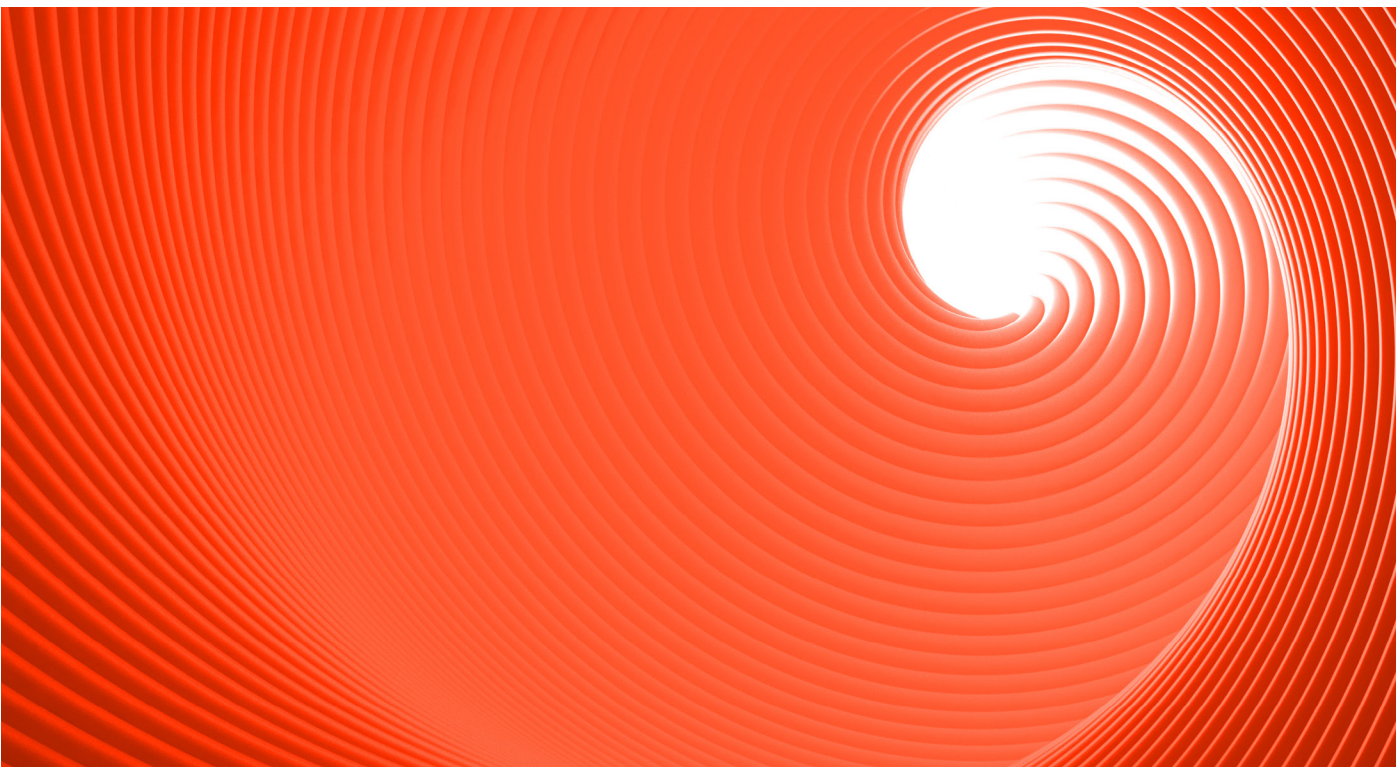


SaaS and The Evolution of Cloud-Based Data Management



Introduction

The evolution of cloud-based technology is continuing to reshape the data management landscape. As data volumes increase, users in different industries are demanding flexible, scalable processes that enable them to leverage a wider variety of sources, uncover new insights and confidently make decisions that will drive their businesses forward.

