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401(k) Investment Analytics Web Service(s)



Your Portfolio Success, Our Analytics.

*Introducing: Investment
Analytics for 401(k) Plans,
Plan Sponsors and
Participants*

Learn How to Maximize Your 401(k) Plan's Investment Return(s) & Minimize Losses

We explore the benefits of incorporating investment **predictive analytics** within the confines of the Plan's investment objective and ERISA duties – outsourced chief investment officer function as a web service.

What action(s) can a Plan or plan sponsor take to help assure a more secure financial future for participants?

Current state:

- Plan performs due diligence process and selects: a record-keeper, wealth manager(s) and investment advisor(s).
- The Plan performs investment education and enrollment activities.
- The Plan Investment Committee meets periodically to perform on-going duty to monitor: fund performance, expenses, participation and loan activities.

Current state: **The Weak Link**

The plan and plan participants lack investment knowledge and expertise. The Plan and Plan participants **must rely 100% on advice and fund offerings created by wealth managers and investment advisors.**

Optimal state:

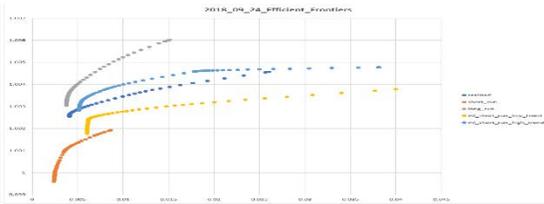
- Plan performs due diligence process and selects: a record-keeper, wealth manager(s), investment advisor(s) **and investment analytics provider.**
- The Plan performs investment education and enrollment activities. **Plan participants are educated as to availability of daily Plan stock and fund(s) predicted range values on corporate internet.**
- The Plan Investment Committee performs **monthly/weekly/daily monitoring of past and expected next trade-day: fund performance, expenses, participation and loan activities using dashboard and internal website.**

Optimal state: **The Optimal Link**

The plan and plan participants have **second independent source of investment knowledge and expertise with daily predicted next trade-day value ranges.**

The Plan and Plan participants **choose the level of reliance and level of participation** on advice and fund offerings created by wealth managers and investment advisors.

Potential large losses are mitigated by early prediction and warnings so that action can be taken to safeguard fund value.



PREDICTIVE ANALYTICS EMPOWERS PLAN INVESTMENT PERFORMANCE

You Are Getting Good Investment Advice If...

It is coming from a fiduciary.
It is 404(c) compliant.
It is comprehensive.
It demonstrates a sound process.
It includes proper monitoring.

You Are Getting **OPTIMAL** Investment Advice If...

It is coming from a fiduciary.
It is 404(c) compliant.
It is comprehensive.
It demonstrates a sound process.
It includes proper monitoring.
It includes investment predictive analytics. (NEW)
It includes investment predictive analytics of short-run excess return opportunities. (NEW)

IHA Consultants offers the following:

Monitoring & Predictive Investment Return

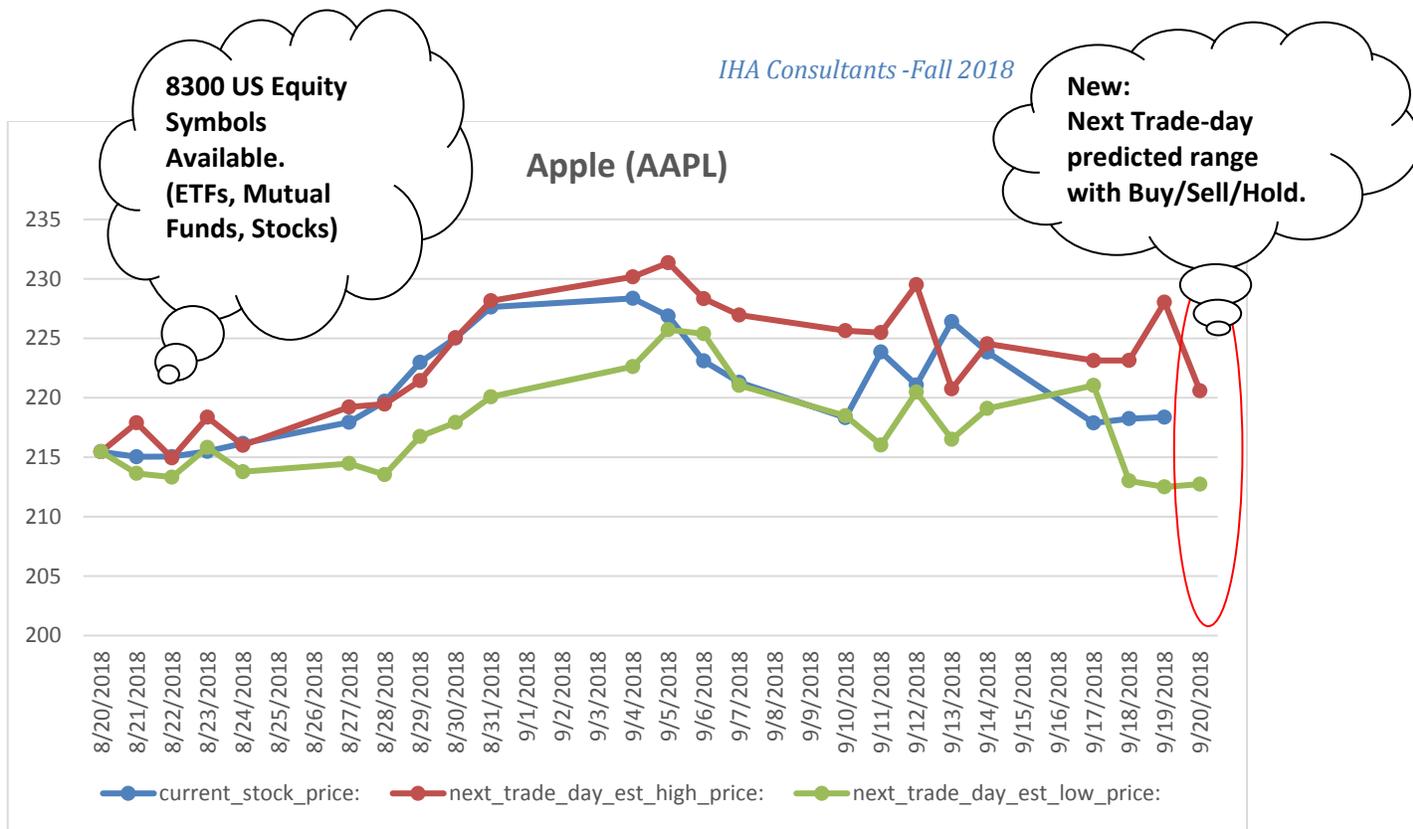
Predictive next trade-day fund performance monitoring – short-run and long-run.

Optimal Investment Return

Next trade-day short-run excess return opportunities that exist in Plan's fund universe.

Next trade-day short-run excess return opportunities that exist in Plan's fund universe and those that exist outside of Plan's fund universe.





Investment Strategy Advice

Investment strategy advice from wealth manager(s) and investment advisor(s) is the starting point. Too much diversification sacrifices return. Fund composition detail is reviewed. Funds with excess diversification are identified. Proprietary funds are analyzed for basis of above average return in short-run and long-run. Target date funds benefit but to lesser extent due to significant reliance on bonds.

The goal is to start with sufficient diversification and then proceed with active management to capture short-run excess return opportunities and associated compounding effect by re-investment of realized gains.

An array of exchange traded funds (ETFs) is identified with high performance and low cost for passive long-term investing.

Minimizes Losses & Capture Gains - Predicted Next Trade-Day Stock Price Range for US Equities

The *next trade-day predicted stock trading range is calculated* for 8300 US stock ticker symbols and available prior to market open. (see figure above.) Plan sponsor, Plan and plan participants receive a daily investment analytic report based on selected “plan asset U.S. equity listing.” **The investment analytic report also includes predicted long-run information so that short-run and long-run investors are supported.** The Plan shares investment analytic information with plan participants via corporate internal website and in so doing **satisfies ERISA monitoring, due diligence and prudent investment duties.**

Benefits include:



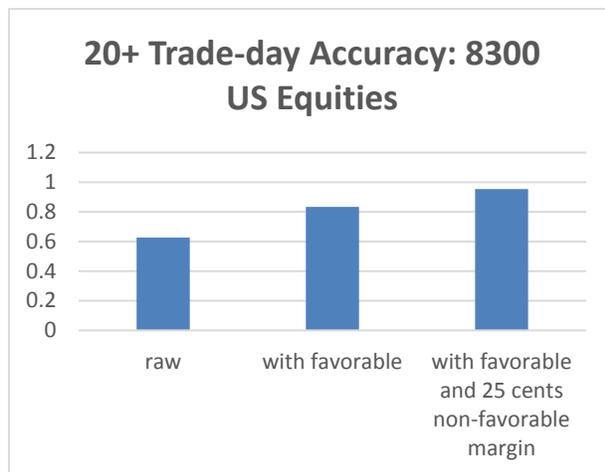
- **Plan participants can verify the Plan’s wealth manager(s) and investment advisor(s) performance by fund each trade-day.**
- **Plan participants can verify the Plan’s wealth manager(s) and investment advisor(s) FORECAST performance by fund NEXT trade-day.**
- **Plan participants using the analytic information have an EARLY WARNING of possible fund loss and can proactively react.**
- **Enhancing Plan performance which normally would not be available until replacement of the wealth manager(s) and/or investment advisor(s).**

As fiduciaries, Plan administrators want to protect against **Plan fund losses especially the type experienced most recently in 2008 via capital preservation strategies. Notably, passive investments such as ETF(s) and target date funds are not immune and will suffer losses with market decline.** The Plan has the option of sharing analytic report information with the Plan’s wealth manager(s) and investment advisor(s) with the goal of enhancing Plan performance which normally would not be available until replacement of the wealth manager(s) and/or investment advisor(s).

Enhanced Plan fund investment returns will increase Plan participation rates as well as deferral rates. Participants will enjoy capturing investment gains earlier leading to higher account balances which facilitates home purchase and college loan repayment. Lastly, plan participants could use the investment analytic information shared with them on an after-tax basis via external personal brokerage account.

Corporations have the potential to realize additional investment gains by putting excess equity funds to work. Corporations with Plans that outperform competitors have a competitive advantage in human resources – talent acquisition and retention.

Accuracy



The next trade-day predicted stock trading range is calculated for 8300 US stock ticker symbols and accuracy measured on prior 1 trade-day and 20 trade-day basis. The 1 trade-day raw accuracy rate is 62%+ which counts “favorable” as well as “unfavorable” against accuracy. Adjusting for favorable outcomes (realized trend exceeded upper bound estimated trend) accuracy rises to 84%+. If in addition an allowance of \$ 0.25 as error margin, the accuracy level attains 95%+. Long-run investment conditions are re-estimated each trade day. Fund de-valuation progresses

from mild watch warnings to outright warnings within at most 1 or 2 trade-days. Of course, information outside the modeling process can result in immediate devaluation.

Optimal Investment Return

Plan participants can rely on Plan's menu of funds, rely on investment advisors or take control of investments. For plan participants who take control of investments, enhanced returns are generated by the following: use of sufficient diversification applied dynamically to daily/weekly trade-days of identified stocks with potential excess return. Compounding of returns is achieved by reinvestment of realized gains. The Plan, and plan sponsor are free to design any level of investment enablement that fits corporate culture, goals and workforce investment comfort level.

The analytic investment service replaces the current one-way direction with a two-way direction of expert investment advice and execution which benefits the Plan, plan sponsor and plan participants. Higher average returns are associated with multiple expert frameworks such as the one proposed in this white paper. Mathematically/statistically, optimizing to capture excess returns over short-run durations, can do no worse (in the probabilistic sense) than the return from a buy and hold approach in a zero-transaction cost environment. Notable additional benefits include direct knowledge of fund performance drivers, warning of fund devaluation, early capture of excess returns at more rapid rate than available in target date fund strategy and identification of actionable short-run return opportunities generated by universe of US equities.

Conclusion

In this white paper, we've outlined the answer to the question '*What action(s) can Plans and plan sponsors take to help assure a more secure financial future for participants?*'

Answer: if the goal is to dynamically maximize risk-adjusted returns with a compounding effect, consider adding IHA Consultant's 401(k) investment analytic web service as one of your Plan's providers.

Taking a different tact, IHA Consultant's 401(k) investment analytic web service fulfills the role normally occupied by outsourced chief investment officer as well as providing daily financial wellbeing prediction as self-service.

Plan sponsor, Plan, plan participants, record keeper, wealth manager(s), investment advisor(s) all benefit from the investment analytic web service. Health savings accounts also benefit from enhance investment return made possible by adding IHA Consultant's 401(k) investment analytic web service. The trust, accessibility, control, financial well-being and transparency enabled is unmatched and unsurpassed.

We believe you'll be glad you did.



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