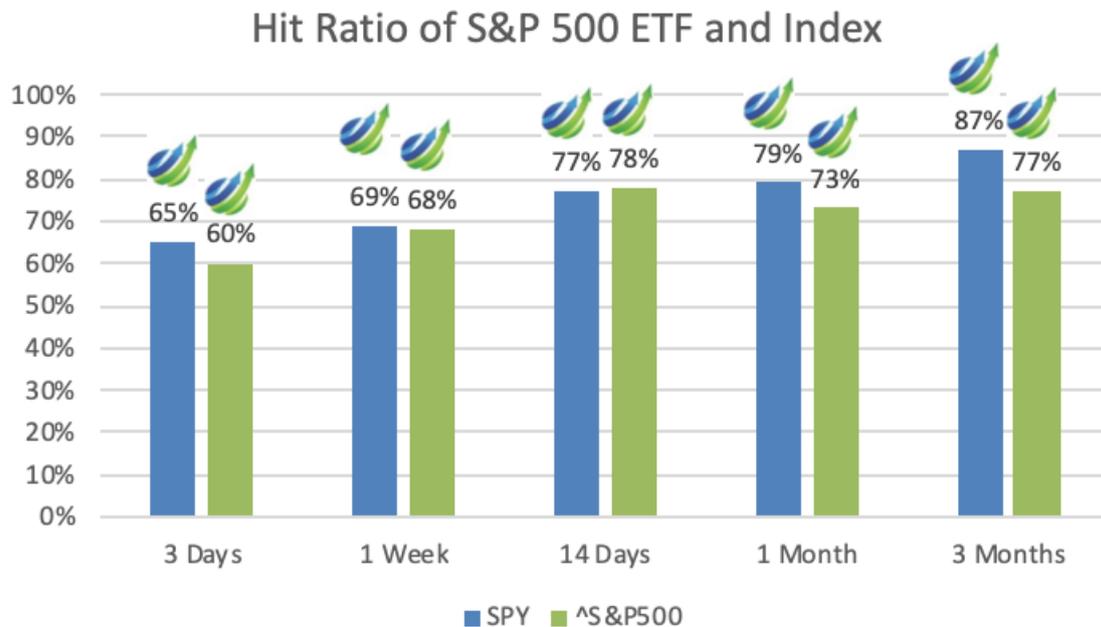


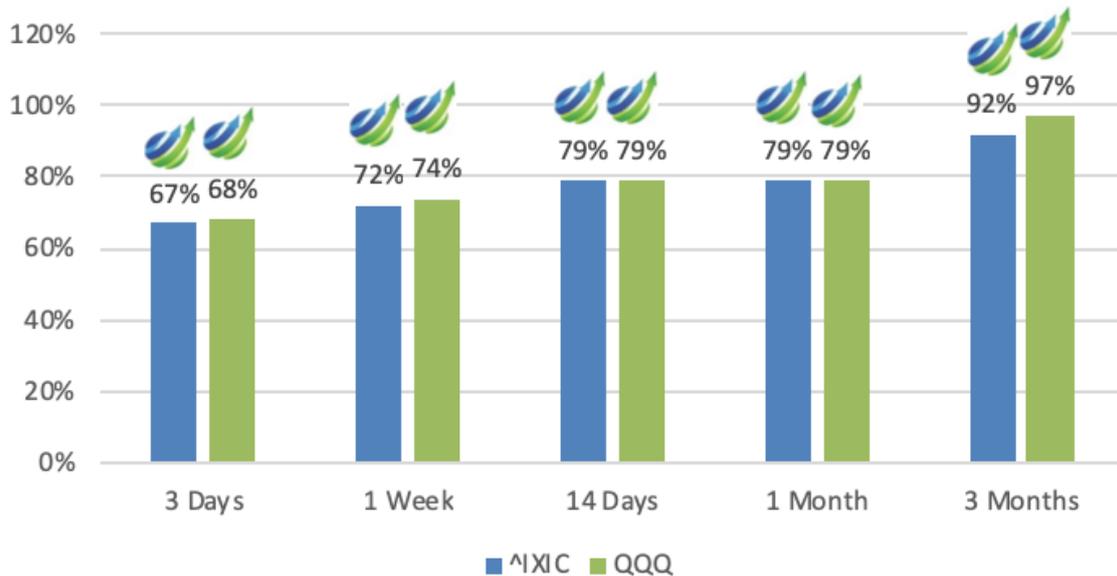
**Stock Market Predictions: I Know First S&P 500 & Nasdaq Evaluation Report- Accuracy Up To 97%**  
 August 15, 2019

**Stock Market Predictions Executive Summary**

In this forecast evaluation report, we examine the performance of the stock market predictions generated by the I Know First AI Algorithm for the S&P 500 and Nasdaq indices with time horizons ranging from 3 days to 3 months, which were delivered daily to our clients. Our analysis covers the time period from the 1<sup>st</sup> January 2019 to 1<sup>st</sup> August 2019. Below, we present our key takeaways for checking hit ratios of our stock market predictions.



