensing costs
- Faster time-to-market
- Minimal downtime due to faster recovery
- Decreased need for clones and backups during testing and development cycles
- Productivity lift due to less involvement of DBAs in maintenance

To cite a direct real-world example, RBL Bank was able to cut 40% in hardware costs by implementing DBaaS while scaling from 15,000 to up to 70,000 transactions a day without adding any new hardware. That's not all; they halved customer acquisition costs by speeding up their sales processes and reducing support tickets by 99%.



Slash Database Costs

62% reduction in operational costs

6-10X database storage savings

57% reduction in license and support costs

Make Data Flow Like Credit

Financial products are now a commodity. Any credit card, savings account, or payday loan is undifferentiated from scores of others. The only way for FinServ firms to stand out from the competition is to implement technology that can consistently meet the evolving consumer expectations in the digital age.

According to Luis Uguina, CDO of Australian financial services company Macquarie Group, you go about it by building a data architecture that makes effective use of “fast data”—the information that flows between IT systems and apps that encourage real-time engagement from customers.

In order to match their data and cash flows, businesses all around, not just FinServ, are increasingly looking at and going through digital transformation initiatives in a post-COVID world. In such a scenario, you can't afford the luxury of database teams siloed from the rest of your IT infrastructure. As hybrid cloud systems take over the enterprise, the days of specialized database units are numbered.

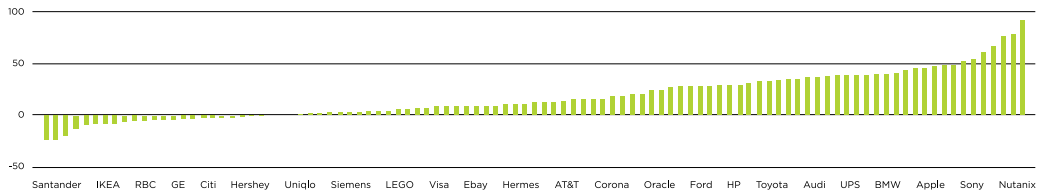
With all-encompassing, cloud-based solutions such as those offered by Nutanix, your IT upgrades and projects transform in step with your business model or objectives.

Indeed, the “suite” or “stack” or vendor-independent products will allow your organization to strip out a lot of complexity from the IT infrastructure, just like RBL Bank. “We are in the position where we can think and strategically plan how we're going to spend our resources,” said Valia. “We're no longer putting out fires—we're focused on the question, what can we do that will deliver the most value to the business?”

At Nutanix, we don't thrust a platform, storage, or cloud infrastructure solution down your throats like traditional big-name database vendors. Our FinServ domain experts sit down with you to understand your business objectives, your processes, and your existing infrastructure to guide you to a nimble, transformative, and cost-effective database solution.

No surprise then that Nutanix works with 3 out of 5 FinServ businesses in the Forbes Global 2000 list while maintaining an average Net Promoter Score (NPS) of 90 for the last 6 years running. That's a score that's more than double our nearest competitor.

Net Promoter Score for Top Brands compared with Nutanix



We help you build and customize your own cloud solution that will serve you into the future just as well as it does today! As Thomas Knappe, Head of IT Operations, Gyldendal, affirmed, "We bought into the Nutanix solution as a better hyperconverged infrastructure that was both scalable and highly available but that's not all it has to offer. Nutanix as a company knows where the cloud is going, and hybrid cloud will give us access to the tools needed to take full advantage of those developments."

"It's totally transformed our lives."

[Find out more about Simplified Database Operations for any Cloud >](#)

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