



NEEDED: A Next Generation of Financial Advisor

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The Need for a New Breed of Financial Advisor empowered with new tools

The current financial planning industry needs to evolve or die. The current tools and techniques implemented for retirees and pre-retirees are antiquated and the previous rounds of “planning” software are often just sales schemes in disguise. Let’s look at the evolution of planning tools that have lead to the creation of some true next-generation finance software.

Proper Financial Modeling Tools are virtually non-existent

How did financial analysis get here? I can’t help but think about my grandparents (at the time of this writing, I am 40 years of age) and their retirement. People that were the age of majority during the Great Depression of the 1930’s and who worked for companies after World War II tended to remain with the same employer their entire adult lives and then retire with a pension. These individuals knew when they retired they would have stable retirement income from company pensions and Social Security. Any additional savings most likely went into their local bank in the form of a Certificate of Deposit. I recall my grandparents renewing their CD’s at 16% interest rates. They happened to retire during the highest interest rate environment in the twentieth century. For that generation, planning their retirement was simple. They simply budgeted their stable retirement income from the company pension and Social Security, and their federally-insured CD interest income was a plus. Their planning responsibilities were really placed on the shoulders of the employer and the government.

Enter the Baby Boom generation. People retiring today are living in an entirely different world. First, company pensions (defined benefit plans) are almost extinct, having made way to the 401k plan. This has shifted the responsibility of retirement planning from the employer and government to the employee. Unfortunately, the individual has no skills at retirement planning and is attempting to do the job formerly performed by highly educated professionals working with company pension plans. Although the government has instituted rules for companies to educate their employees regarding their retirement plan investment options, this burden usually falls to the human resources department (the same people responsible for hiring and conflict resolution). Does this make sense to you? This generation of individuals preparing for retirement has a complex job to do and neither the skills or the assistance to do the job correctly. Many of them rely on financial advisors to assist them in their planning endeavors, but for many their trust is unfortunately misplaced.

The financial advisory industry is wrought with flaws; from inherent conflicts of interest to blatant misrepresentation of services rendered. Having seen the industry in action for almost 20 years, I have realized that the greatest problem with the industry is that it is driven by product sales. This is a problem of gargantuan proportion.

In the first place, financial institutions provide the best in compensation to those who sell the most, not those who provide the best service. Secondly, since the focus of the company is sales, salespeople are hired where analytical people should be. If you have ever known a successful salesperson, you probably found them to be long on action and short on contemplation. Many of these people are goal oriented and their goal is on sales and not on their personal education or implementation of sound financial planning. Thirdly, if the saying “success breeds success” applies, the newcomers to the industry look up to those with the largest sales and not the best financial planning skills. This is not what the largest group of retirees needs from the financial planning industry.

What retirees need from the financial planning industry are professionals educated in financial planning and *financial modeling*. Professionals that think first of their clients (who are entrusting them with their futures) will take steps to educate themselves to provide the services that retirees need. Instead, there has been a growing momentum for “retirement planning” that is just a regurgitation of the inadequate tools of the past. Many of the latest tools are simply referred to as “Bucket Planning” or “Income Ladder” programs. In a 40 page white paper I wrote, I examined the flaws with such programs (they have higher risk and less return) but financial advisors still gravitate to these programs. Why? Simply put: they make promises that are easy to sell. They are easy to sell because they promise over-simplified results that appeal to the retiree, always with successful outcomes that they want to see. The greatest flaw to these programs is their use of average rates of return. It seems the industry has learned only one thing; that by keeping things unrealistically simple, it increases sales of products promising unrealistic results by uneducated sales people.

Current Portfolio Optimization Tools and Monte Carlo Simulation Tools

In the early 1980s there were simple hand-held calculators that provided mechanisms for simple interest calculations to answer questions regarding inflow or outflow goals. For example: How much would I have in 20 years if I earned 8% annually and deposited \$2,000 a year? Or: How much would I have if I withdrew \$20,000 annually from \$200,000 for 10 years while earning 7% annually? In the early 1990s (subsequent to the Nobel Prize for economics being awarded to the contributors of Modern Portfolio Theory), a new breed of software hit the industry and it implemented Harry Markowitz’s Mean Variance Optimization. Many advisors (me included) thought they had found the Holy Grail of the portfolio designing process that would lead to return predictions that improved financial planning results. However, along with this new tool came a couple of complications.

First, Mean Variance Optimization results in 2-dimensional measurements (as opposed to a single-dimensional measurement, Average Annual Returns): Returns or *mean* and Risk or *Standard Deviation*.

