

# REACH FOR THE SKY: INVESTING IN LEADERS IN CLOUD COMPUTING

## INTRODUCING THE BETASHARES CLOUD COMPUTING ETF

Among the many segments of the ongoing global technology revolution, so-called 'cloud' based computing services have been among the most strongly growing - with associated good historical investment performance among those companies involved. Indeed, the benefits of cloud computing have become especially evident in the past year due to the vast number of people who have found themselves working-from-home in the wake of the COVID-19 crisis.

Cloud-computing effectively involves the outsourcing of storage of digital data and software applications to centralised server facilities, freeing corporate and household end-users from having to maintain these on their own devices. Demand for cloud computing services has grown strongly because of the added flexibility and cost saving this outsourcing offers. For the cloud service providers themselves - and their investors - it's also proven a very attractive business model due to the economies of scale and network effects achievable as they grow.

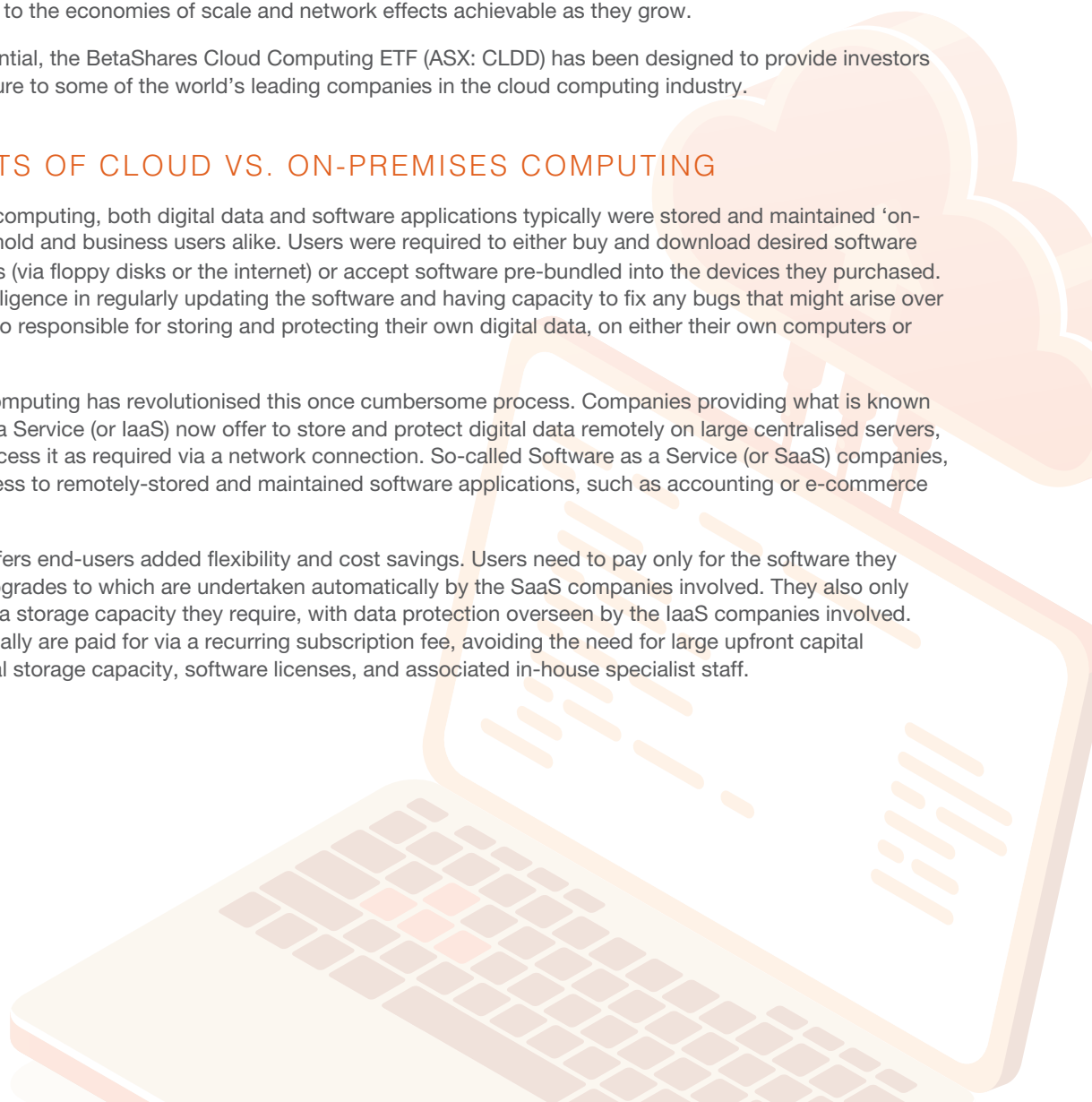
To tap into this potential, the BetaShares Cloud Computing ETF (ASX: CLDD) has been designed to provide investors with ongoing exposure to some of the world's leading companies in the cloud computing industry.

