



401k

# 401k Manifesto™ - The New Standard

A White Paper by Neil Plein

**Where's the evidence for a 401k revolution? Right here.**

The 401k Manifesto calls for a revolution in the retirement industry, the core of which is an entirely new structure designed around exclusively offering Exchange Traded Funds as investment options. This presents the only truly viable way to enact the type of technological change participants urgently need to build higher average retirement balances on a macro scale.

## Introduction

There is a general structure to the mainstream 401(k) plan; one which has become solidly defined by the limitations of its outdated technology. You will know this as the mutual fund dominated, education laden, manual process driven juggernaut; the variation of which is only slightly measurable between major service providers.

In this model, commonly understood as the “status quo,” fundamental change moves at a glacial pace, as seen in the history of major 401(k) milestones:

**1978-** The Revenue Act of 1978 allows for the development of 401(k) plans through Internal Revenue Code (IRC) Section 401(k).<sup>1</sup> Plans are launched with annuity products as the dominant investment option. Front-end loads for these products range as high as 40% and with such generous compensation, unsurprisingly the industry claims that there is no demand for any additional investment types; especially not the drastically lower cost “mutual fund.” As a result, no technology exists or is pursued to make mutual funds available in 401(k) plans.

**1984-** Despite dominating sentiment against mutual funds in 401(k) plans, over the previous two years Vanguard® has paid SunGard® to make the developments needed to offer mutual funds in 401k plans, the technological leap was accomplished through the advent of a recordkeeping system that could accommodate such funds; the missing link which previously served as a barrier to entry.

**1996-** For the first time mutual funds become the largest segment of assets in 401(k) plans.<sup>2</sup> After a decade of booming demand, mutual funds have been solidified as the dominant investment option for 401(k) plans and in this same year, 401(k) plans' next major milestone is reached when companies begin offering online account access for the first time.

From this recitation, it is evident that the last major milestone to reach your 401(k) plan was the addition of Websites back in the 90's and the fundamental technology at the core of the mutual fund 401(k) system, the record keeping technology which accounts for plan data and how it can be used, is nearly 30 years old.

## Record keeping is the at the core

Few people inside or outside of the retirement industry recognize that the management, operation, and services offered to retirement plans; including, the selection of investment choices is dependent on the primacy of the record keeping technology behind the scenes. In fact, the critical role record keeping plays in the delivery of services, investment selection, and ease of use is rarely discussed. Yet, the record keeper sits at the absolute core of the retirement plan, delivering and supporting the elemental components that define **what** can be offered within a plan and **how** it can be delivered to participants.

Consider automatic rebalancing. If the record keeper does not have the ability to automatically rebalance a participant’s portfolio, the service provider using that record keeper cannot offer rebalancing as a feature to their clients. As a result, since rebalancing is important,<sup>3</sup> the service provider must educate the participants to perform rebalancing manually, which involves education on the importance of rebalancing, as well as the frequency with which one needs to consider rebalancing. After this instruction, performing the actual task depends on the will of the participant.

Automatic rebalancing may be just one of many plan features which may be missing from your plan. The point is many participants face a myriad of unnecessary and difficult tasks due to the technological limitations of the record keeper.

Until the retirement community comes to understand that the technological capabilities of the record keeper dictate the ease with which every task in a plan is completed, each participant’s goal in achieving retirement success will remain elusive. Using antiquated technology, whose origins date back to the ‘70s, makes common tasks; such as, enrollment, investment selection, and contribution change, unbelievably difficult and confusing. Recognizing that difficulty and confusion impacts behavior with the result being inertia, the importance of automation and simplicity are paramount to making retirement success a reality for participants.

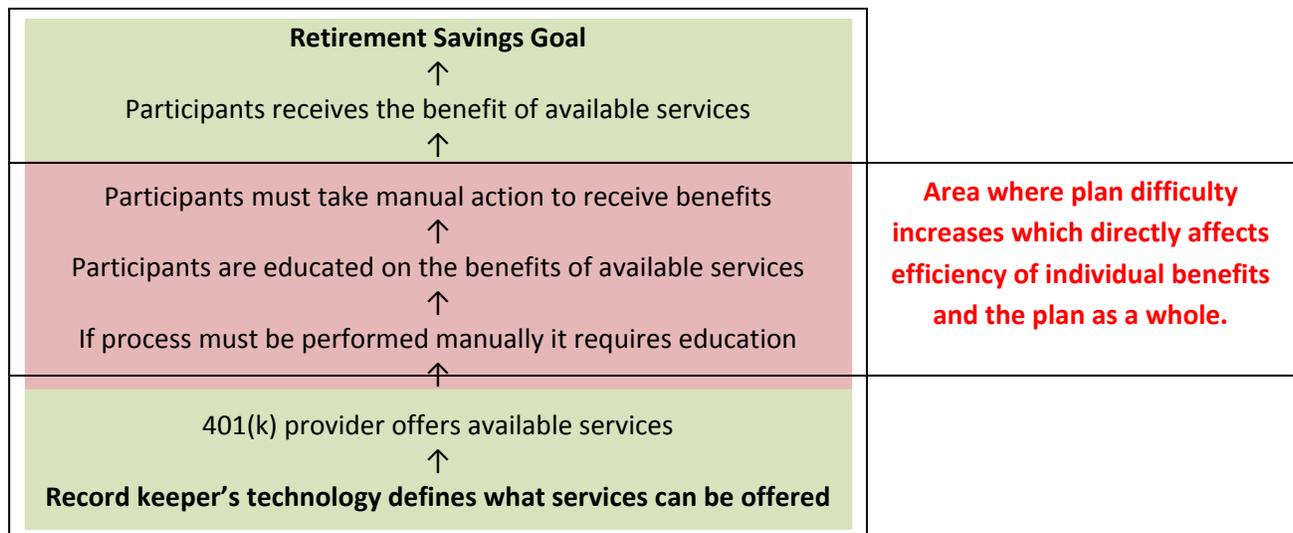


Figure 1: Difficulty of reaching your retirement goal using outdated technology

## A conditioned system

Consider the typical 401(k) experience with Joe Employee. Joe is 30 years old and his company is offering a 401(k) plan. Joe sits through a 60 minute educational seminar where he is instructed on how to enroll in the 401(k) plan; determine, set and adjust his contribution rate; analyze pick and manage his investments; access, use, and understand his retirement calculator; assess, examine and monitor his financial plan and make all necessary adjustments over time to each variable as conditions change.