Second, what period of history should be used for the optimization inputs? Before this simple-to-use portfolio optimization tool, the only people utilizing this strategy were those educated in advanced finance theory. Like children playing with fire, many of the financial advisors attempting to apply Mean Variance Optimization got burned and their clients paid. When the uneducated advisors saw their planning break down, they placed the blame on MPT.

You may recall that at the same time this round of software was being introduced, the utilization of the 'risk tolerance questionnaire' became an integral part of the planning process. This measure was used as a simplistic measurement of downside loss acceptance. For example, if the portfolio optimization process produced a portfolio with a 5% mean and a 10% standard deviation, a client with a risk aversion below -5% would find the portfolio acceptable. However, most of this software only measured risk as 1 standard deviation which only accounts for explaining 68% of the potential risk. Whereas, if 2 standard deviations were used (accounting for 95% of variance of returns), the loss potential of the optimized portfolio would be -15%. This would be unacceptable! The worst of it is that the financial planning assumptions still used constant rates of returns for their projections.

In the late 1990s Monte Carlo Simulation tools reached the investment advisory community. While the introduction of Monte Carlo Simulations was a step in the right direction, many of the implementations were incorrect. Monte Carlo Simulation is a process of modeling a variety of conditions with randomized variables. For example, if an annual return could be 1, 2, or 3 percent, a computer would randomly select one of the 3 numbers. The purpose of Monte Carlo Simulation is to model potential results based on uncertain future conditions. Of the popular tools that implement Monte Carlo Simulations, many of them have a distinct flaw in their design: using actual historical returns as the sole pool of selectable returns. The flawed thinking is that in a Monte Carlo Simulation, forecasting the future by using actual historical returns implies that the future (although randomizing the sequence of returns) will emulate the exact returns of the past - which is virtually impossible to occur.

Unfortunately, many of the financial planning solutions that incorporate Monte Carlo Simulations have *both* inadequate portfolio design *and* modeling tools. Since the returns are the primary component being randomized, inadequate portfolio return assumptions contribute to Monte Carlo Simulations that are of a 'sand-like' foundation. The primary flaws of the common portfolio modeling tools are the following:

1. Simple assumptions that mutual funds within a category (i.e. a Large Cap mutual fund represented by the S&P 500) are represented by their benchmark in analysis. For example Fidelity's Magellan fund is typically represented by the S&P 500 for historical analysis. The flaw of this process is that Fidelity's Magellan has underperformed the S&P 500 as measured by the last 3 years' *Alpha*. Many advisors have seen the research that 80% of actively managed mutual funds underperform their relative benchmark indexes. Sometimes this underperformance can be substantial. As of this writing the Alpha of the Fidelity Magellan fund is -2.81%, which means

that it averaged an annual relative return underperformance of -2.81%. This should be unacceptable to advisors who are cognizant of this flaw.

2. Using actual historical performance of mutual funds and any other managed investment (the same could be said of a stock because a company is managed by individuals who control the direction of the company's business endeavors) is flawed because a management change undermines the quality of the forecasting results. I realize that this assertion seems unconventional but if you think it through you will realize that management companies all compete with a benchmark, and as the management changes so does the subjective element of management style. To use the Fidelity Magellan example from above, if we were to use historical performance of the fund from the 1980s (when Peter Lynch ran the fund) it would be improper since Peter Lynch outperformed against the S&P 500 and the current manager has underperformed. If we used historical returns from the 1980s for predictive analysis we would be working with flawed assumptions, since we would be over estimating relative performance of the current manager.

3. A third basic flaw that is applicable to both strategies above is the use of the same time period for all investments being analyzed. When preparing analysis for a forecasting model it is not logical to constrain all investments to an identical historical dataset. This is because historical time periods possess inherent biases and anomalies of a certain investment's performance. For example, if we were to use the 1970s for our analysis because stock index activity is erratic and matched our forecast, there would be a bias towards interest rate vehicles, since inflation was rampant during that time period. If we didn't believe that interest rates would not be similar in the future, it would be illogical to constrain our analysis techniques to this period. A better way is to allow the financial advisor to select the 1970's dataset for stocks and another historical dataset for interest rate vehicles, etc.

The Next Generation of Financial Software

What should the next step in financial planning evolution be? A new generation of software. A new breed of financial advisor needs to emerge; one trained not only in financial planning but financial modeling. Advisors need to see financial planning as a process of structuring client assets in the most appropriate entities and then financial modeling becomes structuring client assets in the most appropriate investments. Both processes are required and recurring. The new generation of software provides a set of tools that assist a financial advisor in modeling client financial plans. Clients have three primary concerns:

1. Deposits
2. Withdrawals
3. Portfolio Performance