## THE BENEFITS OF CLOUD VS. ON-PREMISES COMPUTING

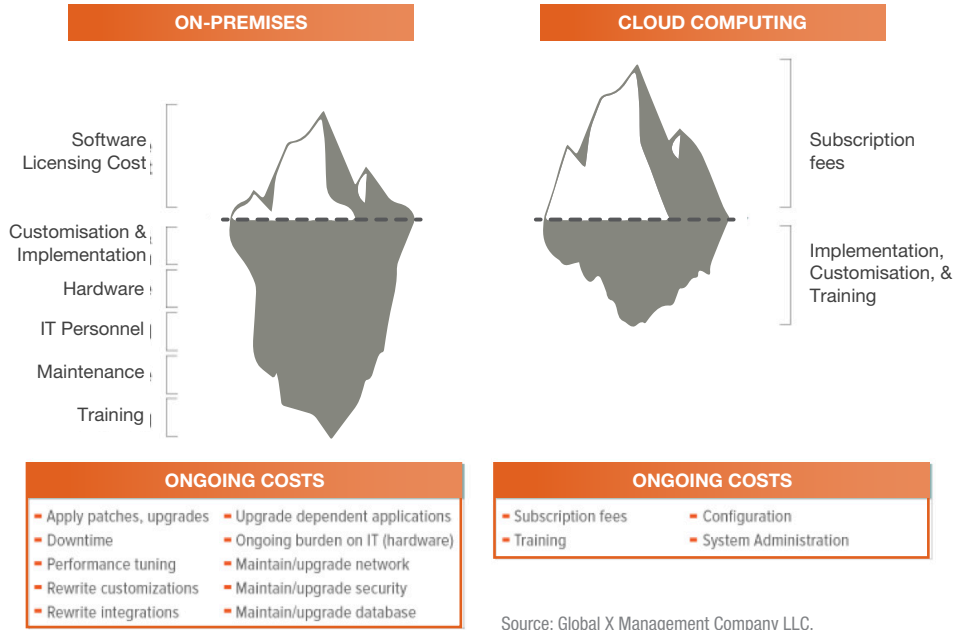
In the early days of computing, both digital data and software applications typically were stored and maintained 'on-premises' by household and business users alike. Users were required to either buy and download desired software onto their computers (via floppy disks or the internet) or accept software pre-bundled into the devices they purchased. This also required diligence in regularly updating the software and having capacity to fix any bugs that might arise over time. Users were also responsible for storing and protecting their own digital data, on either their own computers or attached servers.

The shift to cloud computing has revolutionised this once cumbersome process. Companies providing what is known as Infrastructure as a Service (or IaaS) now offer to store and protect digital data remotely on large centralised servers, allowing users to access it as required via a network connection. So-called Software as a Service (or SaaS) companies, moreover, offer access to remotely-stored and maintained software applications, such as accounting or e-commerce platforms.

Cloud computing offers end-users added flexibility and cost savings. Users need to pay only for the software they specifically need, upgrades to which are undertaken automatically by the SaaS companies involved. They also only need pay for the data storage capacity they require, with data protection overseen by the IaaS companies involved. These services typically are paid for via a recurring subscription fee, avoiding the need for large upfront capital investments in digital storage capacity, software licenses, and associated in-house specialist staff.