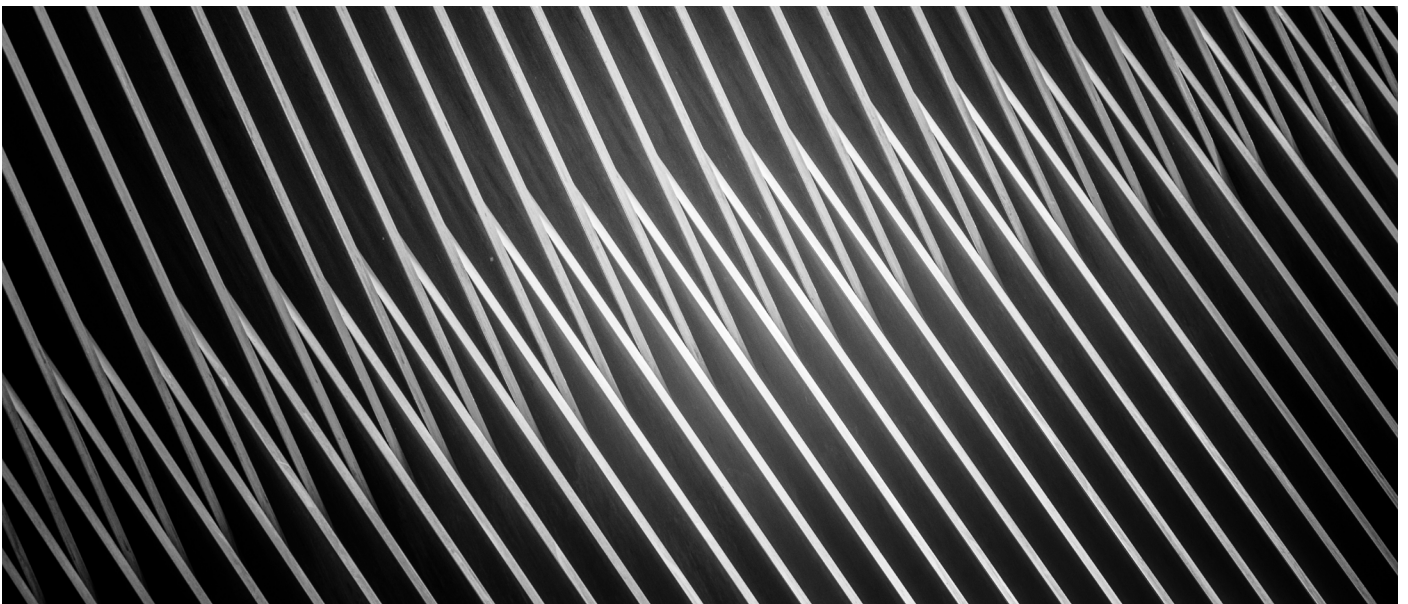
To highlight just a few examples, portfolio managers at asset management firms want to use more data to understand the ESG implications of their investment decisions; geoscientists at E&P companies want a centralized, synchronized view of their well assets, including more data points than ever before; and commercial leads in the shipping industry require accurate data in order to drill down into supply chain risk. The list goes on.

As data volumes and user expectations increase, competitive pressure is also leading many companies to review their operations and consider whether they can make better use of their resources by outsourcing commoditized processes.

Legacy systems based on locally deployed software are often unable to provide the agility and scalability required in this new world. As a result, many companies have now migrated at least some of their data management operations to the cloud, and many of the largest and most advanced organizations are on the second or third phase of this journey of cloud adoption. This trend is set to accelerate as data volumes increase further.

Of course, there are many ways in which the cloud can be used to support data management. Over time, significant differences have emerged between the cloud-based deployment models offered by various providers in this space. These differences have important implications for flexibility, scalability, functionality, security and user experience.

In this white paper, we provide an overview of the evolution of cloud-based technology in the data management space; we assess the benefits of the most commonly used deployment models; we set out our own vision for the future based on a software-as-a-service (SaaS) model; and we explain the journey we are on to deliver increased value for our clients, including the end business user.



Cloud-based deployment: understanding the options

There are a variety of ways in which the cloud can be used to deploy a software solution, each of which has different implications for the end business user and wider organization.



Hosting

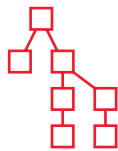
In the simplest form of cloud deployment, a third-party provider hosts the hardware and software in the cloud on behalf of a client. The client company benefits from the scalability offered by the cloud, but remains responsible for managing the infrastructure and application. As a result, the client does not have the option of redeploying resources to other tasks.



Managed service

A managed service typically involves a third-party provider hosting the infrastructure and application in the cloud and managing both on behalf of a client. In the case of our EDM platform (and other software solutions), this includes everything from network monitoring, load balancing, application and database upgrades, through to user administration, performance tuning and ongoing monitoring.

Our managed service also extends to managing operations, such as relationships with data vendors and a host of value-added BAU services to support ongoing change, such as adding new data feeds and configuring new rules. In this way, our managed service allows our clients to outsource commoditized processes to us, freeing up their own resources to focus on higher-value projects.



SaaS

As part of SaaS delivery, software is centrally hosted and licensed on a subscription basis. SaaS is based on a multi-tenant framework, which means new features are pushed out on a single code base across the entire client community – rather than each client undertaking software upgrades separately.

The SaaS model is used for most consumer applications today and delivers many benefits to users, including fast access to new product features without having to take large upgrades. A SaaS solution can be augmented by many of the features offered as part of a managed service (such as orchestration of data feeds into the system, support for uptime and environment monitoring).

The future is SaaS

We have delivered our EDM platform as a managed service for many years. The managed service continues to deliver significant value to our clients by allowing them to outsource commoditized processes to us, so they can focus on higher value-added projects.

We are now taking the opportunity to build on this strong foundation and deliver even greater benefits to our clients by moving to a full SaaS model. We began the transition with [the launch of our Data Dictionary](#).

