



# Why Invest in Disruptive Innovation?

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[www.ark-funds.com](http://www.ark-funds.com)

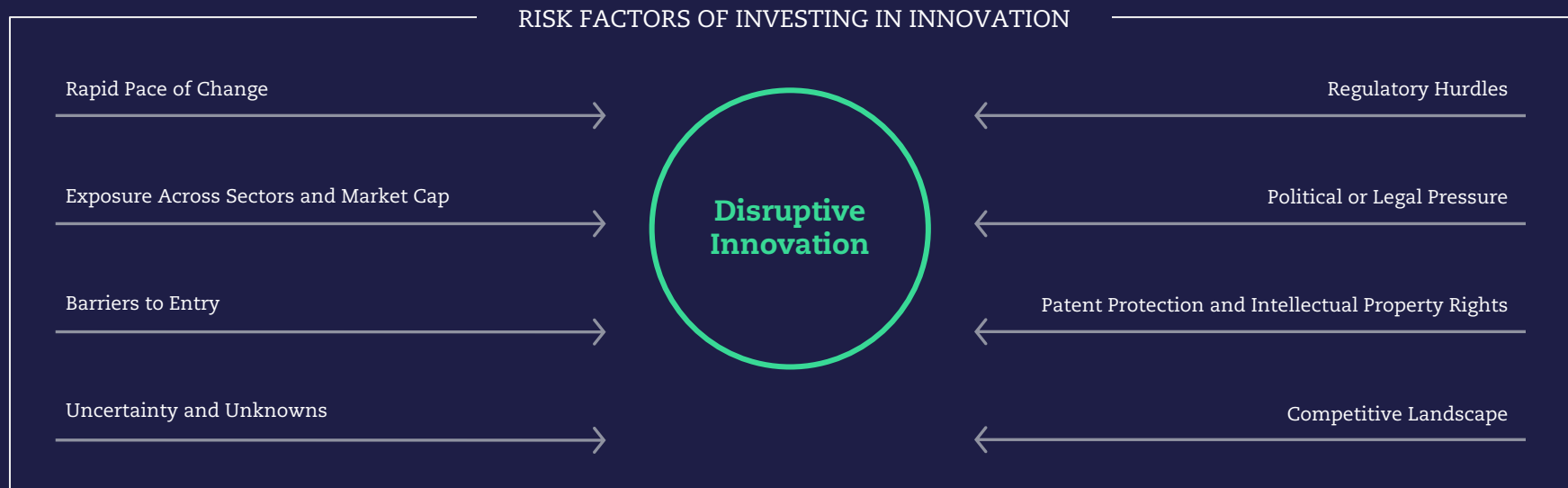
A decorative graphic in the bottom right corner featuring a blue globe with a white network overlay of dots and lines, set against a dark blue background.

**ARKK**



## Risks of Investing in Innovation

Please note, companies that ARK believes are capitalizing on disruptive innovation and developing technologies to displace older technologies or create new markets may not in fact do so. ARK aims to educate investors and seeks to size the potential investment opportunity, noting that risks and uncertainties may impact our projections and research models. Investors should use the content presented for informational purposes only, and be aware of market risk, disruptive innovation risk, regulatory risk, and risks related to certain innovation areas. **Please read risk disclosure carefully.**



→ Aim for a cross-sector understanding of technology and combine top down and bottom up research.

→ Aim to understand the regulatory, market, sector, and company risks. (See Risk and Disclosure at the end)

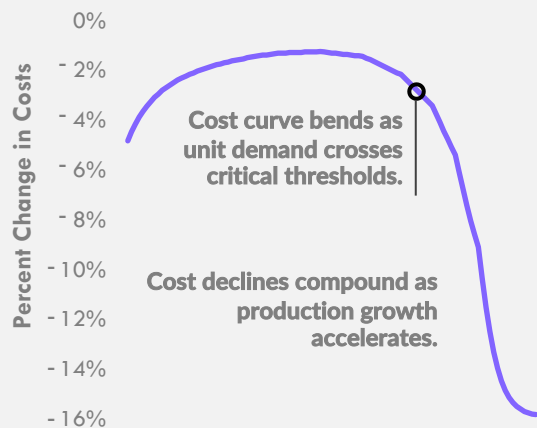


## Identifying Investable Innovation Platforms

ARK's investment process recognizes that true disruptive innovation causes rapid cost declines and demand growth, cuts across sectors and geographies, and spawns further innovation, stimulating growth over extended time horizons.