## Hit Ratio of NASDAQ Index and ETF

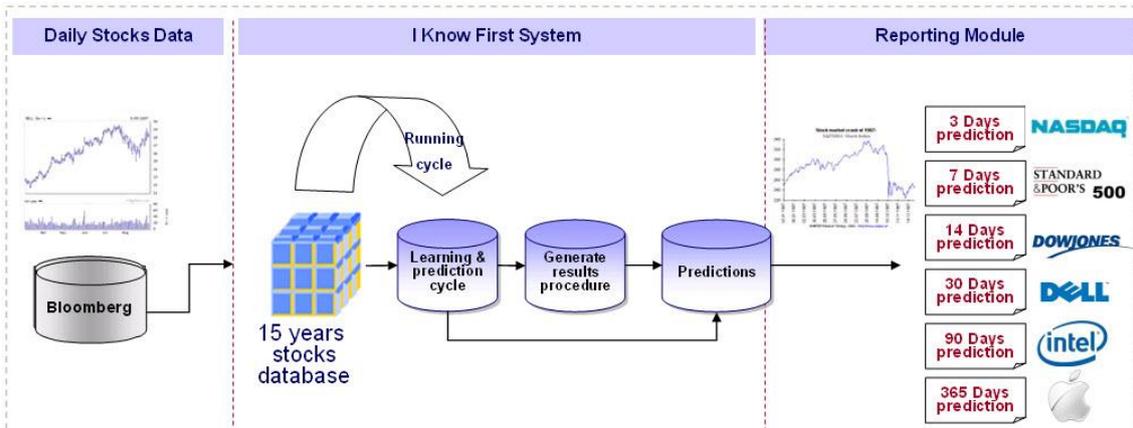


### Stock Market Predictions Highlights:

- 97% Hit Ratio for the 3-Month time period of Nasdaq tracking ETF (QQQ) predictions allow our clients to be able to invest their money with significantly less risk
- 87% Hit Ratio for the 3-Month time horizon of S&P 500 following ETF (SPY) predictions nearly matches the success of impeccable accuracy of the algorithm's Nasdaq forecasts
- Predictions consistently above 60% accurate despite very volatile times in the world economy over the last half-year

Note that the above results were obtained as a result of an evaluation conducted over the specific time period to give a presentation for the S&P 500 and Nasdaq movements. The following report provides an extensive explanation of our methodology and a detailed analysis of the performance metrics that we obtained during the evaluation. This report is a new I Know First evaluation series illustrating the ability to provide successful forecasting on the Nasdaq and S&P 500 indices.

About the I Know First Algorithm



The I Know First self-learning algorithm analyzes, models, and provides stock market predictions for the capital markets, including stocks, bonds, currencies, commodities and interest rates. The algorithm is based on Artificial Intelligence (AI) and Machine Learning (ML) and incorporates elements of Artificial Neural Networks and Genetic Algorithms.

The system outputs the predicted trend as a number, positive or negative, along with a wave chart that predicts how the waves will overlap with the predicted trend. Consequently, the trader can decide which direction to trade, when to enter the trade, and when to exit the trade. The model is 100% empirical, based only on factual data, thereby avoiding any biases or emotions that may accompany human assumptions. I Know First's model only involves the human factor in building the mathematical framework and providing the initial set of inputs and outputs to the system. The algorithm produces a forecast with a signal and a predictability indicator. The signal is the number in the middle of the box. The predictability is the number at the bottom of the box. At the top, a specific asset is identified. This format is consistent across all predictions.



Example display of forecast

Our algorithm provides two independent indicators for the index – signal and predictability.

The signal is the predicted strength and direction of the movement of the index. This is measured from  $-\infty$  to  $+\infty$ .

The predictability indicates our confidence in the signal. The predictability is a Pearson



correlation coefficient relating to past algorithmic performance and actual market movement, measured from -1 to 1. You can find a detailed description of our heatmap [here](#)

#### The Hit Ratio Calculation

The hit ratio helps us to identify the accuracy of our algorithm's predictions.

We predict the direction of the movement of the S&P 500 and Nasdaq Indices using our algorithm. Our predictions are then compared against actual movements of the S&P 500 and Nasdaq benchmarks respectively within the same time horizon.

The hit ratio is then calculated as follows:

$$\text{Hit Ratio Percentage (\%)} = \left( \frac{\text{Correctly Predicted Movement of the S\&P500 Index}}{\text{Total Number of Times S\&P500 is Predicted}} \right) * 100$$

#### S&P 500 Index and SPY ETF

When thinking of index funds as benchmarks for the whole economy, many experts tend to gravitate towards checking the S&P 500. This prominent index, followed by millions throughout the globe, has historically shined a light on the movements in the stock market. What the index does, in essence, is to choose the 500 largest publicly traded companies by order of market capitalization and produces a quarterly list of corporations to be tracked. It is clear that any preemptive indication of how those shares appreciate or depreciate could be a powerful and highly profitable tool for investors.