This process is tedious and dated. Nearly all of these tasks require the participant to perform numerous manual processes because the record keeping technology, behind the 401(k) plan, lacks the ability to perform these tasks in an efficient and simple manner.

Realistically, the retirement industry has been suspended in a time warp, operating and building on top of antiquated systems, whose origins date back to the '70s.<sup>4</sup> Retirement plans simply have not evolved in a way that makes them satisfactory to today's modern standards of ease, simplicity and power; and this excessive lack of change results in a firmly entrenched conditioning.

This paradigm has become so developed that the ideas about how to change for the better mirror what Christian monks discussed in the middle-ages, pouring over questions like, "How many angels can dance on a pin?"

It's not that bad of course, but the monks' pondering does reflect, in terms of importance, what's being discussed and what grabs headlines. What you see is a continuous cycle of the same topic; participants must be educated, despite numerous studies which reveal that educating participants is failing to produce positive results.<sup>5</sup> This emphasis on educating participants is a direct result of outdated technology which requires that participants must be "educated" or trained in using these antiquated systems due to the numerous manual processes a participant must go through before an instruction from the participant can be implemented; otherwise the plan does absolutely nothing.

So industry magazines print stories like: "10 secrets to educating on investment selection" or "5 best practices for examining prospectuses;" engaging in a constant struggle to teach an old dog new tricks. Very few people have the opportunity to consider real, fundamental change.

Ignoring the fact that America workers are in great need of modern 401(k) technology,<sup>6</sup> the retirement industry wants to live in the dark ages. Why? Simply because these antiquated systems cannot evolve at the pace consistent with modern standards of interaction.

Sometimes it takes an entrepreneurial company to make that giant leap forward. By using low-cost investment vehicles, Exchange Traded Funds (ETFs), **Invest n Retire, LLC**, a record keeper in Portland, Ore., quickly realized that the record keeping systems of yesterday are inadequate for trading ETFs. That one simple fact required new modern technology.

**Facts:** ETFs trade like stocks, throughout the day at market price, and can only be purchased and sold in whole shares. In contrast, mutual funds trade at net asset value (NAV) closing price and can be purchased or sold in whole and fractional shares. Since old legacy record keeping systems were built to trade mutual funds in dollar certain orders, these antique systems simply have no ability to:

- (a) buy in share certain orders or
- (b) track residual cash<sup>7</sup>

Going forward, Invest n Retire® (INR) ignored the promoters of mutual funds who claimed that no one wanted ETFs in defined contribution plans and INR proceeded to build its patented system and method for record keeping and trading ETFs in tax-deferred retirement plans (pat. US 8,060,428). This paper is the road map for a new way forward.

## A point of structural consideration

### Some get involved, some don't

The basic equation for retirement success is **The 3 C's™**  
**Costs** should be low, **Compounding** returns should improve and **Contributions** should increase.

There is a bit of an initial challenge here logistically. The fact is most participants do not get actively involved with their retirement plan. Dimensional Fund Advisors (DFA) refers to the reverse as being “engaged.” The discovery of noninvolvement is the conclusion of a study commissioned by DFA in which DFA found that only 41% of participants actually engage their plan. What’s more, when you look at how many participants engage in order to plan for retirement, the number falls to a dismal 19%.<sup>8</sup>

Obviously an ideal plan must be designed to address two basic principles:

- 1.) Un-engaged participants need to receive the best default solution
- 2.) Engaged participants need to receive a benefit which exceeds the option of being un-engaged

From these two foundational characteristics, plan design must aim to motivate (not educate) participants to get involved. A simple, ease of use design which encompasses an intuitive structure and reduces or eliminates manual processes is optimal.

## What can be gleaned from mutual fund technology

### Auto enrollment

Obvious technological shortfall: *“To enroll in your plan, would you rather fill out a stack of paper or just have technology take care of all that for you?”*

The employee retirement savings experience begins with enrollment in the plan. Unfortunately, studies show that between 25-34% of eligible participants do not enroll in their plan. Perhaps the problem starts with all of the paperwork required for participants to manually enroll in the plan.<sup>9</sup>

A practical solution would be to eliminate manual enrollment with auto-enrollment so eligible employees are automatically placed in the plan. Dean Kohmann, Vice President of Charles Schwab and Co., says that companies can easily boost their participation rates from 60% to 90% by adding this one feature,<sup>10</sup> numbers recently echoed in a Towers Watson study.<sup>11</sup>

Participants still have the ability to opt-out of the plan if they choose; but numerous studies have shown that there is little resistance to implementing this approach and, in fact, auto enrollment can increase a company's ability to attract and retain quality employees.<sup>12</sup>

With participants auto-enrolled, what do they invest in and how much do they contribute?

### ***Auto escalation***

Obvious technological shortfall: *"Do your odds of building a comfortable retirement fund improve if you put less money in your plan or more?"*

The same lack of resistance to auto-enrollment is also present with auto-escalation. Traditionally, the alternative has been a default contribution rate at some fixed level, like 3%.

In considering "un-engaged" participants, contributing 3% will never get them to their savings goals. Auto-escalation is a better solution for solving this dilemma by increasing the participant's default contribution rate by some percent each year, such as increasing 1% per year up to a maximum contribution rate of 6%.

If a plan started at a 3% default contribution rate in year 1, then increased to 4% in year two, 5% in year 3 and finally a maximum of 6% in year 4, participants would have a 94% greater balance over 35 years than if they simply contributed a flat 3% over the same period.

For the un-engaged participant, reaching the escalated 6% contribution rate may still not be enough. If the employer can step in to make a match, the un-engaged participant's experience can change radically for the better, while the company receives incentives as well.