The move to SaaS involves a shift from our established single-tenant software model to a multi-tenant framework. As part of our established managed service, we manage each client's software instance separately and coordinate upgrades with each client individually. Migrating to a multi-tenant SaaS model, with all clients leveraging a single software instance, will allow us to deliver enhanced services and greater benefits to our clients, including end-users within the business. The main benefits will include:

Easy access to new features

As part of the SaaS model that we are building out, our clients will not need to undertake large upgrades. Instead, new features will be pushed out on a single code base to all clients. When users log in, they will be able to accept the latest upgrades and benefit from the newest features in the same way they do with many consumer applications. In short, users will have the fastest access to the latest features they need to do their jobs more efficiently and effectively.

User empowerment

In competitive, data-driven industries, it is unsustainable for business users to be dependent on IT to make the changes they need to their applications, such as adding access to a particular data feed. Instead, business users now want to be able to do much of this work themselves, without software coding experience. In effect, they want enterprise software with consumer-grade user experience.

SaaS will help to make this a reality. For example, the SaaS model will make it possible to deliver a low-code/no-code configuration environment in which users are empowered to make changes to mappings and hierarchies and to add new data fields. SaaS will also make it possible to conduct A/B testing to gauge user feedback as part of the development cycle, ultimately leading to a better user experience that allows those with non-technical backgrounds to do more.

Time to market

The SaaS deployment model will provide an opportunity to reduce time to market through the use of accelerators. In the new world we are building, business users will be able to select common use cases (such as a security master) from a templates gallery and modify them without the need for significant IT resources. The goal is to cut the time from project start to first business delivery, resulting in lower TCO.

Enhanced quality

As part of our SaaS framework, all clients will use the same (latest) version of our software. This will make it possible for us to further enhance the quality of our releases and supporting services because all of our resources (including Product, Development, QA and Support) will be focused on the latest version rather than supporting clients on a variety of earlier releases.

Data security and residency

As part of our SaaS framework, we have prioritized SOC 2, Type 2 compliance, including supporting the relevant data quality, visibility, lineage and security requirements. The ability to leverage a global network of data centers will make it possible to satisfy the local data residency requirements of individual clients by ensuring data stays within the borders of a specific country or region.

Complementary services

Our SaaS platform will be augmented by the services we currently offer as part of our well-established managed service, including orchestration of data feeds into the system, support for uptime and environment monitoring, SLA management, audit management and more. We will provide off-the-shelf, configurable data models that reflect the best practices of our client base and reduce time to market.

Our SaaS migration

When planning the SaaS migration of our EDM platform, we considered the options outlined above. We conducted a major survey of our clients, employed an external advisor, and evaluated our internal resources and capabilities. We concluded that a phased migration of our EDM platform to a SaaS model is the optimal approach. Several important factors drove this decision:



Customer Benefit

Firstly, our client survey showed that our customers understand the long-term benefits of SaaS and want to move towards this architecture as well. Evolving our established product into a SaaS offering allows us to help our clients take this journey with us in a way that developing a separate, parallel solution never could.



Risk Mitigation

With more than 200 existing clients, we wanted to ensure a smooth, low-risk transition to SaaS, avoiding a situation where clients would need a 2.0 re-implementation of our software. We wanted to ensure that both our existing and net-new clients enjoy the full benefits of SaaS.



IP and Technological Experience

After assessing the requirements of such a SaaS migration path and our own capabilities, we are confident that we have the unique technological expertise and IP to transform EDM into a true SaaS offering with all of the associated benefits for our clients.



Company Heritage

We pride ourselves on being the industry leader in the data management space for the markets that we serve. We are confident that a phased migration to SaaS will allow us to maintain this standing by providing an enhanced experience for our clients, including the end business users.

Conclusion

Most data management solution providers now consider the cloud to be a central part of their value proposition. However, there are significant differences between the ways in which the cloud can be leveraged and the resulting benefits for users. We hope the definitions outlined in this white paper provide a useful guide to this evolving space.

Of the various cloud-based deployment models, we believe that SaaS offers the greatest value to our clients in terms of flexibility, functionality, time to market, quality and ROI. We are building on the experience of our highly regarded managed service and taking our customers with us as we evolve our EDM platform into a SaaS framework. This process is already bearing fruit following the launch of our Data Dictionary.

Of course, we are not alone in recognizing the potential of SaaS. In fact, SaaS has rapidly assumed the status of an industry buzzword, which is liable to be applied to a variety of cloud-based models whether or not they fully meet the criteria. To address this situation, we have outlined in this white paper what we believe to be the key benefits of SaaS. The following checklist can also be used

to assess whether a solution really meets the criteria of SaaS in terms of flexibility and user empowerment:

- Are all clients using the same instance of the solution (and the same version) or is there a separate instance per client?
- What is the release schedule?
- Are upgrades required in order to take new functionality?
- Are business users empowered to make changes to the platform (e.g. dashboards, workflows, hierarchies and other business logic) without significant IT support?
- Is the solution SOC 2, Type 2 compliant?
- Can data be pinned to specific geographical locations to fulfil regional data security requirements?

The solution we are building out is aligned to the principles of SaaS outlined in this paper. We look forward to sharing the benefits more broadly across the data management space, as we double down on our commitment to empowering users to extract more value from their data.

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