U.S. GROWTH & CORE EQUITY

Investment Management
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The Shift to the Cloud

We believe the digitalization of corporate America—more specifically the expansion of the public cloud—is one of the more significant investment trends we have experienced given its vast growth potential.

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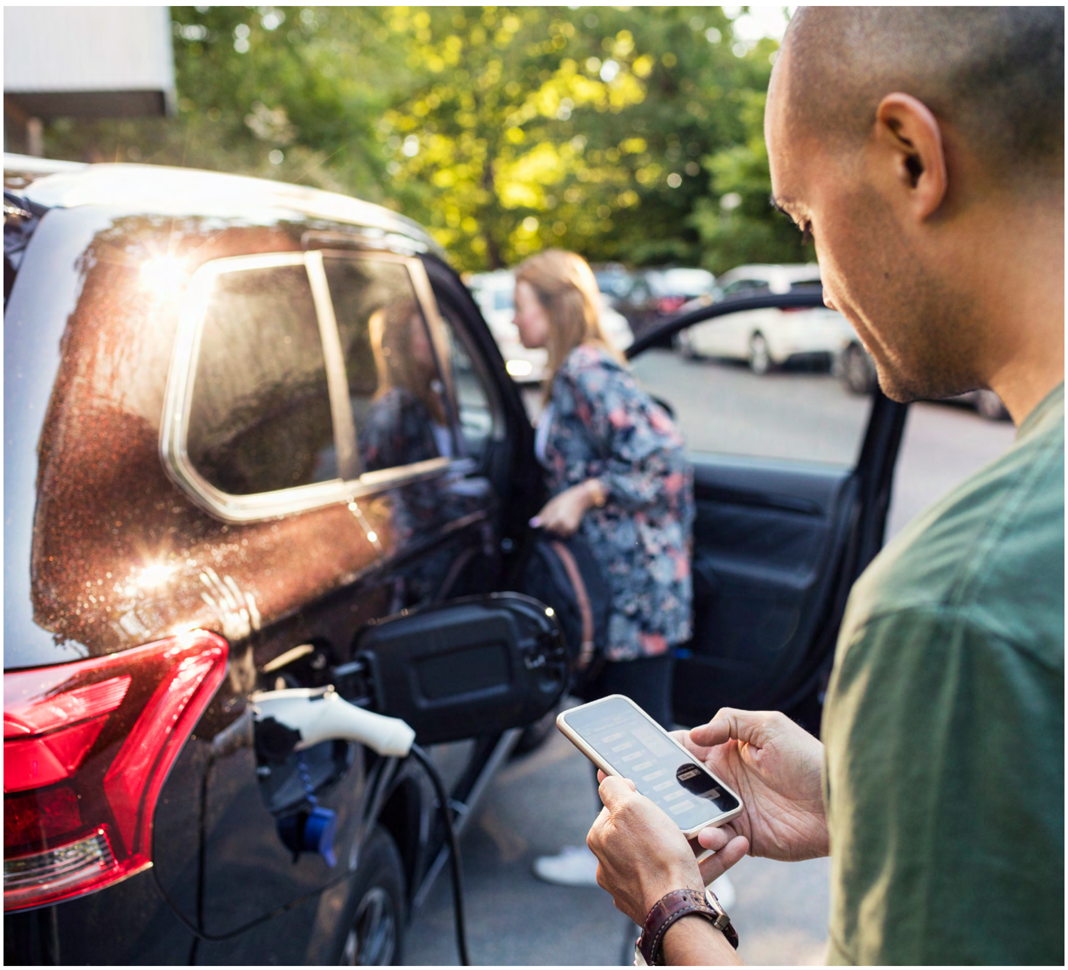
Portfolio Manager
James Golan, CFA, Partner

Introduction

We believe the COVID-19 crisis has facilitated a fundamental reshaping of society in how people shop and pay, along with how businesses interact with their employees, customers, and other businesses.

An area that I would like to dig deeper into is the digitalization of corporate America—more specifically, the expansion of the public cloud. I believe this is one of the more significant investment trends that I have experienced in my career given its vast growth potential.



What Is the Cloud?

On a day-to-day basis, a company's management team and employees have access to a variety of applications and workloads, such as financials, general ledger information, human resources data, and customer information, to help operate the business. Historically, this data would be hosted on a company-owned and -operated data center. To run a data center, an enterprise is required to regularly purchase and depreciate new equipment, such as computer servers, networking gear, storage, and security, all while maintaining a full-time staff to operate the equipment and resolve technical problems that might arise.