### ***Safe Harbor***

Obvious technological shortfall: *"Should you be required to contribute less than the maximum amount allowed by the Internal Revenue Service (IRS)?"*

If you work with 401(k) plans, you've undoubtedly digested some form of pain reliever or fever reducer during the process of plan testing. But testing is important; it ensures that plans are not simply in place for the exclusive benefit of those with the highest pay. But this may be unfair to higher paid employees since they also need to adequately save for retirement. How can everybody win? Include a Safe-Harbor matching contribution as a plan provision.

In order to offer a Safe Harbor provision, the sponsoring company must be willing to match the contributions of participants. For example, the company may match 100% of the first 1% contributed, and 50% of the next 5% contributed to a maximum match of 3.5%.

**Example:** Employee contributes 1% of their salary (\$1,000), then employer matches 100% of that 1% of salary (\$1,000); the total deposited into the employees plan is \$2000. If that same participant had Auto Escalation and was contributing 6% (\$6,000) then the employer would match 100% of the first 1% (\$1,000) and 50% of the remaining 5% contributed (\$2,500); and the total amount deposited into the employee' account would be \$9,500 (\$6,000+\$3,500).

The employer benefits since matching contributions are tax deductible and the company saves money by avoiding testing. Now, the higher compensated employees can contribute the maximum amount to the plan, and the un-engaged employees have contributions going into their account which are 300% higher than if they were simply receiving a flat, non-escalating 3% default. If auto-escalation were present with a Safe Harbor provision, the un-engaged participant now has a total contribution rate of 9% at the highest point, 600% higher than the a default rate of 3%.

With auto-enrollment, auto-escalation, and a safe harbor provision in place, the focus turns to investing the money.

***With investments: cost is king***

Obvious technological shortfall: *“Would you like to pay more or less for your investments?”*

The process of selecting a menu of investment options, for most companies, involves sitting down with an advisor to review a list of actively managed mutual funds with “high” star-ratings. Unfortunately, star ratings have little to do with the actual success of the investment compared to its cost historically.<sup>13</sup> Additionally, actively managed mutual funds have very poor track records, underperforming their benchmark indexes 99.4% of the time over the past 30 years.<sup>14</sup>

Using some exceptionally uncomplicated logic, one can conclude that if cost is a better determinant than star rating, low cost would be preferable; and if actively managed mutual funds underperform their benchmark indexes 99.4% of the time, then buying the index instead would mean outperforming an actively managed fund 99.4% of the time. The conclusion here is that the best investment options for a 401(k) plan are low cost investments which track an index.

Lowering cost also provides a risk-free opportunity to increase returns by the reduced cost. According to the **Department of Labor (DOL)**, reducing your retirement plan cost by 1.00% (100 basis points) can result in a 28% higher balance at retirement.<sup>15</sup> With increased contributions and lower cost investments, the road leading to a comfortable retirement just got a little easier for participants.

## ETFs and new technology

### **Choosing ETFs over Index Mutual Funds**

Obvious technological shortfall: *“Would you like to use the very best type of index investment or the second best type of index investment for the long term?”*

Proponents may claim that ETFs are not needed because plans can add low cost index mutual funds. These claims may remind you of the same claims made against mutual funds in the early '80s.

Opponents to ETFs in retirement plans continue their argument against ETFs with statements like: ETFs are not necessary because index mutual funds are an available option, behave similarly to ETFs, and can be offered without the major technological evolution required by ETFs. However, looking back at the first principle for the un-engaged participant, the goal is to deliver the best solution at the lowest cost. Since both an ETF and an index mutual fund can track the same index, which is the better investment option for the 401(k) plan? The answer is obvious, lower-cost ETFs.

In **“Debunking the myth that ETFs have no place in 401(k)s,”** Darwin Abrahamson, CEO of Invest n Retire®, elaborates on his reasoning that ETFs are the preferred investment choice over index mutual funds. His position centers on the all-important topic of cost and specifically, the fact that mutual funds have internal trading costs which can be as high as 0.27% (27 basis points), where ETFs have costs nowhere near that high.

Abrahamson states: *“In 1994 John Bogle, Founder of The Vanguard Group, coined the term, invisible costs, in reference to the high costs of trading shares in a mutual fund. Bogle was referring to the fund’s expenditures for trading the securities in the portfolio. In contrast to fund fees, which are reported as the expense ratio, trading costs within a mutual fund are invisible because they are not included in the expense ratio which makes them difficult to assess.”*

These internal costs affect all owners within the mutual fund, no matter if the owner is the buyer or seller of the fund. The costs are incurred from the mutual fund’s trading activity internally (thus the distinction between external and internal transaction costs). These transaction costs arise from trading activity, buying and selling shares internally, which results in paying things like brokerage commissions, “market impact costs” and spreads (the difference in cost between what you can buy and sell something for). You will not be able to find a line item expense anywhere in the fund’s prospectus for these costs. But they do create a drag on your investment returns.

If you were to compare an ETF against a mutual index fund that were both tracking the same index, the ETF would be a better investment, over the long term, in comparison to the mutual index fund because the expenses would be lower, resulting in a smaller tracking error than the index mutual fund. Given this inherent design benefit of ETFs, which allow ETFs to perform better over the long term, ETFs clearly are the better index investment option for 401(k) plans.

### ***Professional investment management by default***

Obvious technological shortfall: *“Would you like to pick your own investments or have a professional investment manager do that for you?”*

Most participants simply do not want to pick their own investments, whether “un-engaged,” or “engaged.” Selecting the proper mix of investments and allocating the right amount of money to each is a task that requires professional training. **Modern Portfolio Theory** teaches us that market timing and stock picking are not the way to generate consistent, long term returns. Yet, most plans continue to force participants to pick their own investments or follow guides to build model portfolios rather than providing them with model portfolios, designed by professionals, to choose from.