## The tip of the Iceberg: Cloud vs. On-Premises Infrastructure

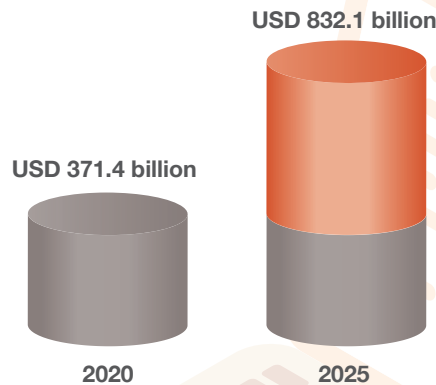


Centralised remote storage, moreover, means users can access both their software and data anywhere and anytime with only internet access and a log-in required. It has made remote computing, such as employees working from home or whilst travelling, much more feasible. Indeed, the benefits of cloud computing have become most evident over the past year given the dislocations caused by the COVID-19 crisis.

Given these benefits, it's no surprise demand for cloud computing services has grown strongly in recent years and has been forecast to maintain strong growth into the future. According to Research and Markets, revenues from global cloud computing services were US\$371 billion in 2020, and are forecast to reach US\$832 billion by 2025 – implying compound growth of 17.5% p.a.<sup>1</sup>

## The Global Cloud Computing Market

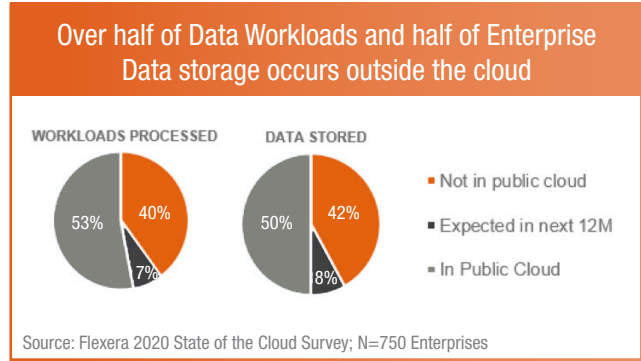
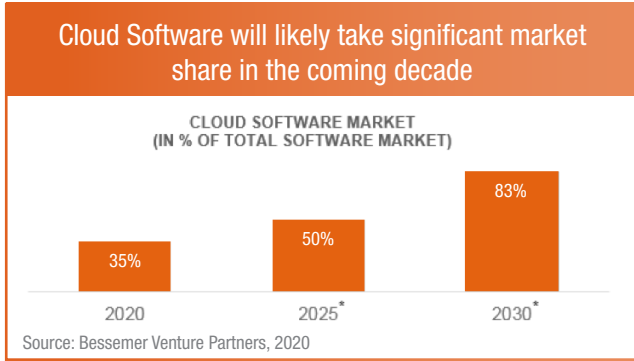
Market forecast to grow at CAGR of 17.5%



Source: Research and Markets

<sup>1</sup> Source: Research and Markets, "Cloud Computing Market by Service Model (Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS)), Deployment Model (Public and Private), Organization Size, Vertical, and Region - Global Forecast to 2025", August, 2020. Actual outcomes may differ materially from forecasts.

Indeed, surveys suggest that still around half of enterprise data processing and storage was conducted outside of cloud facilities last year, and cloud based software still accounted for only 35% of the total software market.