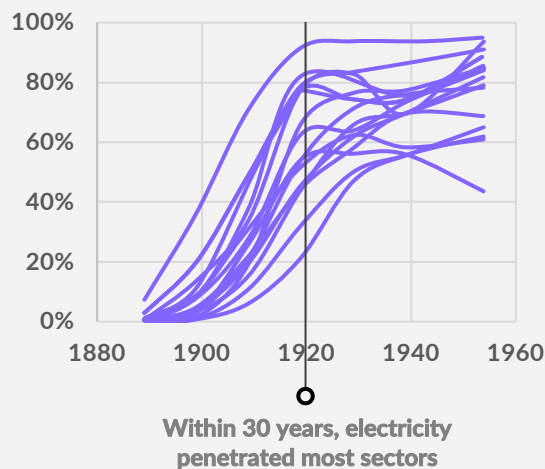
### 1. Cost Curve Declines

**Cost Decline Under Wright's Law  
(Including Tipping Point)**



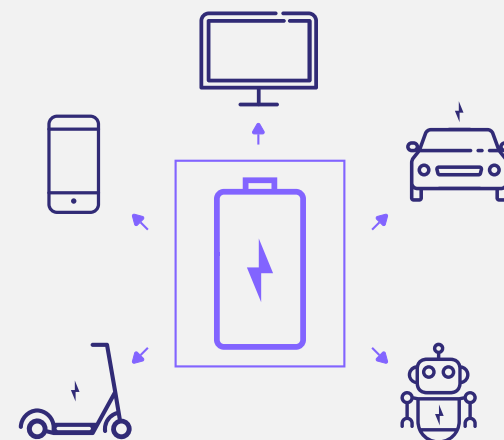
### 2. Cross Sector Ramifications

**Penetration of Electricity by  
Manufacturing Subsector<sup>1</sup>**



### 3. More Innovation

**New Innovation and Technologies  
Thanks to Battery Breakthroughs**

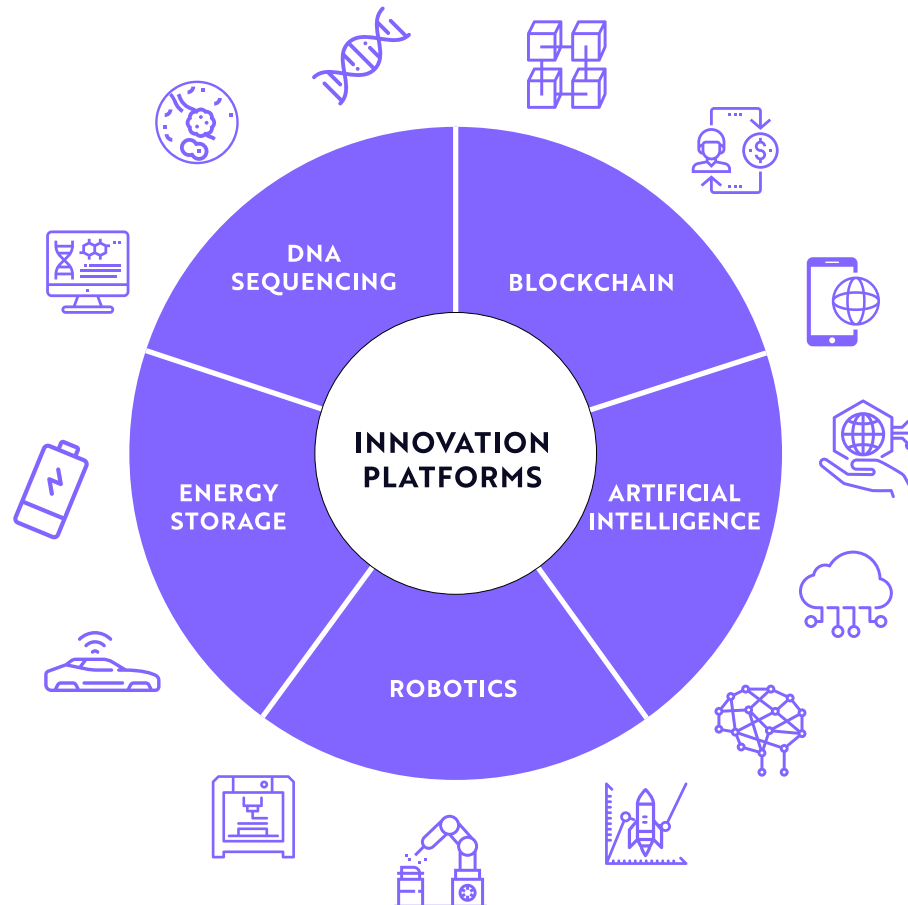


[1] Jovanovic, Boyan & Rousseau, Peter L., 2005. "General Purpose Technologies," Chapter 18. | Subsectors include: Printing, Fabricated Metal, Transport Equipment, Stone Clay Glass, Primary Metals, Petrol/Coal, Paper, Electric Machinery, Rubber, Leather, Chemicals, Textiles, and Food.