The public cloud is infrastructure developed by a group of well-established technology companies that have evolved over the past decade to handle many of the requirements traditionally completed by a corporate data center. These public cloud providers rely on the internet to handle the transmission of data between a company and a public cloud data center. The growth of the public cloud has been driven by improvements in technology, such as better bandwidth, connectivity, and virtualization.

> "We believe public cloud revenues could reach $700 billion to $800 billion by the end of the decade"
>
> **James Golan, CFA, Partner**

Adding new customers is advantageous to public cloud providers given the greater scale and significant cost savings providers gain by hosting additional workloads from other companies.

This scale comes from maximizing the utilization of the public cloud's data center assets relative to what an individual company could do on its own. Typically, an individual company's data center is underutilized and tends to be higher cost. For the largest public cloud providers, the cloud business is a natural extension of their existing business, which is already data intensive and requires the same equipment used by an enterprise data center.

Why Are Companies Shifting to the Cloud?

Virtually all companies across varying industries—most notably in the consumer/retail space—are poised to benefit from shifting to the public cloud. For example, brick-and-mortar retailers have rapidly increased the adoption of e-commerce and are using the public cloud to facilitate that shift as more consumers are now shopping online, particularly in the wake of the COVID-19 pandemic.

More broadly, one of the more obvious reasons a company would shift to the cloud is the cost savings associated with not having a full-time staff on board to manage an internal data center, along with capital expenditure (capex) savings from not having to spend precious cash flow on new data center equipment. In addition, the cloud pricing model is generally based on usage—since cloud companies are operating their data centers at scale, customers tend to have better pricing than what they could achieve on their own. It is estimated that through the full length of a contract with a cloud provider, a company could save 20% to 50% in all-in costs annually versus operating an individual data center on its own.

Companies further benefit from the flexibility and agility the cloud provides. We saw this flexibility during the pandemic when companies had to shift to a work-from-home environment quickly. Enterprises that were further along in the shift to the cloud were able to get employees up and running from home fairly seamlessly, while enterprises that were in the early stages struggled. In addition, gaining access to leading-edge technology, such as artificial intelligence and machine learning, is another driver of the shift to the cloud.

The security of data assets is increasingly important as threats of data hacks and intrusions grow by the day. Cloud providers spend a significant amount of money and effort protecting the data assets of their clients, and this spending far exceeds what an individual company could spend protecting its own data center.

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James Golan, CFA, Partner

How Big Is the Cloud Today—and How Big Could the Cloud Get?

It is estimated that the public cloud market, which we define as infrastructure as a service (IaaS) and platform as a service (PaaS), had reached more than $140 billion in 2021. IaaS, which comprises the computing and storage portion of the cloud, was estimated at $80 billion, while the PaaS market, including operating systems and application development platforms, was in the range of $60 billion. Software applications designed for the cloud, which are generally recognized as software as a service (SaaS), are also a large and rapidly growing part of the cloud, but generally not included in the public cloud definition. Enterprise data centers still represent an estimated $900 billion of annual information technology (IT) spending, but will likely shrink over time as the public cloud continues its growth.

We believe public cloud revenues could reach $700 billion to $800 billion by the end of the decade. This growth will likely be driven by existing workloads hosted at company data centers shifting to the cloud, along with new applications created by enterprises. The proliferation of new applications has been an important driver of cloud growth over the past several years as companies are constantly evolving.

We think it is possible that 60% to 70% of enterprise workloads/applications could shift to the cloud over the next decade, up from an estimated 20% today. Another important driver will be the formation of new businesses and the likelihood that most of their data and business requirements will be hosted in a public cloud environment from the start.

Investment Implications

There are many powerful reasons why the public cloud is experiencing tremendous growth, but greater flexibility and agility, along with lower all-in costs, stand out. Cloud migration typically stands at the top of strategic priorities for corporations across many industries, which we believe creates an exciting investment area for years to come. Our large-cap growth team focuses on identifying what we call structurally advantaged companies—growing companies in growing industries whose long-term growth potential is underappreciated by the market.

We look for healthy industries, such as the public cloud, with strong secular growth drivers whose profits are expected to grow at least as fast as the overall economy over a three- to five-year horizon. We then aim to invest in large-cap companies in those industries that we believe are taking share of the industry profit pool. We believe identifying and investing in the leaders in the rapidly growing public cloud space will lead us to companies that are likely to achieve substantially faster profit growth than the overall economy throughout this decade.

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