



PRODUCT VIEWPOINT

SNOWFLAKE CLOUD DATA PLATFORM

APRIL 2021

VENDOR BASICS

Headquarters: San Mateo, California

Headcount: 1400

Year Established: 2012

Chief Executive: Frank Sloatman

Latest Revenue: \$100m+ in 2019

Operations: Regional/Global Expansion

Latest Profit/Loss: Not Published

Notable Investors: Sutter Hill Ventures, Sequoia Capital & Salesforce, Dragoneer Investment Group.

Competitors/Peer Group: Microsoft, Amazon Web Services, Teradata.

SNOWFLAKE - SNAPSHOT

Snowflake are an exciting business right now. Founded in 2012, Snowflake have grown significantly in a very short amount of time and now have over 1400 employees in offices across the globe. Their specialist area of focus is data engineering, data science, data warehousing and data lakes, data applications and data sharing in the cloud - spanning an already fast growing data management space. The Cloud Data Platform sits at the heart of a major technology transition and this places Snowflake at the very core of the data management revolution. In mid-September 2020 they made a splash with the largest IPO in history.

What's it all about? Why the excitement?

The move to cloud computing has been ongoing for over a decade. Businesses of every size, every industry and in every region are moving existing applications and data sources to the cloud. It's a challenging issue for most established businesses to grapple with and they generally began by taking small steps by introducing niche cloud applications (for areas like sales and HR) and generic cloud storage. As the cloud has evolved and grown in stature, we are now seeing IT teams tackle the more complex elements of their landscape - and this is where Snowflake fit in to the picture.

A data warehouse is a core component of almost every IT architecture. It is a central repository of data that often flows from a variety of different company platforms which can then be used for reporting and analysis. Traditionally, due to the associated data volumes and the location of the feeder platforms, the data warehouse is hosted on-premise within the customer's central data centre. As customers look to deploy more Software as a Service (SaaS) applications and move strategic platforms to the cloud, the data warehouse has evolved to become cloud-based - and the 'cloud data warehouse' was born.

Snowflake appear to have hit a rich seam of opportunity and are going toe-to-toe with some of the very largest vendors (AWS and Microsoft) as well as partnering with them as the Snowflake platform runs on their technology and thereby creates revenue for their competitors. The race is now on to facilitate this transition of data platform technology as more and more companies begin the move.

CLOUD DATA PLATFORM

The Snowflake Cloud Data Platform is a modern platform built from the ground-up as a cloud architecture. The platform features a patented multi-cluster, shared data architecture that is designed to support very large data loads and different types of users to those seen in the traditional on-premises alternatives.

Snowflake refer to the platform as requiring 'near zero maintenance' and point to the fact that the different platform layers (compute, storage and cloud services) are logically integrated but scale independently to provide an environment that is suited to many different use cases and data volumes that are unprecedented in this fast growing market.

Snowflake can be run on Microsoft Azure, AWS or Google Cloud Platform. This provides customers with the ability to select the right platform for their IT standards and strategy without being forced into one or the other. This also provides an unusual contradiction as each partner ideally would prefer to sell their own variety of data warehouse technology.

What sets Snowflake apart from their competitors is the architecture behind the platform. It is a major differentiator as customers of all shapes and sizes benefit from scalability and processing power to meet their data analysis needs today and into the future.

VISION

Despite being a relatively new entrant to the market, Snowflake have had a dramatic impact upon this core technology. Unlike their primary competitors, Snowflake are laser-focused on their vision to change the data platform marketplace. They appear to be resisting the temptation to branch out into new solutions and instead are doubling-down on cloud data platform technology and focusing all their energy into leading this niche market. According to Snowflake, they almost tripled headcount in the last financial year as the business is growing to meet demand.

Although they are under intense pressure from some of the world's largest technology businesses (Microsoft and Amazon Web Services (AWS) offer alternative platforms), with much deeper pockets and much greater physical resources, their vision, based upon a unique architecture, is winning new customers on a frequent basis.

Snowflake have recently started to talk about 'the data cloud'. This is where Snowflake can really change the game by becoming the location for a company's data to be held. By connecting different Snowflake environments (either interally within the company or external Snowflakes) the potential of that data is unlimited. They talk about seamlessly storing, unifying and analyzing all data - which would be a game changer in the industry. The potential for Snowflake, if they can bed this down, is extremely exciting. We expect to hear more about this in the coming year as we see customers start to move along this path.

Tied to the Data Cloud rhetoric is a substantial relationship with Salesforce. Salesforce are a juggernaut in the software world. They refer to the products within their application landscape as X cloud (sales cloud, marketing cloud, integration cloud etc). As Snowflake refer to themselves as the Data Cloud, commentators wonder whether the long term vision for the business may be under the Salesforce banner - although the value of the IPO may make this challenging to achieve. Whether this coming together occurs or not, there is no doubt that Salesforce data will be a significant growth engine for Snowflake as they already work with a large number of Salesforce customers - and work with existing Salesforce technologies like Tableau.