# ARK Believes Innovation is Key to Growth

We identify five major innovation platforms that are evolving today, transforming the way the world works while enabling long-term investment opportunities.



Blockchain  
Frictionless Value Transfer  
Mobile Connected Devices  
Internet of Things  
Cloud Computing  
Neural Networks  
Reusable Rockets  
Adaptive Robotics  
3D Printing  
Autonomous Mobility  
Battery Systems  
Gene Editing  
Immunotherapy  
Sequencing Technology

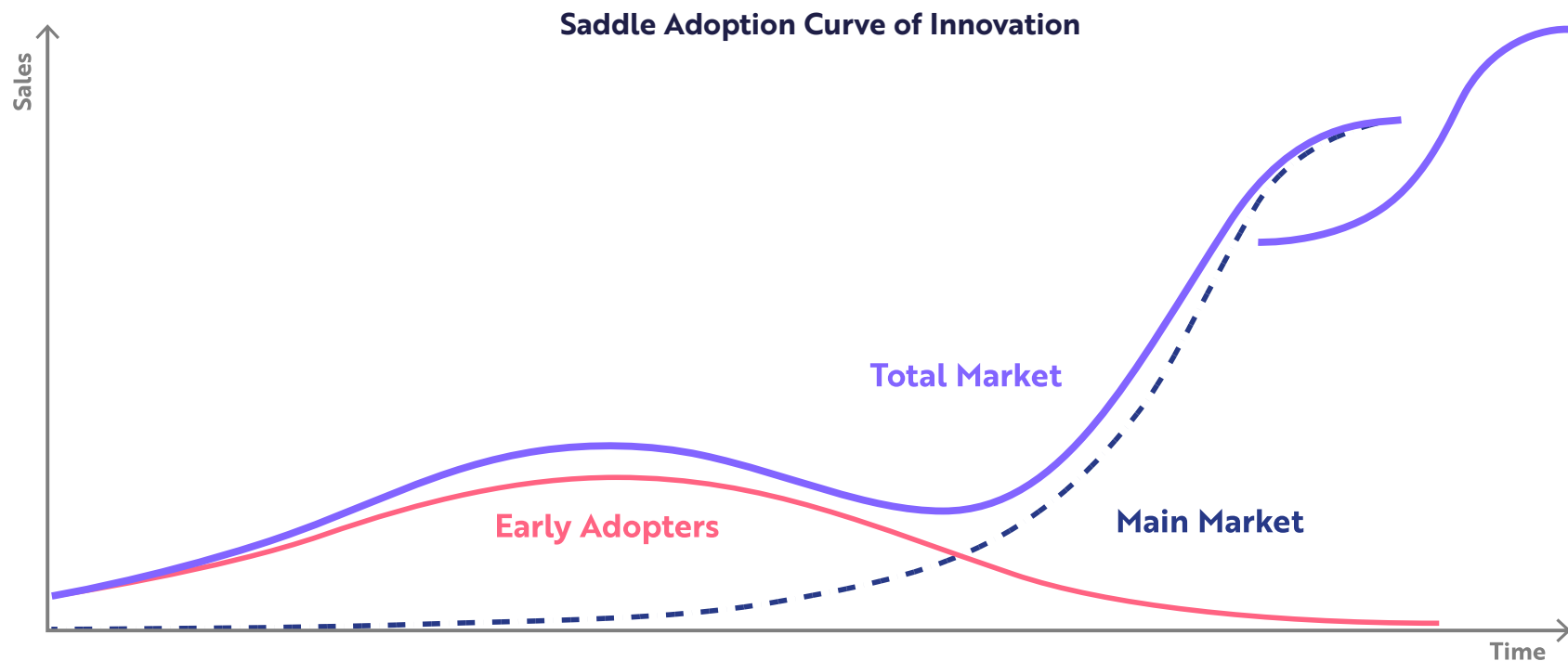
There is no guarantee the investment opportunities ARK seeks to identify will translate to sustained long-term growth.