Professional investment management has been shown to outperform participant directed investment selection 84.6% of the time,<sup>16</sup> which also leads to higher average portfolio balances;<sup>17</sup> indicating that participants should be defaulted into professionally designed asset allocation models, built using ETFs as the underlying investment options.

### ***Age based asset allocation models over target date funds as a plan’s default option***

Obvious technological shortfall: *“Should your investments be designed to simply target a date somewhere within a few years of your retirement date; or should your investments be designed to target your specific savings goal for your specific retirement date?”*

Target date funds are seen as beneficial because their asset allocation changes over time automatically, from aggressive to conservative. In contrast, asset allocation models, traditionally, appeared inferior because they did not offer an “automatic” change in investments as you age. With the enactment of the Pension Protection Act of 2006, investment managers recognize the value of age-based models which move with participants as they age.

Ideally, professionally designed ETF asset allocation models should be age-based; allowing them to serve as default investment options (Qualified Default Investment Alternatives or QDIAs) for participants. Participants will be defaulted into a model, based on their age, then automatically move from one asset allocation model to the next without initiating any trades themselves or becoming engaged in any way. When focused on the un-engaged participant, age-based model portfolios make perfect sense.

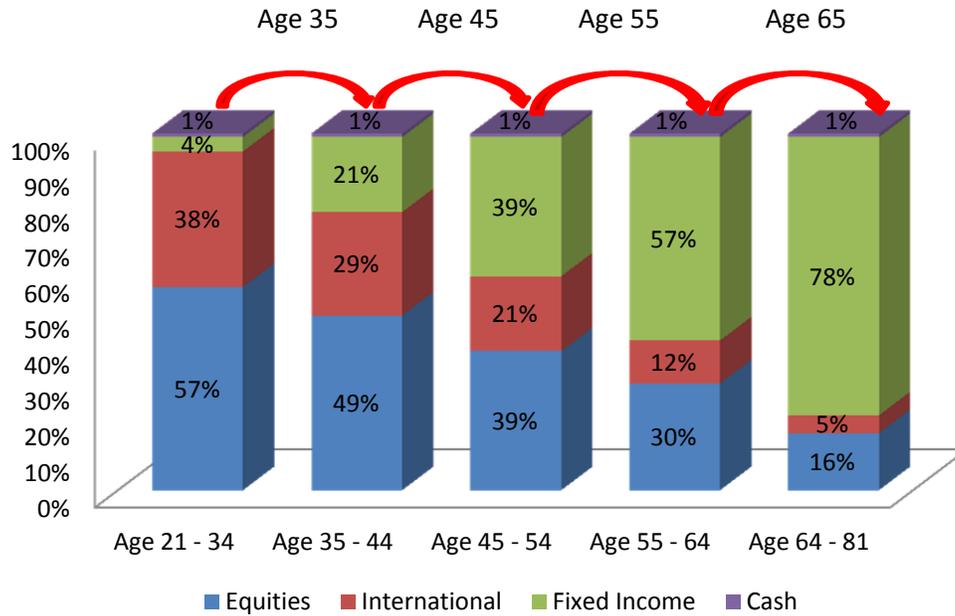


Figure 2: Asset Allocation models that automatically move participants as they age

ETF age-based asset allocation models automatically change allocations over time, similar to Target Date Funds, but with substantially more benefits; low cost and, perhaps more important, ETF models provide an essential element of clarity; something target date funds lack.

This element of clarity highlights a significant difference between Target Date Funds and Model Portfolios. With model portfolios, the historical investment gain or loss for each ETF can be used in order to calculate the historically investment return (rate of return) for the model, which helps participants make well-informed decisions. On the Invest n Retire® (INR) patented system, INR uses the performance information to pre-populate INR’s retirement calculator with the historical rate of return (ROR) for the participant’s model in order to perform projections for retirement savings needs. The participant may also compare the historical return of other models, which the participant may select for comparison purposes, in performing projections.

**Rebalancing Intelligently**

Obvious technological shortfall: *“If rebalancing your portfolio is advantageous to keep investments in line with your risk/reward characteristics, would you like this to happen infrequently and cost you more or would you like for this to happen as often as possible and cost you less?”*

With professionally managed model portfolios, the investment manager factors in the risk/reward characteristics for each model in a specific way, with specific intentions. Keeping the model portfolio in line with this design is important in order to avoid increased risk. For this reason, it is important to keep a portfolio in balance as often as possible and the ideal way to accomplish this feat is to use regular payroll contributions to continually rebalance the model, as Invest n Retire® designed into its patented system (pat. 8,060,248) for managing tax-deferred retirement accounts.

When an employee contributes money to his or her retirement plan, you have an event where money is going into the plan. Currently, the process works in this way; say you're starting a new retirement plan on January 1st. Hypothetically, the investment manager has built you a model portfolio with specific risk/reward characteristics, so your money is allocated across two funds, Fund A and Fund B, each receiving 50% of the money you put into the plan, \$100 each payroll period.

Your first contribution to the plan looks like this:

Date	Fund A		Fund B	
	Value	Percentage of Portfolio	Value	Percentage of Portfolio
January 1 <sup>st</sup>	+\$50	50%	+\$50	50%

Figure 3: Initial Balance

The next time you put money into the plan will be January 15th. Hypothetically, between January 1st and January 15th the value of Fund A tripled. Result: on January 15th, before you make another contribution to the plan, your portfolio is invested 75% in Fund A and 25% in Fund B.

Date	Fund A		Fund B	
	Value	Percentage of Portfolio	Value	Percentage of Portfolio
January 1 <sup>st</sup>	\$50	50%	\$50	50%
Change in Value	+\$100			
New Balance	\$150	75%	\$50	25%

Figure 4: Changing values as a result of market conditions between Jan. 1 and Jan. 15

Now your 2nd contribution of \$100 dollars, split 50/50, would result in the following:

Date	Fund A		Fund B	
	Value	Percentage of Portfolio	Value	Percentage of Portfolio
January 1 <sup>st</sup>	\$50	50%	\$50	50%
Change in Value	+\$100		\$0	0%
January 15 <sup>th</sup>	+\$50		+\$50	
New Balance	\$200	67%	\$100	33%

Figure 5: January 15<sup>th</sup> payroll contribution effect

Although the investment manager intent is to limit your exposure to Fund A and Fund B to 50% each, changing market conditions and additional contributions to the plan put your portfolio in a position of being inconsistent with its risk reward characteristics. For this reason, quarterly rebalancing is necessary.

