



Unlocking the Value of Data in the Cloud for Financial Services

The financial services industry (FSI) has seen enormous change in the last few years as customers increasingly do business online and demand service anywhere at any time. Established institutions find themselves squeezed between the pressure of upstart competitors and existing regulatory constraints.

And at the same time, cybersecurity threats have intensified as never before. For example, cybersecurity firm Trend Micro saw a **1318% increase** in ransomware attacks on financial services customers from 2020 to 2021.

Financial services firms must support critical operations without fail in the face of all these challenges while continuing to innovate. Central to the challenge is the monumental task of managing **unstructured data** — media files, sensor and text data, and more that exist apart from structured databases. Too much of this data

resides in silos on premises, where it takes up valuable storage space, creates potential compliance liabilities, and doesn't add value to business operations. And the problem will only get worse. According to IDG (via Solutions Review), unstructured data will constitute 80% of global data by 2025.

Much of this data is never used. The prevalence of so-called dark data, that is, data that enterprises store without using it, is an indication of the extent of the problem. For example, a recent study by Splunk found that dark data constitutes **up to 75%** of data stored by enterprises. In short, two-thirds of data in the world consists of **ROT** — data that is redundant, obsolete, or trivial.

Fortunately, new tools in the cloud provide the means for FSI organizations to meet the challenges head-on.

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*Richard Gagliano,
President of Origination Technologies,
Black Knight*



Unlocking Benefits in the Cloud

FSI organizations, including banks, payments providers, insurance companies, investment firms, and more, are challenged by the amount of data they must manage, much of which exists on premises in unstructured form. Yet that same data can unlock opportunities for organizations able to tap it. Key to that effort is making actionable insights accessible to business decision-makers. Migrating data to the cloud offers that potential.

Enterprises stand to realize three major benefits from data in the cloud:

- **Cost savings** from no longer maintaining old data or moving to less expensive storage
- **Compliance** with regulations thanks to better management and governance
- **Insights** derived from applying modern tools such as AI and machine learning to examine data in new ways

Data in the cloud can also help FSI enterprises streamline operations. That's because, as **McKinsey & Company** points out, the cloud allows for reductions in manual labor thanks to standardization, application programming interfaces (APIs), and automation.

Take mortgage underwriting. Typically a tedious, time-consuming process involving combing through reams of documents by highly paid employees, underwriting has gotten a **makeover** thanks to the cloud. Now, underwriters working with cloud-based tools can focus on more productive tasks. “Automation and digitization give underwriters a much-needed break from time-draining, manual steps,” says Richard Gagliano, President of Origination Technologies for mortgage technology company **Black Knight**.

Organizations must accomplish such goals without running afoul of regulators and exposing themselves to risks such as cyberattacks. Fortunately, the right tools can find data wherever it is in your systems and make it accessible in the cloud while ensuring regulatory compliance and maintaining security. Best of all, many FSI organizations already have such tools in place.

For example, the NetApp Cloud Volumes Platform offers a holistic portfolio of data services centered around data management features from NetApp® ONTAP® software that many institutions use on premises and now can extend into a hybrid-cloud with AWS. Working with ONTAP, IT professionals can mirror unstructured data that carries multifaceted security requirements in the cloud. They simply deploy the same tools available through ONTAP along with any additional security tools they use on premises. They can tap the same Microsoft Active Directory controllers and encryption protocols they use on premises as well. Such flexibility is one reason IDG's "**2020 Cloud Computing** survey" found 59% of FSI respondents using cloud apps migrated from on-premises resources.

Getting Started with Data Migrations

Given the complexity typical of FSI unstructured data, one approach that makes sense when starting migration projects is to first engage one or more trusted partners. One benefit: partners can help organizations build proofs of concept. Lessons learned from these small-scale implementations help everyone involved scale up to take in more data and use cases as they go. Starting small also helps organizations avoid getting bogged down by overthinking projects.