## ARK FOCUSES ON INNOVATION TO TAKE ADVANTAGE OF FOUR MARKET INEFFICIENCIES

# 1. “The Market’s Short-Term Time Horizon”

The market easily can be distracted by short-term price movements, losing focus on the long-term effect of disruptive technologies. We believe there is a time arbitrage ARK can take advantage of. We seek opportunities that offer growth over 3-5 years that the market ignores or underestimates.

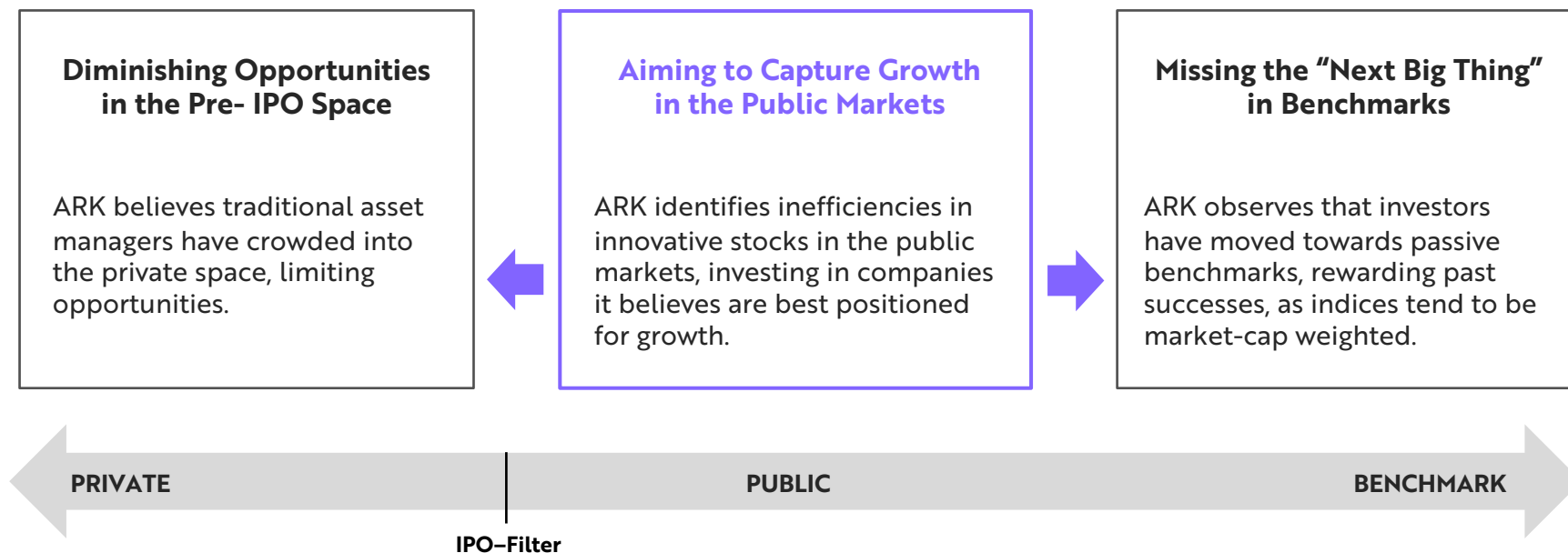




ARK FOCUSES ON INNOVATION TO TAKE ADVANTAGE OF FOUR MARKET INEFFICIENCIES