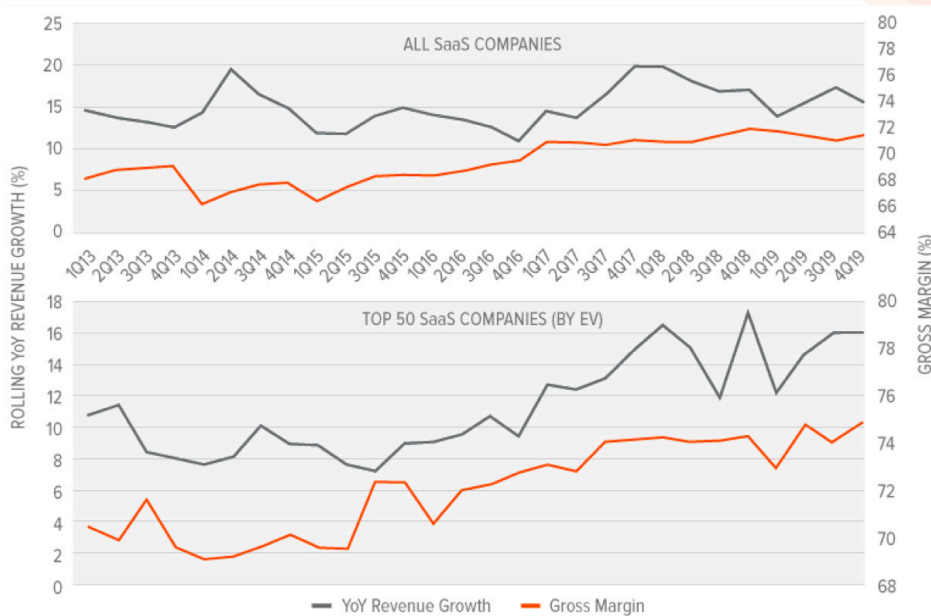
Note: Actual outcomes may differ materially from forecasts.

## AN ATTRACTIVE BUSINESS MODEL

For the companies involved – and their investors - the provision of cloud computing services has developed into an appealing business model. Centralised data storage facilities and software applications naturally lend themselves to strong scale economies – whereby the costs per unit of service fall as the number of users grow. By offering subscriptions rather than relying on large and less frequent upfront payments, revenue also tends to be steadier and more recurring. And once a new user has been acquired, familiarity with the services can lead to strong lock-in effects, making the revenue stream somewhat ‘stickier’.

As evident in the chart below, these features have enabled many cloud computing companies to enjoy high profit margins and strong revenue growth.

### SaaS Companies Revenues Have Grown in the Double Digits, Margins Have Expanded



Source: Bloomberg, Global X ETFs, March 27, 2020.

Note: Past performance is not indicative of future performance.

## THE BETASHARES CLOUD COMPUTING ETF (ASX: CLDD)

In view of the strong ongoing growth potential of the cloud computing market, BetaShares is pleased to launch the Cloud Computing ETF (ASX: CLDD).

The index that CLDD aims to track provides exposure to over 30 of the world's leading listed cloud computing companies, across both developed and emerging markets. To be eligible for inclusion, companies must meet certain minimum revenue thresholds associated with cloud computing services.

One implication of the minimum revenue thresholds is that the index's methodology aims to capture more 'pure play' cloud-based services, prioritising companies that generate the majority of their revenues from cloud-based services<sup>2</sup>.

As seen in the table below, the companies included among the top ten index holdings as at end January 2021 cover a diverse range of cloud-based services, such as data storage, cybersecurity, e-commerce, accounting and video-streaming. For Australian investors, some are relatively easily recognised, such as Xero and Netflix.

### Top Ten Holdings in CLDD's index: 31 January 2021

COMPANY NAME	WEIGHT	DESCRIPTION
Fastly	5.3%	Data storage service
Proofpoint	4.9%	Cloud based cybersecurity service
Zscaler	4.8%	Cloud based cybersecurity service
Xero	4.5%	Cloud based accounting software service
Dropbox	4.4%	Data storage service
Qualys Inc	4.3%	Cloud based cybersecurity service
Akamai Technologies	4.2%	Data storage service
Twilio	4.0%	Cloud software applications
Shopify	3.8%	Cloud based e-commerce platform
Netflix	3.7%	Cloud based media streaming service