At the same time SPY is the best-recognized and oldest ETF and typically tops rankings for largest AUM and greatest trading volume. The fund tracks the massively popular US index, the S&P 500. Few realize that S&P's index committee chooses 500 securities to represent the US large-cap space—not necessarily the 500 largest by market cap, which can lead to some omissions of single names. Still, the index offers outstanding exposure to the US large-cap space. SPY is a unit investment trust, an older but entirely viable structure. It can't reinvest portfolio dividends between distributions; the resulting cash drag will slightly hurt performance in up markets and help in downtrends. SPY is extremely cheap to hold and SPY's phenomenal trading volume makes it the perfect vehicle for tactical traders and mom and pop investors alike.

#### NASDAQ Index and QQQ ETF

On the other hand, when looking towards the health of growth-oriented stocks, a majority within the world of investing points toward the Nasdaq as the strongest indicator. The index focuses on mostly technology and internet-related firms, but also contains many financial, consumer, biotech, and industrial companies. The Nasdaq Composite, the leading index for the group, tracks over 3,300 stocks including Apple (AAPL), Intel (INTC), Facebook (FB), and Microsoft (MSFT).



Finally, QQQ is one of the best established and most traded ETFs in the world. It's also one of the most unusual. Per the rules of its index, the fund only invests in nonfinancial stocks listed on NASDAQ, and effectively ignores other sectors too, causing it to skew massively away from a broad-based large-cap portfolio. QQQ has huge tech exposure, but it is not a 'tech fund' in the pure sense either. The fund's arcane weighting rules further distance it from anything close to plain vanilla large-cap or pure-play tech coverage. The ETF is much more concentrated in its top holdings and is relatively volatile. Still, it is extremely large and liquid, and has huge name recognition for the underlying index, the NASDAQ-100.

#### Markets Turmoils and Volatility in 2019

Over the considered period the major world markets experienced a significant turmoils and hence the increased volatility across all the sectors, so both S&P 500 and NASDAQ, as well as the above-mentioned ETFs, prices were hardly predictable almost on any horizons. As a result, the demand for the reliable and consistent prediction algorithm has spiked from investors and analysts community. Meanwhile, I Know First predictive algorithm provided daily forecasts for these assets and the following sections are going to present the outstanding results of these forecasts in terms of hit ratio on different time horizons. The below charts illustrate the volatility experienced by the analyzed indexes and ETFs over the last half year:







**Evaluating the Stock Market Predictions Hit Ratio**



<b>Hit Ratio Per Time Horizons</b>					
<b>Index/ETF</b>	<b>3 Days</b>	<b>7 Days</b>	<b>14 Days</b>	<b>1 Month</b>	<b>3 Months</b>
^IXIC	67%	72%	79%	79%	92%
QQQ	68%	74%	79%	79%	97%
^S&P500	60%	68%	78%	73%	77%
SPY	65%	69%	77%	79%	87%

Through the results above, you can see that we at I Know First have developed an algorithm that can consistently predict the S&P 500 and Nasdaq throughout various time periods. On average through 2019, I Know First has achieved the incredible feat of hitting the exact movement of an ETF tracking the S&P 500 87% of the time for the 3-month prediction time horizon. Additionally to that, we can predict the 3-day time horizon, 7-day time horizon, 14-day time horizon, and one-month time horizon for this fund at 65%, 69%, 77%, and 79% accuracy respectively. On the other hand, the machine-learning algorithm was able to match the movement of an ETF following the Nasdaq at an even greater rate. Specifically, at the 3-day, 1-week, 14-days, 1-month, and 3-month time horizons, the algorithm correctly predicted the ETF at 68%, 74%, 79%, 79%, and



97% respectively. This allows our investors to have a safer outlook when investing despite these quick and volatile time periods.

#### Conclusion

All in all, we at I Know First have a mission to provide our clients with the best information about the future. By sharpening our abilities to predict the S&P 500 and Nasdaq indices and related ETFs through our incredible Artificial Intelligence system, we provide our clients with increasing certainty that their investment will be safer and more profitable. Within the bounds of certainty, we have consistently been able to find that we can predict both the S&P 500 and Nasdaq movements up to 97% of the times over the last half-year. On top of that, we have had even greater accuracy predicting the ETFs tracking each respective index, both in terms of hit ratio (consistency of success) and percentage return (magnitude of success). The peak of the predictions is the 97% hit ratio over the 3-month time horizon for the ETF tracking the Nasdaq (QQQ), thus indicating our services can predict the movement of the fund correctly more than 9 out of 10 times on average.

 IST Co., Ltd.

The logo for IST Co., Ltd. consists of the letters 'IST' in a bold, blue, sans-serif font, enclosed within a blue oval shape. To the right of this logo, the text 'IST Co., Ltd.' is written in the same blue, sans-serif font.