## 2. “The Passive Public Markets”

Innovation investors have crowded into the private markets, while at the same time the public markets have increasingly gone passive. Thus ARK believes innovative public companies with forward looking growth are the most inefficiently priced part of the market.



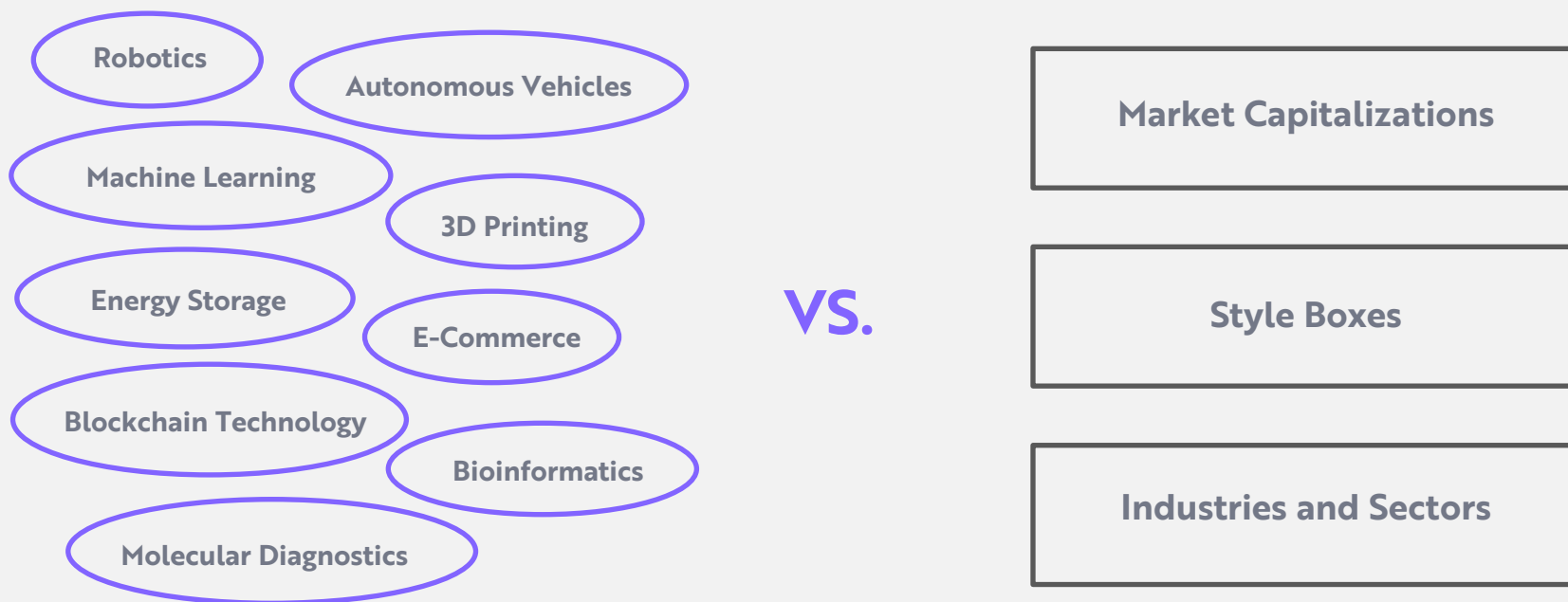


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### 3. “The Silo-ization of Wall Street”

Index strategies tend to miss forward looking growth opportunities, while analysts covering disruptive companies have trouble understanding technology cost curves. ARK’s analysts are organized by cross-sector disruptive innovation themes to capitalize on the convergence of research.

