



SNOWFLAKE DATA WAREHOUSE PLATFORM: A CHEAT SHEET

TABLE OF CONTENTS

- 3** [What is Snowflake Inc.?](#)
- 4** [Why is the Snowflake platform important?](#)
- 4** [What services does Snowflake offer?](#)
- 5** [Who are Snowflake's competitors?](#)
- 6** [Where can you get Snowflake, and how much does it cost?](#)

Snowflake data warehouse platform: A cheat sheet

The Snowflake platform offers all the tools necessary to store, retrieve, analyze, and process data from a single readily accessible and scalable system.

BY MARK KAELIN

The digitization of the modern business enterprise has created a seemingly never-ending stream of raw data. Gleaning actionable nuggets of information from terabytes upon terabytes of data requires systems that can store, retrieve, and process data quickly and efficiently. One of the most common of these systems is called a [data warehouse](#).

Data warehouses are central repositories of integrated data obtained from one or more disparate sources. These systems store current and historical data in one single place, which can then be retrieved for the development of analytical reports and other actionable information for employees throughout an enterprise. A well-designed and comprehensive data warehouse can unleash the power of institutional collected data.

Developing and maintaining sophisticated data warehouse systems is often too expensive for individual businesses, so many have partnered with service vendors and their cloud-based platforms. One of the most prominent [Software-as-a-Service](#) (SaaS) data warehouse vendors in this industry is [Snowflake Inc.](#), which offers a complete array of services, platforms, and features related to data warehouse systems.

WHAT IS SNOWFLAKE INC.?

[Snowflake Inc.](#) was founded in Silicon Valley by Benoit Dageville and Thierry Cruanes. They developed the Snowflake data cloud platform to serve as a tool to harness the power of business-generated data, which was often under-used in the past. According to Snowflake's website, customers of its platform achieved an average rate of return of more than 600% over the past three years.

In September 2020, Snowflake ([SNOW](#)) became a publicly traded company on the New York Stock Exchange with an initial offering price of \$120. By the end of the first day of trading, [Snowflake's stock price](#) was above \$250. At that price, Snowflake was valued at \$70.4 billion, which is [the largest ever IPO valuation for a software maker](#).

WHY IS THE SNOWFLAKE PLATFORM IMPORTANT?

For modern businesses, generating raw data is standard operating procedure. In fact, with the continuing trend toward [business digitalization](#), [generated data has become so plentiful that it tends to overwhelm systems](#) and their ability to use it in a meaningful way. Just because data is plentiful does not mean it is also useful—at least not until it is properly stored, retrieved, analyzed, and processed.

Data warehouses provide the platform and tools needed to achieve the goal of efficiently and effectively storing, retrieving, analyzing, and processing data so that raw data becomes useful and actionable information for business decision makers. The manner in which data warehouses achieve those goals requires an approach that varies significantly from traditional data techniques, which allows data warehouse systems to store data from many different sources, creating a central enterprise-wide repository.

The [Snowflake platform](#) offers all the tools necessary to store, retrieve, analyze, and process data from a single readily accessible and scalable system. Snowflake concentrates on data accessibility through queries, high-volume capacity for many users, and no-maintenance automated scalability.

[Snowflake's data warehouse platform](#) is now serving more than 3,000 customers, varying in size from small businesses of fewer than 50 to [Fortune 500](#) companies employing thousands. In July 2020, the company processed more than 500 million separate data warehouse queries. Without a doubt, Snowflake is a leader in the data warehouse cloud-based platform as a service industry.

WHAT SERVICES DOES SNOWFLAKE OFFER?

The Snowflake platform uses a unique architecture that logically separates but natively integrates storage, computing, and services. The multi-cluster architecture allows employees to access business data simultaneously without impacting performance. This advanced data warehouse system architecture provides a platform for numerous services, including:

- Data warehouse
- [Data lake](#)
- [Data engineering](#)
- [Data science](#)
- Data applications
- Data sharing

Leveraging the capabilities of this system architecture, Snowflake has developed customizable platform solutions applicable to several industries, including:

- Financial services
- Healthcare and life sciences
- Retail
- Advertising
- Media
- Entertainment
- Technology
- Government
- Education

Snowflake has also developed tools for accessing and analyzing third-party data sets that are vital to scientists, business intelligence and [analytics professionals](#), and everyone who desires data-driven decision-making access. Snowflake offers ready-to-query access to dozens of third-party data sets.

WHO ARE SNOWFLAKE'S COMPETITORS?

With data playing such a pivotal role in business intelligence, competition analysis, and strategic decision making, it is no wonder that the Snowflake has many powerful competitors. Huge multinational companies like Microsoft, Amazon, Google (Alphabet), SAP, Oracle, and IBM all have cloud-based data warehouse platforms that compete directly with Snowflake.

A short list of major competitors to Snowflake would include:

- [Microsoft Azure Synapse Analytics](#) (formerly SQL Data Warehouse)
- [Amazon Redshift](#) (part of AWS)
- [Google Cloud BigQuery](#)
- [IBM Db2 Database](#)
- [Oracle Autonomous Warehouse](#)
- [SAP Data Warehouse Cloud](#)

In addition to those large multinational corporations, Snowflake also must contend with competition from other smaller operations like [YellowBrick Data](#), [Teradata Integrated Data Warehouse](#), and [Panoply](#), which all offer unique platforms and specialized data warehousing and management services.

Despite the fierce competition, Snowflake has been able to garner support from other cloud service providers like Salesforce, which owns a significant share of Snowflake stock. Only time will tell if Snowflake truly has a unique enough architecture to hold off powerful competitors with substantial resources.

WHERE CAN YOU GET SNOWFLAKE, AND HOW MUCH DOES IT COST?

Access to the Snowflake data warehouse platform and its unique architecture is available now. The company offers a free trial for 30-days, which includes \$400 worth of credit toward standard usage fees.

The [cost of Snowflake's services](#) is determined by your activity, so it is difficult to predict as it will change business to business, month to month. However, as an example, a Standard-level data warehouse running on Microsoft Azure from servers in the eastern United States will cost \$2/credit. One TB of on-demand storage will cost another \$40/month.

To get a more complete picture of the potential cost of Snowflake's platform, prospective customers are encouraged to register with the company and consult with a Snowflake representative.

CREDITS

Editor In Chief

Bill Detwiler

Editor In Chief, UK

Steve Ranger

Associate Managing Editors

Teena Maddox

Mary Weilage

Editor, Australia

Chris Duckett

Senior Writer

Veronica Combs

Senior Writer, UK

Owen Hughes

Editor

Melanie Wolkoff

Wachsman

Staff Writer

R. Dallon Adams

Multimedia Producer

Derek Poore

Staff Reporter

Karen Roby



ABOUT TECHREPUBLIC

TechRepublic is a digital publication and online community that empowers the people of business and technology. It provides analysis, tips, best practices, and case studies aimed at helping leaders make better decisions about technology.

DISCLAIMER

The information contained herein has been obtained from sources believed to be reliable. TechRepublic.com, LLC. disclaims all warranties as to the accuracy, completeness, or adequacy of such information. TechRepublic.com, LLC. shall have no liability for errors, omissions, or inadequacies in the information contained herein or for the interpretations thereof. The reader assumes sole responsibility for the selection of these materials to achieve its intended results. The opinions expressed herein are subject to change without notice.

Cover image: Lisa Hornung/iStockPhoto