

# Firsthand Technology Opportunities Fund

## Investment Strategy

The Fund invests primarily in equity securities of high-technology companies in the industries and markets that we believe hold the most growth potential within the technology sector. Due to the Fund's focus on emerging opportunities within the technology sector, its investments tend to include younger companies with market capitalizations in the small- or mid-cap categories.

## Total Returns as of 12/31/19

|                           | Firsthand Technology Opportunities Fund | NASDAQ Composite Index | S&P 500 Index |
|---------------------------|---|------------------------|---------------|
| Since inception (9/30/99) | 3.74%                                   | 7.06%                  | 6.70%         |
| 10-Year                   | 16.14%                                  | 16.14%                 | 13.54%        |
| 5-Year                    | 18.16%                                  | 15.00%                 | 11.68%        |
| 3-Year                    | 27.73%                                  | 19.89%                 | 15.25%        |
| 1-Year                    | 28.51%                                  | 36.74%                 | 31.48%        |
| Q4 '19                    | 7.45%                                   | 12.49%                 | 9.06%         |

*The performance data quoted represent past performance. Past performance cannot guarantee future results, and current performance may be lower or higher than the performance quoted. Performance information does not reflect the impact of taxes. Both the return from and the principal value of an investment in the Funds will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. To obtain performance as of the most recent month-end, please contact Firsthand Funds by calling 1.888.884.2675 or go to [www.firsthandfunds.com](http://www.firsthandfunds.com).*

*The NASDAQ Composite Index (NASDAQ), and the Standard & Poor's 500 Index (S&P 500) each represent an unmanaged, broad-based basket of stocks and are typically used as benchmarks for overall market performance. The indices' performance figures assume the reinvestment of all dividends (except where noted), but do not reflect the impact of taxes. Additionally, because an investor cannot invest in an index directly, indices' performance figures do not reflect the expenses associated with the management of an actual mutual fund portfolio.*

## Fund Facts as of 12/31/19

|                   |                 |                          |       |
|-------------------|-----------------|--------------------------|-------|
| Portfolio Manager | Kevin Landis    | 2019 Gross Expense Ratio | 1.86% |
| Manager Tenure    | Since inception | 2019 Net Expense Ratio   | 1.85% |
| Inception         | 9/30/99         | Redemption Fee           | None  |
| Ticker            | TEFQX           | Number of Companies      | 40    |
| Cusip             | 337941504       | Sales Load               | None  |
| Net Assets        | \$255 M         | 2019 Portfolio Turnover  | 43%   |

The Fund's total gross operating expenses are 1.86%. The Fund's total net operating expenses are 1.85%. Under the Investment Advisory Agreements, the Investment Adviser has agreed to reduce its fees and/or make expense reimbursements so that the Fund's total operating expenses (excluding independent trustees' compensation, brokerage and commission expenses, litigation costs and any extraordinary and non-recurring expenses) are limited to 1.85% of the Fund's average daily net assets up to \$200 million, 1.80% of such assets from \$200 million to \$500 million, 1.75% of such assets from \$500 million to \$1 billion, and 1.70% of such assets in excess of \$1 billion. The current expense waiver is in effect until 8/31/20.

## Holdings as of 12/31/19

### Top 10

|                        |              |
|------------------------|--------------|
| Roku, Inc.             | 12.6%        |
| Arista Networks, Inc.  | 5.6%         |
| Nutanix, Inc.          | 5.5%         |
| Twilio, Inc.           | 5.4%         |
| Chegg, Inc.            | 5.0%         |
| Match Group, Inc.      | 4.8%         |
| Netflix, Inc.          | 4.4%         |
| Facebook, Inc.         | 4.0%         |
| Cree, Inc.             | 3.8%         |
| NVIDIA Corp.           | 3.7%         |
| <b>% of Net Assets</b> | <b>54.8%</b> |

### By Industry

|                         |       |
|-------------------------|-------|
| Software                | 27.4% |
| Internet                | 16.0% |
| Consumer Electronics    | 12.6% |
| Networking              | 11.1% |
| Semiconductors          | 9.3%  |
| Education               | 6.0%  |
| Social Networking       | 4.0%  |
| Other Electronics       | 3.8%  |
| Renewable Energy        | 3.4%  |
| Defense & Aerospace     | 1.7%  |
| Semiconductor Equipment | 1.3%  |
| Other                   | 3.2%  |
| Net Cash                | 0.2%  |

The top 10 holdings are current as of December 31, 2019, and may not be representative of current or future investments. Portfolio assets such as cash, treasuries, options, and warrants are not presented in the top 10 list. The holdings by industry are presented to illustrate examples of the industries in which the Fund has bought securities and may not be representative of the Fund's current or future industry investments.

