



# **How financial services can overcome unexpected business challenges with remote managed services**

## The more you want to compete on customer experience, the more governance and security you'll need in order to protect customer data privacy.

Enterprise organizations are turning to digital transformation as a result of market disruptions. As they consider analytics platform vendors, they should also research key technology trends and make sure their decisions will protect and secure the business.

Businesses looking to create a seamless customer experience must create a secure, always-on, agile analytics infrastructure that can quickly scale and flex to address unexpected business challenges. There are many considerations for these businesses – on-premises or remote, cloud or cloud hybrid? Should it be managed by their own IT departments or outsourced? Is it open source friendly? This whitepaper dives deeper into these questions.

We compiled a panel of experts from D4t4 Solutions and SAS to discuss how remote managed services can help organizations reduce risk, more easily fulfill their compliance obligations, and increase overall performance in the financial services industry.

### Key takeaways

- Customer data management is the first step in digital transformation
- Why you should embrace cloud computing and open-source
- A good customer experience requires lots of customer data
- Your data management solution needs to be both forward and backward compatible

### Great customer experiences demand a lot of customer data

Many vendors talk about artificial intelligence (AI), machine learning (ML), and natural language processing (NLP) – and they can all mean something different. But no matter how these technologies are defined, one universal truth applies: You need up-to-date, accurate, and often very large data sets brought together in a meaningful way to take advantage of analytics of any kind. There's a science behind this architecture that shouldn't be overlooked.

You might have enormous data sets in silos all over your organization. But to make decisions with that data, your analysts must have seamless access to all the data they need. We recognize that not all data can live in the cloud, especially in financial services, which is why a hybrid cloud deployment typically makes the most sense. Regardless, the cloud can provide scale, flexibility, and performance as you work toward your organization's cloud strategy, which is why our experts recommend you get on the cloud computing "bus" if you haven't already.

A good customer experience requires lots of customer data, and that means you need security and governance. It seems obvious, but the more you want to compete on customer experience, the more governance and security you'll need to protect customer data privacy. Again, the cloud (or a hybrid environment with data hosted in the cloud and on-premises) is likely the best option for any business

– with built-in protections for where certain data lives and who can access it. You should also determine whether your solutions allow for deduplication and other data management protocols. Deduplication, for example, saves money and is important for good data governance and privacy.

“During the pandemic there have been a lot of conversations about recreating digital experiences for customers to make it as seamless and as friendly as possible from a user experience perspective. But as you consider that and you’re bringing all this data together, privacy, compliance, and governance becomes a massive part of preparation for customer experience analytics.”

Lou Bush Lead Data Scientist Financial Services Industry

## Key considerations

### Open source is here to stay.

The reality is that most data scientists want to experiment and use open source analytics. There will likely be groups within your organization that want to test different scenarios and will use open-source applications to try to run different jobs of different analyses. All organizations need to have environments that can offer that capability as an extension of your existing environment. The challenge is building an environment that can support these needs as they grow over time.

### There will always be new tech. You need the flexibility to leverage it.

Technology moves fast, and new trends pop up every day. Data scientists are constantly trying new approaches for modeling. For organizations trying to maintain those environments, this makes things

challenging. It’s difficult from both an architecture perspective and a hardware perspective to allow for the testing of new applications while still running day-to-day business and analysis jobs. To be cutting-edge, you must be able to pivot very quickly as an organization. You also have to strategically design these environments to continue meeting your service level agreements.

### It’s difficult and costly to keep environments up to date.

Outages cost money. If you have out-of-date environments – or perhaps environments that aren’t designed to stack or to facilitate the new business requirements – it can be costly. Whether those are internal or third-party resources, costs can go through the roof if not designed appropriately. Ask about this when you’re looking at vendors, especially since many outages result from mismanaged updates to environments.

“I don’t worry about what is next week’s new thing, or if we had issues or problems with the environment. That’s all handled by SAS and D4t4 and the appliance. So, I’m allowed to be much more strategic and much more embedded with my customers in their use cases. And that allows us to get ahead of the game with the groundbreaking analytics.”

Lou Bush Lead Data Scientist Financial Services Industry

## What to look for in a customer data management solution

### Look for something that’s both backward and forward compatible.

It will be a while before old-school operating systems are out of the picture, so you need a solution that can give you the best of both worlds. While

containerization, like Docker and Kubernetes, is the way to go, your environment must also be able to interface with older environments and data sets. That also means you need to store old containers or old applications in case you need to run them again for regulatory reasons. It's very important that your solution allows you to be backward, as well as forward, compatible.

**Containerization is absolutely critical for multilanguage platforms.**

Especially in open source environments, there's no guarantee of backward compatibility as those packages change over time. For example, in the financial services industry, an analyst might need to go back and rerun a model for auditors – but the new packages don't work with their old model object.

**Find a solution that allows you to do your job and not worry about maintenance and security.**

You're going to want something that gives you peace of mind while doing your job. This is the benefit of outsourcing and the power of the D4t4 and SAS

partnership. If you want to pursue a new cutting-edge technique, you can simply pick up the phone and ask for it, without any of the headaches of ordering software or hardware or adding a new environment.

"I don't remember a time where I went back with a challenge and didn't have three or four options within the week. Usually it's within a day. So this environment, this group of people, and the D4t4/SAS team, has been absolutely phenomenal in terms of getting solutions quickly to my customers and helping us be a best-in-class analytics environment for the bank."

Lou Bush Lead Data Scientist Financial Services Industry



## About D4t4

D4t4 brings years of experience in the Customer Data Management (CDM) sector to help organizations build environments fit for purpose that can scale and flex as business needs change.

Combined with the remote managed services and D4t4's IP, D4t4 provides an enterprise platform that automates the ingestion, integration, transformation, and delivery of customer data from all relevant data sources, whether on-premises or cloud, to deliver real-time customer and regulatory analytics.

## About SAS®

With 40-plus years of analytics innovation, SAS® is a trusted analytics powerhouse for organizations seeking immediate value from their data. A deep bench of analytics solutions and broad industry knowledge keep our customers coming back and feeling confident. With SAS®, you can discover insights from your data and make sense of it all. Identify what's working and fix what isn't. Make more intelligent decisions and drive relevant change. SAS® is the only vendor named a leader in the Gartner Magic Quadrant for Data Science and Machine Learning Platforms for all eight years of its existence.