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Perhaps one of the greatest assets partners can bring to the table is simplicity. For example, partners can help FSI organizations get data-led cloud migrations without extensive training. And, in the case of migrations leveraging NetApp systems and ONTAP, organizations can use the same management console, practices, and technology to manage data in the cloud that they use on premises.

Leveraging ONTAP and AWS for Data Management in the Cloud

Besides simplicity, NetApp and AWS offer several key benefits through Amazon FSx for NetApp ONTAP.

Compliance

Large amounts of unstructured data on premises represent a compliance liability to organizations that don't understand what they have.

For example, a recent study with a large UK bank uncovered a cache of unstructured data composed of sensitive customer information. The research team discovered such sensitive information as credit card numbers, birthdates, passport photos, and more, in unprotected file shares. Sadly, the problem may be all too common for large financial institutions.

However, by migrating files to the cloud, FSI organizations can gain critical insights into what data they need vs. what they can — and are required to — delete. The result: improved security and full compliance with privacy regulations.

Security

Ransomware has emerged as one of the most significant cybersecurity threats to FSI firms. After ransomware takes over and encrypts vital data, organizations get squeezed to pay ransom money to regain access to it. According to [experts](#), one of the best defenses against ransomware is preserving immutable copies of critical data that organizations can use in recovery operations.

Amazon FSx for NetApp ONTAP lets organizations create independent recovery environments in days or even minutes. In contrast, on-premises backup and recovery operations can take months or even years.

The NetApp SnapMirror®, SnapLock®, and SnapVault® features of ONTAP let administrators quickly create incorruptible copies of vital data and restore those after a crisis, maintaining operations and preserving institutional reputations.

Data analytics and insights

Siloed, inert data returns no value to an organization. On the other hand, moving that data into the cloud can yield valuable insights through data analytics.

With data analytics in the cloud, organizations can:

- Find non-compliant, sensitive data
- Gain more complete customer views through sentiment analysis and other analyses
- Quickly get answers to critical questions about customers to drive business decision-making

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Reduced IT burden

Data in the cloud can lend speed to projects that would take much longer on premises, maximizing valuable IT resources. Such speed is also critical to meeting the fast-changing market demands of one of the most tumultuous times in modern history. A project that takes three years to implement may well turn out to have no value by the time it launches due to changes in the market, the regulatory environment, or competitive environment. It's not the failure that necessarily proves unacceptably costly in such a scenario; it's time, money, and expertise wasted while more agile competitors surge ahead.

In the cloud, organizations can set up pilot projects and quickly discover whether they will prove valuable, without spending time and money setting up servers and buying costly licenses for tools that turn out to be unnecessary. Instead, with cloud tools — for example, those in AWS — administrators can cancel services with the click of a mouse.

As McKinsey & Company notes, “Cloud enables companies to experiment with applications and new business models at lower cost and greater speed.”

Sustainability

Also of critical importance is the positive environmental impact of moving unstructured data to the cloud and eliminating unused data.

Recent **analysis** puts greenhouse gas emissions from information technology at as much as 3.9% of the global total — **larger than** that of the aviation industry. Storing, processing, and managing data has a real impact on the planet. Keeping ROT alive unnecessarily contributes to that impact.

With more organizations and their stakeholders seeking solutions to climate change, eliminating unused, unstructured data represents an obvious low-hanging fruit.

Moving the Starting Line

Given the unprecedented challenges facing FSI, organizations must do more than ever to foster innovation, keep sensitive data safe, operate efficiently, and be good social and environmental stewards. Migrating data to the cloud offers opportunities to do it all.

Even so, FSI organizations have some distance to go. As the IDG "2020 Cloud Computing study" found, 73% of FSI respondents have some cloud workloads, but still have most workloads on premises. Clearly, there's room for improvement — and room to meet today's challenges.



Learn more about how financial services firms can unlock their data with the cloud for greater efficiency and agility at [NetApp.com](https://www.netapp.com).