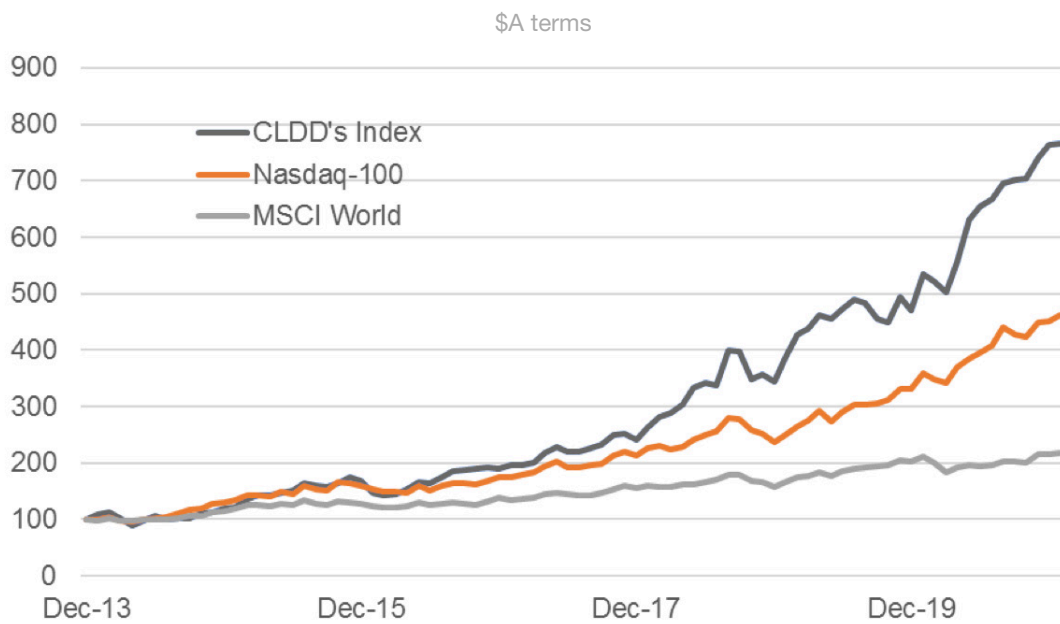
Source: Bloomberg. No assurance is given that these companies will remain in the index or generate positive returns.

<sup>2</sup> For more specific information on index construction and eligibility criteria, please refer to the Product Disclosure Statement (PDS).

Against the backdrop of growing demand and good profitability, it should be no surprise the leading cloud computing companies have enjoyed relatively strong share price performance in recent years.

Since inception in 2013 to end January 2021, for example, the index of cloud computing companies that CLDD aims to track has delivered returns of 33.3% p.a. compared with 11.5% p.a. for the MSCI World Index. CLDD's index has even outperformed the NASDAQ-100 Index, which delivered annualised returns of 24.1% over this period\*.

### Return Performance



\*Source: Bloomberg, 8 November 2013 to 31 January 2021. Past performance is not an indicator of future performance of the Index or CLDD. Does not take into account CLDD's fees and costs. You cannot invest directly in an index. CLDD's index is the Indxx Global Cloud Computing Index. CLDD's returns can be expected to be more volatile (i.e. vary up and down) than a broad global shares exposure, given its concentrated sector exposure.





## SUMMARY

The shift from on-premises to cloud-based computing services has been an important innovation in recent years. It has given both consumers and business added flexibility and cost-savings in managing their activities in the digital age. The benefits of cloud-based computing have become especially evident in the past year due to the COVID-19 related need to facilitate remote 'working from home', online shopping and media consumption.

Due to scale economies and network effects, moreover, cloud-based service companies have themselves been able to enjoy relatively high profitability and 'sticky' recurring revenue streams – which in turn have delivered strong returns to investors to date.

Given ongoing growth in online activity, and the sizable share of the world's digital data and software applications still maintained outside of the cloud, continued adoption of cloud-related services has been forecast.

There are risks associated with an investment in the Fund, including market risk, technology sector risk, international investment risk and concentration risk. The Fund's returns can be expected to be more volatile (i.e. vary up and down) than a broad global shares exposure, given its concentrated sector exposure. The Fund should only be considered as a component of a diversified portfolio. For more information on risks and other features of the Fund, please see the Product Disclosure Statement.

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