If the same values above (\$200 in Fund A and \$100 in Fund B) existed at the end of the quarter, how would rebalancing occur? Fund A would sell off \$50 which would then be used to purchase \$50 of Fund B; this is two transactions, each with a cost associated.

When considering a portfolio with a larger number of investments, the negative effects are magnified; portfolios become more out of balance and require more expense due to more transactions needed in order to bring the portfolio back in-line with the risk/reward characteristics of the model (in balance).

A solution to both problems is accomplished through INR's patented technology, referred to as "Self-Aligning Portfolios™." <sup>18</sup>

Think about the example above. Look back at the January 15<sup>th</sup> contribution again; the contribution is going into a portfolio with the following conditions:

Date	Fund A		Fund B	
	Value	Percentage of Portfolio	Value	Percentage of Portfolio
January 1 <sup>st</sup>	\$50	50%	\$50	50%
Change in Value	+\$100		\$0	
New Balance	\$150	75%	\$50	25%

Figure 6: Changing values as a result of market conditions between Jan. 1 and Jan. 15

The patented technology of Self-Aligning Portfolios™ intelligently allocates the contribution going into the plan by **first** valuing the portfolio and **then** determining how the money should be allocated to bring the portfolio back to or as close to being balanced as possible. Rather than splitting the contribution money up 50/50 and continuing to allow the portfolio to remain out of balance with its intended risk/reward characteristics, the portfolio is **first** valued, which shows that Fund A has tripled; so **then** the entire contribution of \$100 will be invested into Fund B, resulting in one transaction:

Date	Fund A		Fund B	
	Value	Percentage of Portfolio	Value	Percentage of Portfolio
January 1 <sup>st</sup>	\$50	50%	\$50	50%
Change in Value	+\$100		\$0	0%
January 15 <sup>th</sup>	\$0		+\$100	
New Balance	\$150	50%	\$150	50%

Figure 7: January 15<sup>th</sup> payroll contribution effect using Self-Aligning Portfolios™

Self-Aligning Portfolios™ offer participants three benefits:

- 1.) Magnifies dollar cost averaging by purchasing more of the shares that are down in value and fewer or none of the shares that are up in value.
- 2.) Keeps the portfolio in balance or as close to achieving alignment as possible with the model's intended risk/reward characteristics.
- 3.) Minimizes the amount of quarterly rebalancing required which reduces transaction cost.

Maximizing benefits and using performance information to calculate savings projection needs, brings true synergy to the sum of the parts of the plan for the benefit of the participants.

### ***Integrated retirement calculator and the engaged participant***

Obvious technological shortfall: *“Would you like to be responsible for entering your personal information and investment target return correctly or should your retirement calculator just do all of that for you?”*

A turn to plan tools means entering the world of the engaged participant; which is to say, exploring how an engaged participant can use plan tools to their benefit. The quality of plan tools means nothing unless they are used. To encourage the use of tools, the tools should be designed to actually do some good, come as close as possible to ensuring that if a participant uses the tools they are better off having done so than they would have been if they had never used the tools at all.

The traditional tools available to participants lack the technological capability of bi-directional integration with payroll providers. If your 401(k) website feels more like an Easter egg hunt than an easy to use and effective retirement planning tool; it probably lacks a basic element of clarity and perhaps bi-directional payroll integration. The finest example of just how unclear and archaic most technology offered in the retirement industry is can be seen in retirement calculators.

Think about a savings goal, say a million dollars. Assuming, only basically, that you can somehow start your retirement planning process with an understanding of what you will eventually need to save. From here, your task becomes, “How do I get there?” Reaching your retirement goal is a challenge.

Using the analogy of an engine, consider an engine’s performance. If you know your destination, getting there becomes a matter of asking, “What type of gas mileage can I expect so I have a good understanding of how much fuel I will need to put in?” In retirement plans, the gas mileage and engine performance equivalent is called “target rate of return;” the rate you expect your account as a whole to grow at in the future.

Once you have an understanding of this “gas mileage” equivalent, you can reasonably determine how much contribution or “fuel” needs to go into your plan. If you have a target date fund, determining your “target rate of return” won’t be easy, in fact, even your financial advisor may not know how to answer that question. But if you hope to use your retirement calculator, its ability to function depends on your ability to figure out target rate of return, otherwise you won’t have an accurate understanding of how much you need to contribute in order to be on track for reaching your retirement goal.

You will quickly begin to understand that the value added by becoming engaged depends on the clarity to see whether you’re on track to realizing your goal and, if not, what exactly you can do to get there.

Where ETF asset allocation models pull away from the status quo towards a real effective solution is how they solve this dilemma. First of all, let it be repeated that, if you own a target date fund (the direction plans are currently heading with increased momentum<sup>19</sup>) you cannot determine your target rate of return! Why?

Because a target date fund is one investment option. It changes its asset allocation over time, depending on a multitude of factors. The primary point of this scenario is there is no way to determine a singular “target rate of return” from this type of investment; thereby, limiting or even preventing you from using the retirement calculator effectively.

