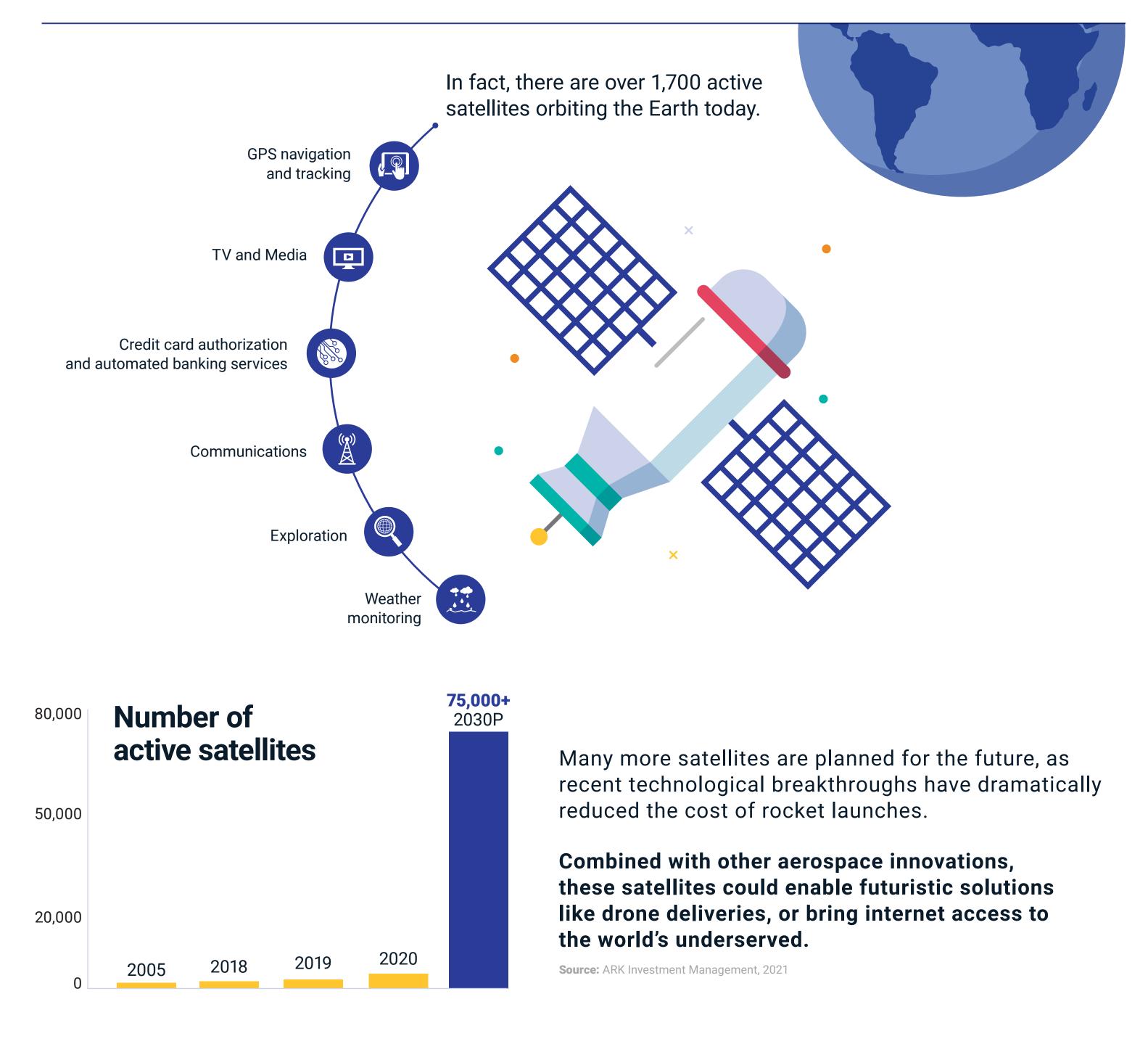


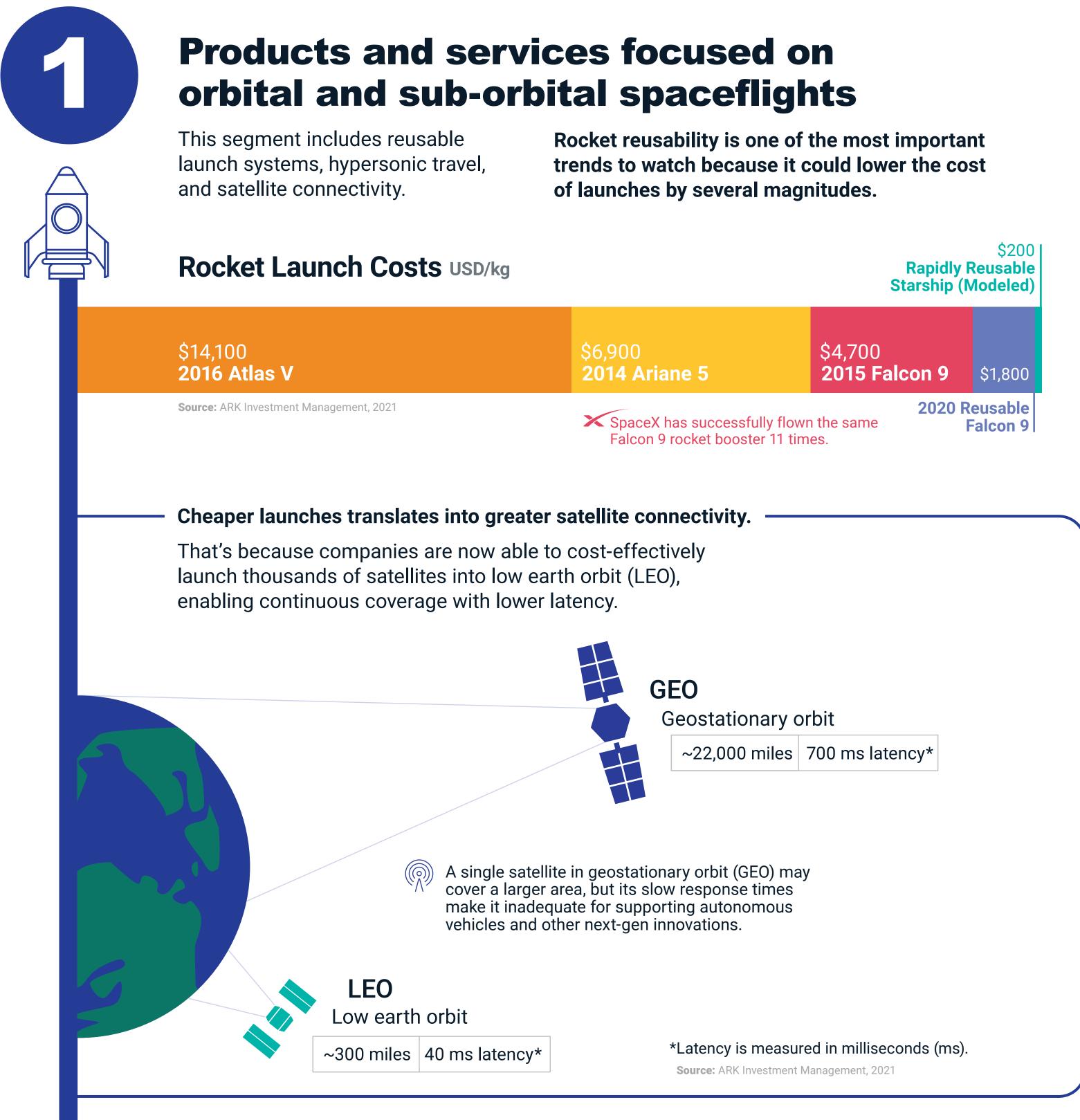
# Is Space the Next Frontier for Investors?

Over the past several decades, space and satellite technology has become the invisible foundation of our digital world.



## **Emerging Trends** in the Space Industry

From an investment standpoint, the space industry is a broad opportunity set which can be divided into three sub-categories:



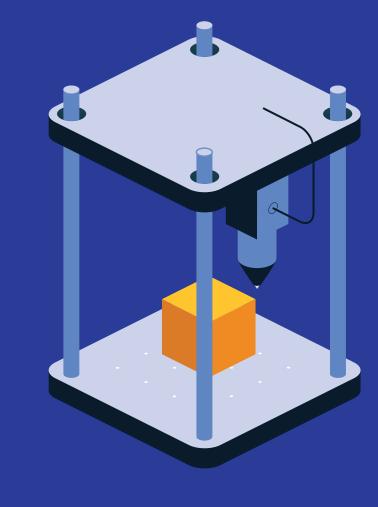
#### **Technologically enabled products** and services for space exploration

This segment includes sectors that support space exploration, including unmanned aerial vehicles and astrionics (electronics used in spacecraft).