## Portfolio Commentary Q4 '19

### Contributors

Firsthand Technology Opportunities Fund underperformed its primary benchmarks in the fourth quarter, gaining 7.45%, compared with gains of 12.49% and 9.06% for the Nasdaq Composite Index and the S&P 500 Index, respectively.

For the fourth consecutive quarter, Roku (ROKU) was the largest contributor to the Fund's performance in Q4. Although the video streaming company's stock stumbled in November after its Q3 earnings report and outlook disappointed investors, Roku shares remain near all-time highs and finished the quarter up nearly 32%.

Online education tool provider Chegg (CHGG) enjoyed a rebound in its stock in Q4 following a decline of 22% in Q3. Chegg stock was buoyed in early November by strong financial results for Q3 and an improved revenue forecast for the full year 2019.

nVidia (NVDA) was another strong contributor to the Fund's performance during the quarter. The company's stock was hit hard in late 2018 as demand from cryptocurrency miners fell, but nVidia stock rebounded in 2019 as demand from gaming a data center customers improved.

### Detractors

Arista Networks (ANET) was the largest detractor from fund performance during Q4, after the networking company issued disappointing guidance for the fourth quarter. Certain analysts pointed to slowed spending by Facebook (FB) as the reason behind Arista's lackluster guidance.

Another negative contributor to the Fund's performance during the quarter was Twilio (TWLO); its stock slid 10% during Q4. The company's stock fell sharply in October following Twilio's announcement of Q4 guidance that fell below analysts' expectations. Adding insult to injury, the company further revised its guidance downward, attributing the change to "a simple math error."

The Fund's third largest detractor from performance during the quarter was Revasum (ASX: RVS). The California-based company, whose shares are listed on the Australian Securities Exchange (ASX), warned of lower than expected revenues for the second half of 2019 shortly after the Fund established its position in Revasum in late Q3.

Firsthand Technology Opportunities Fund is subject to greater risk than more diversified funds because of its investments in fewer securities and because of its concentration of investments in certain industries in the technology sector. Specific risks associated with investments in the technology industries (as described in the Fund's Prospectus) could cause the Fund's share price to fluctuate dramatically. The Fund's investments in small-cap companies present greater risk than investments in larger companies. The Fund invests in several industries within the technology sector and the relative weightings of these industries in the Fund's portfolio may change at any time. Equity investing involves risks, including the potential loss of the principal amount invested. The Fund's performance information assumes reinvestment of all dividends and includes all Fund expenses, but does not reflect the impact of taxes

**Equity investing involves risks, including the potential loss of the principal amount invested. Firsthand Funds are subject to greater risk than more diversified funds.**

As of 12/31/19: ROKU (12.56% of TEFQX), CHGG (5.04% of TEFQX), NVDA (3.68% of TEFQX), ANET (5.56% of TEFQX), TWLO (5.38% of TEFQX, RVS.AX (1.27% of TEFQX). A complete list of portfolio holdings for Firsthand Funds is available on [www.firsthandfunds.com](http://www.firsthandfunds.com) and is updated 45 days after the end of every calendar quarter. The portfolio holdings discussed are subject to change. Please visit [www.firsthandfunds.com](http://www.firsthandfunds.com) for a complete list of holdings.

The information provided should not be considered a recommendation to purchase or sell a particular security and there is no assurance that, as of the date of publication, the securities purchased remain in a Fund's portfolio or that securities sold have not been repurchased. Also, you should note that the securities discussed, even if they have been purchased by a Fund, do not represent a Fund's entire portfolio and, in the aggregate, may represent only a small percentage of that Fund's holdings. There can be no assurance that any Firsthand Funds will buy, sell, or hold any particular security after the date referred to in the discussion.

**An investor should consider investment objectives, risks, charges, and expenses of the Funds carefully before investing. To obtain a prospectus, which contains this and other information, please call 1.888.884.2675 or visit [www.firsthandfunds.com](http://www.firsthandfunds.com). Read the prospectus carefully before investing or sending money.**