Project Proposal

SYE: STAT 489 with Dr. Higham

Liam Reiner

Allocation Master (Sunguard)

* Allows you to forecast future values of a given portfolio based on a number of different factors
  + Asset class investment allocations
    - Allows you to choose the Asset Manager based on Asset Class
      * Shows different risk parameters given an expected amount of return
* Allocates your investments into different Asset Classes based on historical data
  + You can determine how much of each Asset Class you want to allocate your investments into
* Can include ETFs, bonds, and securities
* Typically used by wealth managers or family offices (i.e. offices that manage money for extremely high net worth individuals)

Fundware (Kintera)

* Accounting system used by many nonprofits, and the asset allocation module is used by the financial managers in these nonprofits to help make investment decisions
* Targeted towards corporate investors
* Handles all types of allocations, including indirect cost, percentage, flexible, and multi-step
* Wouldn’t be used for a beginning investor due to the software being used to manage corporation’s assets (both liquid and illiquid)

Investor Management Services

* Automate workflows, calculate waterfalls, process distributions, and troubleshoot discrepancies in minutes.
* Eliminate Excel-based risk and time-consuming manual processes.
* Closely track total equity committed by investor and each capital call.
* Streamline workflows to monitor the process of making the capital call through receipt of funds with specific dates & amounts.
* Integrate data from accounting systems and use interactive filters to generate custom charts, graphs, & reports that give insights into property performance.
* Typically used by investment managers, and is expensive
  + Not worth it for the typical retail investor that is just beginning

Personal Capital

* See if your retirement savings are on track to retire by your target date and calculate your projected monthly income.
* We’ll help you estimate and plan how much you should be saving today to cover education costs down the road.
* See how well your investments are performing, and how they could do even better, with the Investment Checkup tool. Compare your current portfolio allocation to the ideal target allocation designed to minimize risk and maximize returns to meet your financial goals.
* See if you’re losing money through hidden fees in your mutual fund, investing, and retirement accounts.
* Personal Strategy is a personalized, diversified multi-asset class portfolio with enhanced diversification that’s directly linked to your financial goals.
* Would be used for a more experienced investor, or individual, who has more background knowledge
  + Wouldn’t be hard to figure out to use, but it is expensive, and a beginner investor wouldn’t use this

Key Features I Would Include

* Portfolio tracker
  + Forecasts and shows you how your portfolio changes over time
    - Ideally over the next 3-30 years given how long you want to stay in the market
  + How your portfolio changes when you add in new investments, given historical data, and take out existing investments
  + Allow the user to add in ETFs, bonds, and securities
    - For all Asset Classes
  + Show how certain asset classes perform given risk parameters
    - Sharps ratios
  + Scenarios showing how your investments change over time based upon how you’re invested
    - Diversified
    - Risk Adverse
      * Gganimate would be good for this
      * Animation would be good with any sort of time variable
      * Follow the progress through time
  + Bitcoin/alt-coin tracker as a part of the portfolio

Next Steps

* Learn how to scrap data off yahoo finance
  + Focus on one specific idea to start
    - Hammer it out and seeing if you can get some static graphs
  + Start to learn Shiny
    - Look for Dr. Higham’s email
  + Start to learn github
    - Look for Dr. Higham’s email
* For this week
  + Get as far as I can
  + If I get stuck just stop and we can discuss next week
    - On shiny do 1-4 on the link Dr. Higham sent me