#### Innovation vs. Traditional Silos





ARK FOCUSES ON INNOVATION TO TAKE ADVANTAGE OF FOUR MARKET INEFFICIENCIES

## 4. "The Closed-off Research and Investment Mentality"

Disruptive innovation demands an open-source approach to gain a deeper understanding of the convergence and full market potential. ARK uses an Open Research Ecosystem that combines top-down and bottom-up research. It is designed to identify disruptive innovation early, allowing for an organized exchange of insights between the portfolio manager, director of research, analysts, and external sources.

### OPEN RESEARCH ECOSYSTEM



Data Sources



Analyst Teams



Portfolio Management



Theme Developers







## ARK's ETFs Aim to Offer



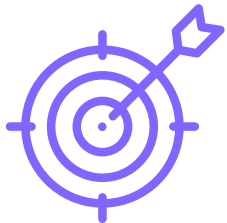
### 1. Access to Growth

Investors who seek to access companies at the forefront of technology-enabled innovation, in some of the most promising areas of the economy, with potential for long-term growth.



### 2. Portfolio Diversification

Suited for investors who like to diversify their existing portfolio with strategies that offer low correlation to a number of core asset classes held in most investors' portfolios.



### 3. Moderate-to-High Risk-Reward Profile

A constant focus on secular changes and disruptive innovation can compliment traditional strategies and core portfolios. Investors should have a moderate-to-high risk profile and intend to stay invested for the medium-to-long term.



## 5 Reasons Investors Should Consider ARKK

1. **Exposure To Innovation:** Aims for thematic multi-cap exposure to innovation across sectors. ARK believes the securities held in ARKK present the best risk-reward opportunities from ARK's innovation-based themes.
2. **Growth Potential:** Aims to capture long-term growth with low correlation of relative returns to traditional growth strategies and negative correlation to value strategies.
3. **Tool For Diversification:** Offers a tool for diversification due to little overlap with traditional indices. It can be a complement to traditional value/growth strategies.
4. **Grounded In Research:** Combines top-down and bottom-up research in its portfolio management to identify innovative companies and convergence across markets.
5. **Cost Effective:** Seeks to provide a lower cost alternative to mutual funds with true active management in an exchange traded fund (ETF) that invests in rapidly moving themes.



## ARK Innovation ETF — ARKK

The ARK Innovation ETF aims for multi-cap exposure to innovation across sectors. ARK believes the securities held in ARKK present the best risk-reward opportunities from ARK's innovation themes.

- Ticker: ARKK
- Fund AUM: \$8.9 Billion
- Holdings: 35-55 U.S. Equities/U.S.-listed ADRs
- Expense Ratio: 0.75%

TOP 10 HOLDINGS	Weight
TESLA INC	11.0%
INVITAE CORP	8.8%
SQUARE INC - A	6.4%
ROKU INC	5.3%
CRISPR THERAPEUTICS AG	4.9%
PROTO LABS INC	3.5%
ZILLOW GROUP INC - C	3.4%
2U INC	3.1%
LENDINGTREE INC	2.9%
TELADOC HEALTH INC	2.9%
	<b>52.0%</b>

### MARKET CAPITALIZATION

Mega (\$100B+)	14.0%
Large (\$10-\$100B)	35.4%
Medium (\$2-\$10B)	35.3%
Small (\$300M-\$2B)	14.3%
Micro (\$50-\$300M)	0.4%

### PORTFOLIO COMPOSITION

Cloud Computing	10.1%
E-Commerce	9.8%
Molecular Diagnostics	9.4%
Gene Therapy	7.5%
Big Data & Machine Learning	7.4%
Digital Media	7.3%
3D Printing	7.3%
Internet of Things	5.7%
Beyond DNA	4.8%
Bioinformatics	4.6%
Mobile	4.4%
Instrumentation	4.2%
Energy Storage	3.6%
Targeted Therapeutics	2.9%
Autonomous Vehicles	2.2%
Next Generation Oncology	1.9%
Robotics	1.9%
Social Platforms	1.5%
Development of Infrastructure	1.1%
Space Exploration	<1%
Blockchain & P2P	<1%
Stem Cells	<1%

