

Creating Convenience: A Case for the Cloud

TECHNOLOGY

[Read Online](#) 

What is the State of the Cloud in 2023?

Cloud Computing Defined

Cloud computing is a way of using computers over the internet to store, manage, and process data, rather than using a local server or personal computer.

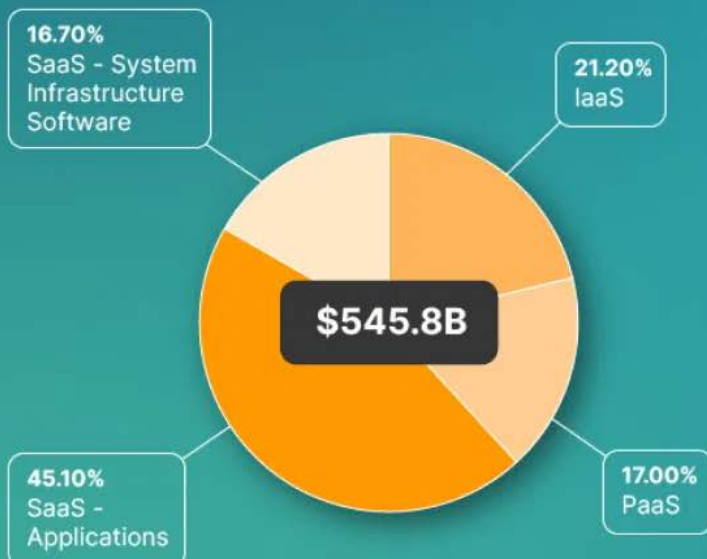
Where's my data?

Stored in data centers. These data centers are large buildings filled with servers, which are basically powerful computers and can be located anywhere in the world.

Worldwide Public Cloud Services is expected to continue grow. Gartner predicts that the market will reach a mind-blowing figure of

\$725 Billion by 2024

Cloud Computing in Numbers



Worldwide 2022 Revenue

for the public cloud services market, divided by 4 segments

Worldwide revenue for 2022 increased by 22.9% compared to 2021, adding up to \$545.8 billion.

Software as a Service – Applications continues to lead the race as the most popular source of public cloud services revenue.

Source: IDC Worldwide Semiannual Public Cloud Services Tracker, 2H 2022

Market Share of Cloud Services

For Q2 2023

The cloud computing market is a three-horse race, with Amazon Web Services (AWS) in the lead, followed by Microsoft Azure and Google Cloud Platform.

These three providers collectively control over **TWO-THIRDS** of the market.

Source: Synergy Research Group | Q2*2023 Market Share; data as of August 2023



Top 5 Advantages

Cloud services offer businesses a number of benefits that can help them save money, be more flexible, and improve their security.



Cloud Computing Defined

As its name implies, cloud computing delivers on-demand computing resources and services via the convenience of a virtual “cloud” that is accessible anywhere with an internet connection.

Cloud computing allows users and organizations to remotely access servers, storage, databases, net-

working, software, and analytics via the internet, eliminating the need for local infrastructure maintenance.

There are three primary models of cloud computing:

- **Infrastructure as a Service (IaaS):** Users rent virtualized computing resources, such as virtual machines, storage, and networks, from the service provider. Users have more control over the operating systems and applications running on the infrastructure.
- **Platform as a Service (PaaS):** Users can deploy their applications onto the cloud infrastructure, leveraging the underlying computing resources provided by the service provider. The provider manages the infrastructure, and users focus on developing and running their applications.
- **Software as a Service (SaaS):** Users access and use software applications hosted on the cloud infrastructure. The provider manages the entire infrastructure, including the applications, and users only need to access them through web browsers or specialized clients.

Investments in Innovation

Given its extensive capabilities and convenience, the cloud computing industry continues to grow at a significant pace. According to economic estimates and consultancy forecasts:

- The adoption of cloud computing technologies by global companies is expected to drive as much as \$3 trillion in EBITDA value by 2030.¹
- Worldwide spending on cloud services is expected to grow 21.3% and top \$724.56 billion by 2024.²
- Cloud computing is expected to unlock \$750 billion in innovation and \$340 billion in cost reductions amongst the largest global firms by 2030.³

¹Source: McKinsey & Company as of 31 December 2023

²Source: Gartner as of 31 December 2023

³Source: McKinsey & Company as of 31 December 2023

Service Segmentation

Amongst cloud computing services, Software as a Service (SaaS) Applications remain the largest segment, encompassing 44.7% of the overall industry market share.

However, Platform as a Service (PaaS) is the fastest expanding segment of the market, growing at 27.7% over the first half of 2023 relative to 2022, driven in part by increased demand for artificial intelligence applications.

Specific segments of cloud computing services remain driven by the demand of companies to adopt

cutting-edge technologies and real-time analytics as a means to improve organizational efficiency and value creation.

Worldwide Public Cloud Services Revenue and Year-over-Year Growth 1st Half (1H) 2023 (revenues in billions of USD)			
Deployment Category	1H23 Revenue	1H23 Market Share	1H23/1H22 Growth
IaaS	\$64.40	20.40%	16.90%
PaaS	\$56.80	18.00%	27.70%
SaaS – Applications	\$141.20	44.70%	15.80%
SaaS – System Infrastructure Software	\$53.20	16.90%	22.70%
Total	\$315.50	100%	19.10%

Source: IDC Worldwide Semiannual Public Cloud Services Tracker, 1H 2023, 31 December, 2023

Our **Cloud Computing ETF (CLOD)** seeks to track the Solactive Cloud Computing Index (SOLCLOUN), which identifies the **largest 50 companies by market capitalization that derive their revenues from:**

- **Digital Security**
- **E-Commerce Infrastructure**
- **Data Infrastructure**
- **Data Architecture**
- **Internet Infrastructure**
- **Data Support**

CLOD seeks to provide investment results that correspond generally to the price and yield performance, before fees and expenses, of the SOLCLOUN Index.

ALPS Distributors, Inc (1290 Broadway, Suite 1000, Denver, Colorado 80203) is the distributor for the Themes ETFs Trust.

Investing involves risk, including the possible loss of principal. In addition to the normal risks associated with investing, international investments may involve risk of capital loss from unfavorable fluctuation in currency values, from differences in generally accepted accounting principles or from economic or political instability in other nations. Emerging markets involve heightened risks related to the same factors as well as increased volatility and lower trading volume. Narrowly focused investments and investments focusing on a single country may be subject to higher volatility.

Technology-themed investments may be subject to rapid changes in technology, intense competition, rapid obsolescence of products and services, loss of intellectual property protections, evolving industry standards and frequent new product productions, and changes in business cycles and government regulation.

Shares of ETFs are bought and sold at market price (not NAV) and are not individually redeemed from the funds. Brokerage commissions will reduce returns.

Carefully consider the funds' investment objectives, risk factors, charges, and expenses before investing. This and additional information can be found in the funds' summary or full prospectus, which may be obtained by calling 1-866-5Themes (1-866-584-3637) or by visiting themesetfs.com. Please read the prospectus carefully before investing.

Themes Management Company LLC serves as an adviser to the Themes ETFs Trust. The funds are distributed by ALPS Distributors, Inc (1290 Broadway, Suite 1000, Denver, Colorado 80203). Solactive and STOXX have been licensed by Solactive AG and ISS STOXX, respectively, for use by Themes Management Company LLC. Themes ETFs are not sponsored, endorsed, issued, sold, or promoted by these entities, nor do these entities make any representations regarding the advisability of investing in the Themes ETFs. Neither ALPS Distributors, Inc, Themes Management Company LLC nor Themes ETFs are affiliated with these entities.