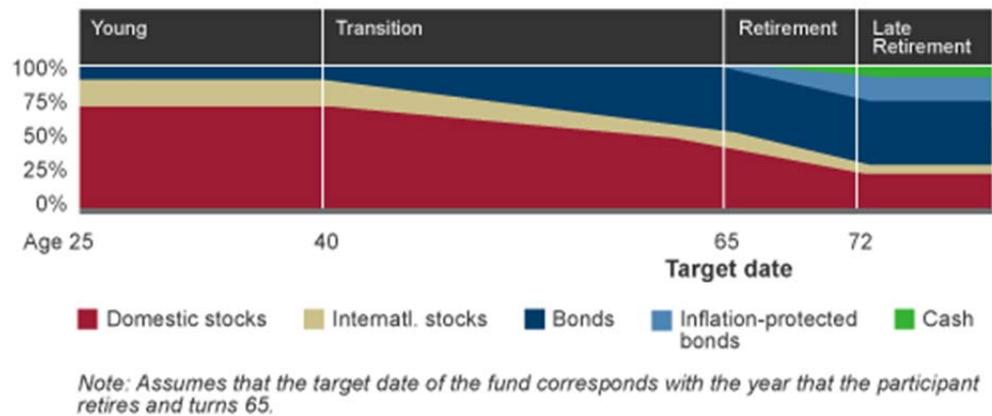
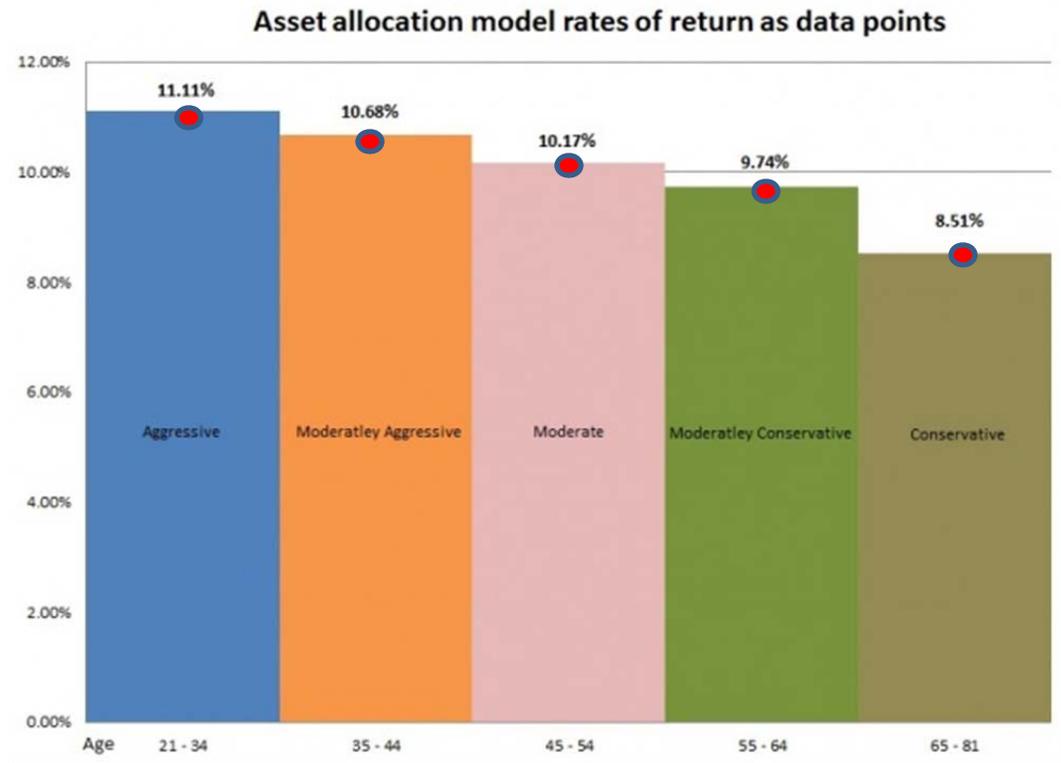


Figure 8: A target date fund’s changing asset allocation over time

Automatically changing asset allocation models, over time, is beneficial for the un-engaged participant. Keeping low cost in mind, let’s say an investment manager designs five age-based ETF model portfolios which range from aggressive to conservative. The un-engaged participant moves from one model to the next automatically over time. For the engaged participant, since ETFs track indexes, the historically long-term performance of the index can be used to calculate the historical rate of return for each model, which the engaged participant can use in the retirement calculator.



*Figure 9: Asset Allocation Model performance history can be used as data points to calculate contribution rate. The asset allocation models and historical returns are for illustrative purposes only.*

Indexes: What you gain by using ETF asset allocation models are data points. Asset allocation models built from index-based ETFs can have their performance history determined based on the historical returns of the indexes (which are long term) (see example above). By appropriately weighting these returns based on the current asset allocation, the information can be wrapped up for the model as a whole, which provides an appropriate long term rate of return which can be used as the target rate of return needed by the retirement calculator.

Finally, the Invest n Retire® patented system integrates the historical return for the model, as the “target rate of return” in the retirement calculator, along with the participant’s personal information; such as salary, contribution rate and employer matching contributions. The calculator then performs its task without manual intervention. If a participant finds that he or she is not on track for retirement, the participant will need to take manual action, by performing tasks which are beyond the control and legality of automation; such as increasing contribution rate, beyond default amounts, or changing asset allocation models to something which doesn’t strictly match the risk/reward characteristics of the participant’s age group.

Aspects for computational consideration:

**Age:** Prepopulated

**Retirement age:** Default to average of 65<sup>20</sup>

**Estimated annual inflation:** Default to average of 3%<sup>21</sup>

**Target rate of return:** Prepopulated from Figure 9 “●” of ETF asset allocation model

**Annual salary:** Prepopulated

**Estimated annual increase in salary:** Default to average of 3%<sup>22</sup>

**Replacement ratio:** Default to average of 75%<sup>23</sup>

**Employee contribution rate:** Prepopulated

**Retirement savings account balance:** Prepopulated

**Employer contribution match:** Prepopulated

*Figure 8: Retirement calculator data elements*

With this information automatically entered, a single click can yield the amount a participant needs to save by the time the participant reaches retirement age. The calculator will also provide feed-back as to whether the current mix of projected investment return and contribution rate puts the participant on track to reach the savings amount needed. If a shortfall exists, minor modifications are all a participant needs to focus on, 4 simple areas of decision that technology absolutely cannot make for someone:

- 1.) Increase contribution rate (exact increase is shown)
- 2.) Change to a model portfolio with a higher historic rate of return
- 3.) Adjust replacement income percent down to retire on less income
- 4.) Adjust retirement age up to retire later

Rather than focusing on input management, that which has been the intent of extensive education under the mutual fund system, plan participants can shift their focus to making small adjustments to their output which requires far less effort and involvement.