### SECTORS

Health Care	35.5%
Information Technology	28.7%
Communication Services	16.5%
Consumer Discretionary	11.1%
Financials	3.8%
Industrials	3.8%
Not Classified	0.6%

*Holdings are subject to change and should not be considered as investment advice, or a recommendation to buy, sell or hold any particular security. The securities identified do not represent all of the securities purchased, sold or recommended for client accounts. It should not be assumed that an investment in the securities identified was or will be profitable.*

*Source: ARK Investment Management LLC; All data as of September 30, 2020.*



## Thematic Strategies Focused on Disruptive Innovation



**ARKK**  
ARK Innovation ETF



**PRNT**  
The 3D Printing ETF



**ARKW**  
ARK Next Generation Internet ETF \*



**IZRL**  
Israel Innovative Technology ETF



**ARKQ**  
ARK Autonomous Tech. & Robotics ETF \*



**ARKG**  
ARK Genomic Revolution ETF



**ARKF**  
ARK Fintech Innovation ETF

\*Effective as of November 4, 2019, the name of the ARK Web x.0 ETF changed to the "ARK Next Generation Internet ETF" and the name of the ARK Industrial Innovation ETF changed to the "ARK Autonomous Technology & Robotics ETF."



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Factsheet, prospectus, and latest performance reports are available for download on our website: [ark-funds.com/investor-material](https://ark-funds.com/investor-material)

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***Investors should carefully consider the investment objectives and risks as well as charges and expenses of an ARK ETF before investing. This and other information are contained in the ARK ETFs' prospectuses, which may be obtained by visiting [www.ark-funds.com](http://www.ark-funds.com). The prospectus should be read carefully before investing.***

**Fund Risks:** The principal risks of investing in the ARKK include: **Equity Securities Risk.** The value of the equity securities the Fund holds may fall due to general market and economic conditions. **Foreign Securities Risk.** Investments in the securities of foreign issuers involve risks beyond those associated with investments in U.S. securities. **Health Care Sector Risk.** The health care sector may be adversely affected by government regulations and government health care programs. **Communications Sector Risk.** Companies in this sector may be adversely affected by potential obsolescence of products/services, pricing competition, research and development costs, substantial capital requirements and government regulation. **Information Technology Sector Risk.** Information technology companies face intense competition, both domestically and internationally, which may have an adverse effect on profit margins. Additional risks of investing in ARKK include equity, market, management and non-diversification risks, as well as fluctuations in market value and NAV.

The Fund's exposure to cryptocurrency may change over time and, accordingly, such exposure may not always be represented in the Fund's portfolio. Many significant aspects of the U.S. federal income tax treatment of investments in bitcoin are uncertain and an investment in bitcoin may produce income that is not treated as qualifying income for purposes of the income test applicable to regulated investment companies, such as the Fund. GBTC is expected to be treated as a grantor trust for U.S. federal income tax purposes, and therefore an investment by the Fund in GBTC will generally be treated as a direct investment in bitcoin for such purposes. See "Taxes" in the Fund's SAI for more information.

An investment in an ETF is subject to risks and you can lose money on your investment in an ETF. There can be no assurance that the ETF will achieve its investment objective. The ETF's portfolio is more volatile than broad market averages. Shares of ARKK are bought and sold at market price (not NAV) and are not individually redeemed from the ETF. ETF shares may only be redeemed directly with the ETF at NAV by Authorized Participants, in very large creation units. There can be no guarantee that an active trading market for ETF shares will develop or be maintained, or that their listing will continue or remain unchanged. Buying or selling ETF shares on an exchange may require the payment of brokerage commissions and frequent trading may incur brokerage costs that detract significantly from investment returns.

Portfolio holdings will change and should not be considered as investment advice or a recommendation to buy, sell or hold any particular security. Please visit [www.ark-funds.com](http://www.ark-funds.com) for the most current list of holdings for the ARK ETFs.

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Foreside Fund Services, LLC, distributor.