One of the biggest opportunities, though, lies in 3D printing.

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3D printing is a form of additive manufacturing that builds objects layer-by-layer. This is the opposite of traditional methods where material is removed from larger blocks.



While 3D printing has applications in a broad range of industries, a large share of the opportunity is in aerospace.

**3D printing reduces the delay between** design and production, which simplifies the supply chain for complex components.

#### **3D printed parts in one** aircraft engine



#### **3D Printing reduces the number of parts** required for an aircraft engine

**Total part count** 250,000

150,000

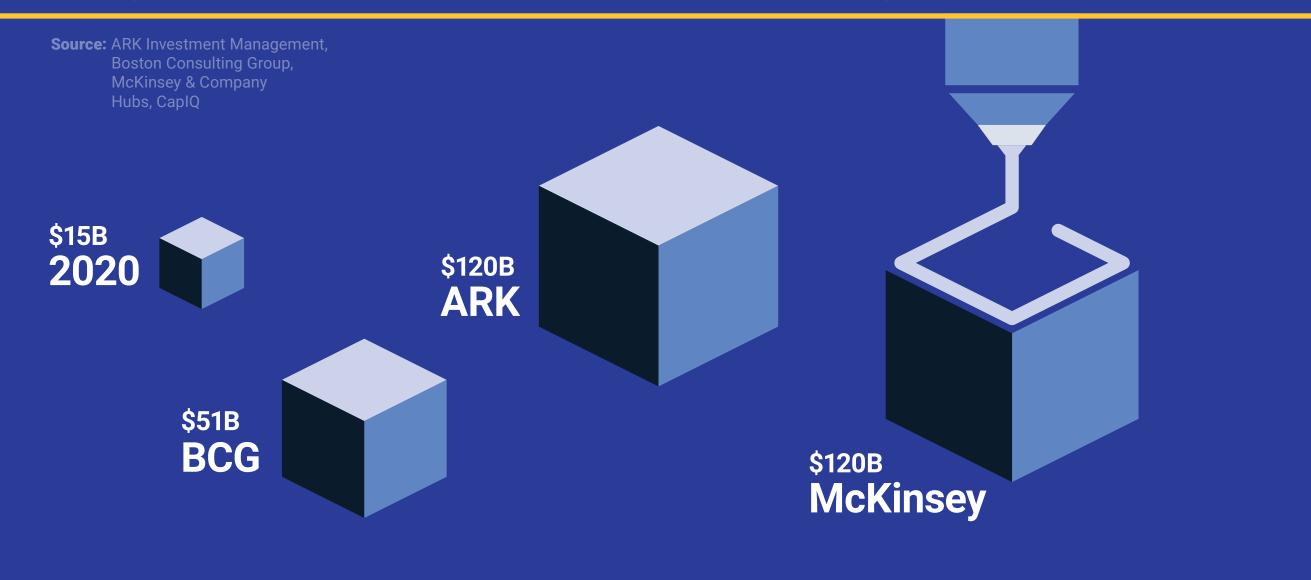


Source: ARK Investment Management, 2021



As space activities continue to ramp-up, so too will the adoption of relevant technologies like 3D printing.

#### Analyst Estimates for the 3D Printing Market by 2030 Billions, USD



### **Other relevant products and services**

The last segment of the space industry includes urban air mobility, satellite imaging, and satellite communication. These sectors can leverage the aforementioned trends to unlock new and powerful drone capabilities.

#### **Drone deliveries** in e-commerce

Autonomous drones, which would rely heavily on satellite GPS, have the potential to unlock value by reducing the costs of delivering packages.

#### **Amazon Drones vs. Current Delivery Options Price** for a 5lb package delivered within 15 miles



\*Prices given are for members with a subscription.