Viewpoint Analysis expects to see Snowflake continue to mine this very rich seam and continue to reap the rewards as more and more businesses move their infrastructure to the cloud and take advantage of the scalability that is inherent within the Snowflake platform. If the 'data cloud' concept gains traction, expect to see customers deploy a Snowflake environment because partners and data suppliers have also joined Snowflake - creating a domino effect.

CUSTOMERS

Customers are drawn from businesses of all shapes and sizes and from all over the globe. According to Snowflake and associated media sources, customer numbers have grown exponentially with 4000 customers in 2020 and half of those (2000) coming in the last 12 months. New customers added in the last few years include the likes of Netflix, Office Depot, Netgear and Yamaha.

It has been noticeable that the shape and size of a typical customer has grown over the last few years. A few years ago, the stereotypical customer would have been in the 'mid-market' area with only a few examples of large, multi-nationals. Today, the mixture of small, medium and large customers is much more balanced and the sales team often have a selection of customers and new business targets that cross different size thresholds.

It is common for selection processes to be based upon a proof of concept approach where customers will run an exercise to compare real-world processing across a number of different competitor technologies. Reports suggest that due to the performance of the Snowflake platform, this approach is proactively suggested by Snowflake sales team members in order to demonstrate the performance versus other vendors.

Customers appear to go through a journey with Snowflake. They start with that initial proof of concept. Once that is proven, they bring the platform in and choose a specific use case. When that is successful, the world really is their oyster and the platform is used by multiple project teams. This customer adoption cycle drives the way that Snowflake interact with the customer base and the sales team are driven to follow a similar path.

PARTNERSHIPS

Snowflake's platform cannot exist within a bubble - it is absolutely dependent upon the goodwill and support of a number of key partners - both in terms of connectivity and platform. Their ability to partner and the emphasis they have upon partner relationships appears to be a significant strength.

If we take the platform as an example - Snowflake resides on Amazon Web Service (AWS), Microsoft Azure and Google Cloud Platform. When a customer talks about their cloud strategy, invariably one of those three vendors is at the heart of the technology that supports the term 'cloud'. As such, if you really want to deploy a cloud data warehouse or a cloud data lake, that really needs to sit on one of those three vendor's technology stacks. Snowflake, despite competing with central components of each vendor (e.g. Redshift from AWS and Synapse from Microsoft Azure) is also a key partner - that is some balancing act to manage but it helps that Snowflake's growth also fuels the revenues for those platforms.

Connecting data is also a key requirement - in order to take data into the Snowflake cloud, invariably it needs to come from a multitude of on-premise data sources (particularly existing on-premise data warehouses) and from a variety of modern cloud applications and data sources. Snowflake partner with the likes of Informatica, the defacto integration platform for on-premise and cloud integration, as well as other partners in this space.

As mentioned earlier in this Viewpoint, Snowflake are also big partners with Salesforce. The size and shape of Salesforce and the sheer number of customers and breadth of data means that this is a critical partner and one that will facilitate the continued growth of the business. However, outside of that, more than half of the analytics performed across the Snowflake platform (as business intelligence is perhaps the number one reason for buying a Cloud Data Warehouse) runs through Tableau - a recent acquisition of Salesforce.

These and other partners are therefore crucial to Snowflake and we expect to see a continued focus upon partnering as the company and the brand grows - both with those named above, but also with a broader set of technology vendors

VIEWPOINT - PRODUCT VERDICT

Viewpoint Analysis rates the Snowflake Cloud Data Platform as a **LEADING** product. We expect the Snowflake solution to continue to gain ground (revenue and market share) as it differentiates itself through a solid architecture built for multiple use cases and multiple customer personas.

As the Snowflake brand and market recognition continue to grow, we expect the Snowflake Cloud Data Platform to see increasing demand. At the same time, we believe this growth intersects a hyper-growing market. It appears exceptionally well positioned to take advantage of the move to cloud and the transition from on-premise data warehouses to cloud data platforms.

Snowflake's Vision is regarded as **LEADING**. They appear to have differentiated themselves successfully in a fast growing market and we expect them to build upon this differentiation to provide significant advantages for the future.

The market appear to be moving toward Snowflake and therefore we rate the Market Buzz as **LEADING**. At time of writing, they appear to have gained real traction by winning major new logos and creating an excitement for the product across multiple regions. Doubling customers in one year is phenomenal by any measure.

The product is one of the key data management technologies and regarded **LEADING** in the cloud data platform area. We know of a number of examples where Snowflake have had success through providing a proof of concept (POC) that has shown their product to provide advantages that have won over the customer. The challenge will be for Snowflake to take advantage of this current perceived differentiation.

We rate Snowflake's cloud data platform product as **STRONG** for opportunity. We anticipate that competitors, particularly with the financial and R&D strength of the likes of AWS and Microsoft, will continue to bring out new additions to their CDW portfolio in an attempt to close the gap. The opportunity presented to Snowflake will therefore be in the balance and they will no doubt need to work hard to continue the momentum they have built to date.

If the Data Cloud plans come to fruition, and Snowflake sits inbetween the Public Cloud (AWS, Azure, Google Cloud) and Application Clouds (Salesforce, Workday et al) this would drive the platform to a whole new level and the momentum would push Snowflake into top gear.