Mastering a delivery method incorporating simplicity is paramount for success. Imagine participants going online to use the calculator; maybe increasing their contribution rate, or making other adjustments so they have a better chance of reaching their retirement goals.<sup>24</sup>

***Focused video demonstrations over lengthy investment education***

Obvious technological shortfall: *“Would you rather sit through a 60 minute investment education session or watch a 5 minute video demonstration?”*

401(k) plans are a complicated thing. What makes them complex to the point of nearly guaranteed confusion is their underlying technology; which mandates lengthy demonstration of manual processes on top of already complex education on investments and how to pick them. This confusion usually produces two outcomes; inaction or action resulting in poor choices.<sup>25</sup> There are two fundamentally responsible elements at work here:

- 1.) Underlying technology: What if the technology requires participants to be educated on how to use the technology?
- 2.) Educational approach: How is education delivered to participants?

Dated technology generates dated processes. Some plans require manual enrollment by filling out forms, some require participants to read prospectuses and pick their own investments from a list of 40 fund options, some require participants to read lengthy manuals on asset allocation and market volatility, some require contribute rate changes to be completed by manually filling out sheets of paper and hand-delivering it to HR, and some have impossible retirement calculators that expect the average person to understand projecting investment returns. Each and every one of these manual processes should be seen as detrimental to your plan; the more you have, the worse off your plan -exponentially.

It's true that all manual processes cannot be completely eliminated from a plan, although there is a framework to determine if a manual process is actually needed or not by asking a simple question: “Is this something the participant absolutely must do that technology cannot do for them?” Enrolling in the plan, defaulting into an age-based model portfolio, populating the performance history of that model into a retirement calculator- all things technology can do for someone. Deciding to retire later in life or on less income; these are choices technology cannot make for someone.

Seeing plans in this light illuminates the stage that outdated technology has set for retirement plan professionals. Professionals are acutely aware that the average participant cannot be turned into an investment professional after a 60 minute seminar. Yet, the technology provided to most participants requires them to become investment experts by forcing them to “pick” their own investments. This scenario begs the question, “Just what is all this education supposed to be teaching them?”

Even with the advent of simplified investments, like target date funds, the traditional investment education topics (along with all the others required by manual processes) still dominate the landscape; being required for so long they are ingrained and, as a result, accepted as standard practice. So with years of practice, why is it that investment education still doesn't work? Lou Harvey, CEO of DALBAR®, one of the nation's premier research and due diligence firms explains, *“Continued efforts since 1996 to help participants make informed decisions through educational sessions have been futile.”*

Clearly the problem is fundamental, the “how” education is approached. The point of education is to convey a message and have it be both understood and retained by the recipient. The debate over “how” best to accomplish this is centuries old, originating with great thinkers like Rousseau, Emerson, Pestalozzi, Froebel and more recently by names like Steiner, Montessori, Jung and Maslow; all unanimously identify one common trait leads to genuine success in comprehension; your will to learn.

This will, as it is driven towards inquiry, is unique to each and every individual. As a result, the primacy of standardization to educate someone is fundamentally the incorrect starting point; each person learns differently and in different ways, so the method of tomorrow’s education should be designed with this in mind, rather than how the system standardizes the delivery of information to plan participants.

The result will be a system far more efficient and effective, where participants who decide to engage their plan (the minority as we’ve already established) can do so in a way that gives them exact answers to the exact questions they have; and the nature of these questions can be predicted with a great degree of certainty because they will depend on the depth of understanding required for a participant to gain that “engaged” positive benefit.

This brings things back to technology. The “output” based retirement calculator presented in this paper automates nearly all of the unnecessary, formerly manual processes; leaving only those decisions to be made by manual process that the participant must absolutely perform on their own. By constructing the plan in this way, auto-enrollment, auto-escalation, safe harbor, low cost investments, professional management, age-based asset allocation models and information from each area already prepopulated into the retirement calculator; all the power of the plan is built behind the scenes- and with one click the calculator can show someone if they’re on track or need to make a change.

Clearly, if a participant learns that he or she is not on track for retirement, then education should squarely focus on four areas exclusively so that the participant can make the decision whether to change or maintain their contribution rate, asset allocation model, level of income needed at retirement, or maybe consider retiring later.

Participants have an appetite for information, but they don’t want to receive it in boring meetings or print media. Participants also don’t want to be overloaded with useless and confusing information. Therefore, by focusing on the four factors which each participant must decide allows plans to narrow their educational efforts in the right direction.

Even CNN acknowledges the death of lengthy printed instruction, saying it has “never really worked;” and instead acknowledges a new frontier of immediate, on-demand, effective web-based video instruction.<sup>26</sup> By limiting the range of topics, this simplified approach can be presented in a clear, concise and focused manner through online videos.

In collaboration with Apple®, Medical Media, LLC proved just how effective short videos can be for educating people on some of the most complicated topics imaginable within medicine. Aside from improving a patient’s understanding of complicated topics, doctors acknowledge that despite years of formal standardized education, there are clear benefits of simplified, on-demand, short video

demonstrations to address specific questions relating to complicated topics. Dr. Daniel Price explains this finding in a recent article:

*“All 14 of the health care providers were able to find the brachial plexus within about 15 seconds from the time they placed the ultrasound transducer on the patient’s skin, which is really quite amazing,” Price notes. “The brachial plexus is a relatively subtle and difficult finding, and they were able to find it in less than 15 seconds after a short, two-minute presentation on the iPod.”<sup>27</sup>*

Presenting simplified areas of focus, complimented by an educational opportunity that accommodates unique learning styles and unique questions, offers an effective and efficient way to fill any gap in understanding that would prevent someone from having clarity on what their retirement goals are and whether or not they’re on track to reach them.