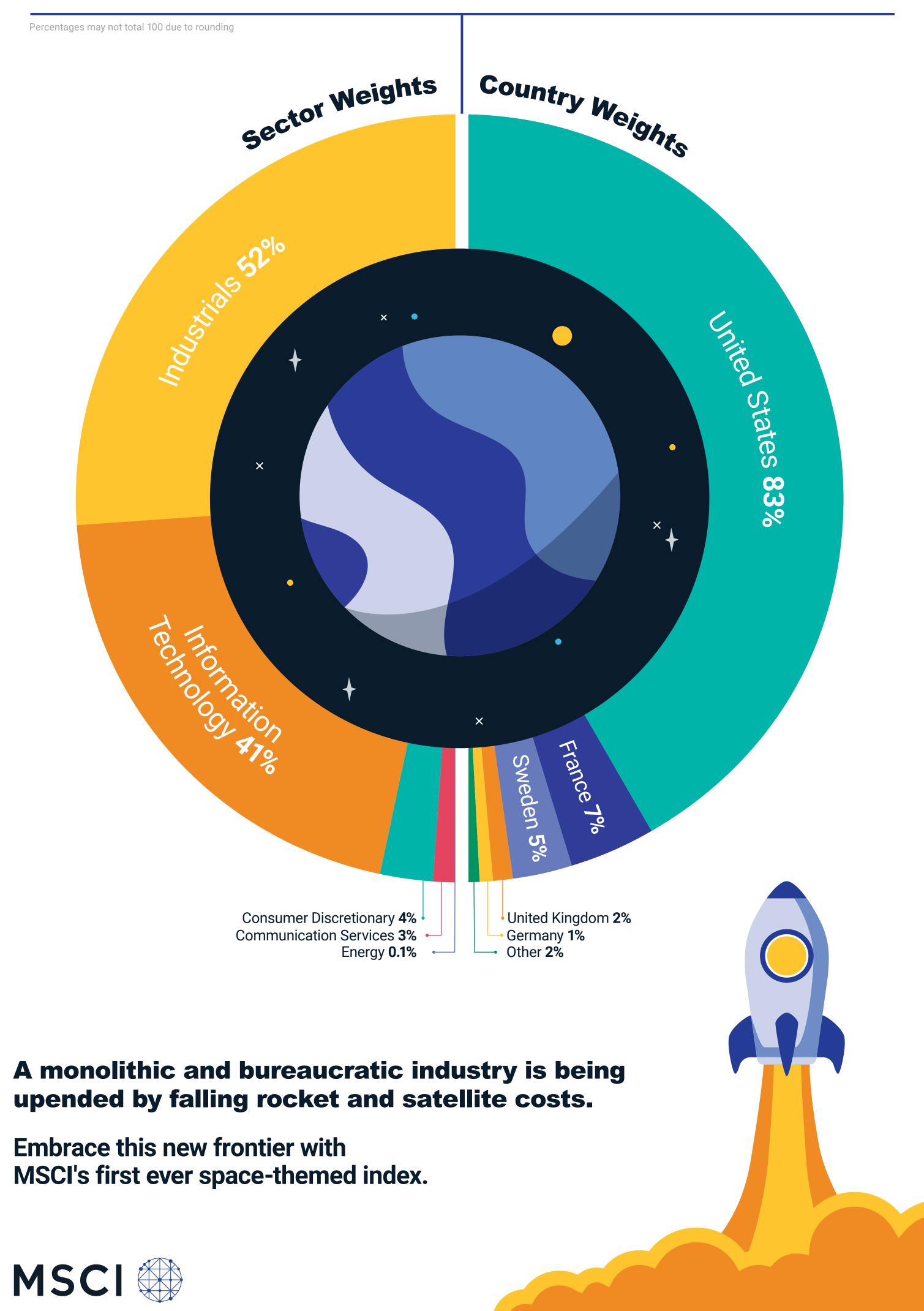
\*\*Most bike couriers do not travel more than 10 miles. This is an estimate for a 10 mile delivery. Source: ARK Investment Management, 2021

Consumers could enjoy greater convenience at an even lower cost, while businesses stand to benefit from greater operational efficiency.



### Introducing the MSCI **Space Exploration Index**

Developed in collaboration with ARK Invest, this index aims to represent the performance of companies associated with developments in spaceflight, satellite communications, and urban air mobility.



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