Of course, the opportunity to review investment information through online prospectuses, as mandated by the Department of Labor (DOL), and perhaps seeking the advice of a financial advisor may be useful to participants, the mere fact that a plan is now directing its educational efforts to focus on the four factors each participant must decide for himself or herself, assists plans in shifting from old educational “instruction” to the delivery of meaningful and useful information through simple technology which assists participants in making well-informed decisions that are at the core of their retirement success.

### ***Participant Fee Disclosure***

Obvious technological shortfall: *“Would you like to know approximately what your 401(k) plan costs or exactly what it costs you?”*

Fee disclosure has been a big deal for a long time. The Department of Labor under President George H.W. Bush first started pushing for fee disclosure. Then with the election of President Bill Clinton fee disclosure was pushed to the back burner, as part of deregulation, until President Barack Obama took office. With the passage of ERISA §404(a)(5) plan sponsors will be required, starting April 2012, to disclose to participants the fees they pay for plan services. You may wonder why it took so long since it’s obvious that most people want to know how much something costs. Part of the delay relates to the fact that mutual funds have different types of fees; including, hidden fees which are difficult to uncover.

Hidden fees, often referred to as “revenue sharing,” may be used for payment of marketing, bonus compensation, syndicated distributions, sub-transfer agency fees, networking fees, and “other” revenue sharing payments. This type of payment conflicts with shareholders’ interests as they directly reduce assets and returns, and many believe they should be prohibited as a result.<sup>28</sup> Not surprising, mutual fund companies are fighting hard to avoid fully disclosing revenue sharing payment arrangements; which may dilute fee disclosure to merely listing charges for plan services “per \$1,000 invested” rather than disclosing in dollars and cents the actual amount each participant is paying from his or her account for services provided to the plan.

A practical way to avoid addressing complexities surrounding concealed investment costs is to eliminate those hidden fees altogether; something which can be accomplished by using ETFs, which have no revenue sharing or hidden fees. On an ETF platform all expenses would be deducted directly from the plan and easily disclosed in totality on participants quarterly statements; not in an amount per thousand or some other derivative formula. In this way, each participant sees the cost he or she pays for the services provided and the investments chosen, full transparency in dollars and cents.

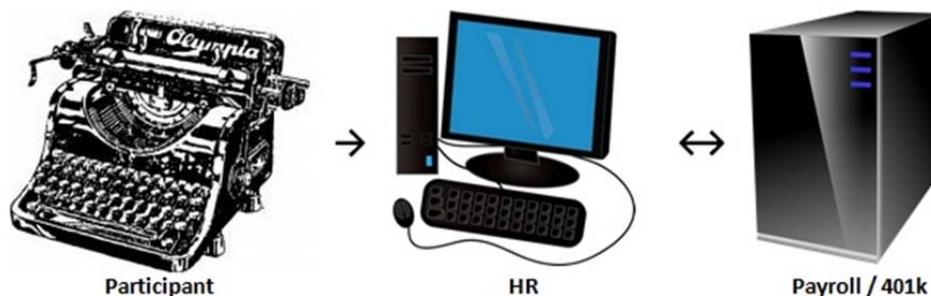
### **Payroll integration**

Obvious technological shortfall: *“When you make a contribution rate change online, would you like that change to take effect in a few days or instantly?”*

In the world of low-technology manual-task ridden headaches, few administrative aspects can compete with the duties of HR/Payroll. As eluded to above, under the current structure, some processes are so outdated that people literally have to print and fill out a form to change their contribution rate. Those that claim to have “improved” this process offer an ability for participants to change their contribution rates online; obviously a step forward by comparison- but both pieces of information still land at the same place; the doorstep of HR/payroll. Upon arrival, one could say that “step 1” is complete; a participant has changed his or her contribution rate. However, there are still a few steps remaining before the change takes effect.

Step 2 involves HR/payroll receiving the information. Step 3 is the act of HR/payroll either notifying the payroll provider of the change, by phone or email, or HR manually enters the change into the payroll system. With email and phone notification, a few more steps are required. Step 4 involves the payroll provider receiving the change request. Step 5 is the act of the payroll provider manually entering the contribution change into the payroll system.

Can you imagine what this must be like at a large company? Contribution rate changes are just one piece of the puzzle, when you factor things like loan payments and other changes; at least 5 steps for each, clearly there is room for improvement. Required manual processes reflect cause and effect: technological limitations of out-dated record keeping systems and non-bidirectional payroll integration demands manual processes.

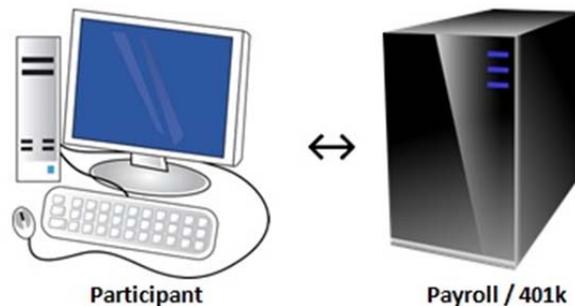


*Figure 10: The manual participant / manual HR model*

A benefit of modern technology is integration. Someone using a Microsoft Xbox gaming console can now play games from Atari in the 1980's, then go on the internet and start a Jacuzzi at their home on the other side of the world, all because of seamless integration among many platforms; an afterthought benefit of today's programming capabilities. 401(k) and bi-directional payroll interaction have no reason to behave any differently, and integration delivers benefits which makes everyone's lives easier.

Beware of claims of functional integration by some payroll providers and record keepers. True functional integration is rare since it involves "bi-directional" data flow capabilities; meaning that the record keeper and payroll provider can quite literally talk to each other and share information in real time.

For example, you go online to your 401(k) Website with the intent of changing your contribution rate. After seeing your current rate, maybe 6%, you decide to change it to 7%. You enter the new amount and click "submit." The change bypasses your HR payroll department and goes directly to your payroll provider where it is updated instantaneously in their system. Simultaneously the confirmation of your change is returned and presented on the Website; and all the work is done, instantly.



*Figure 11: The automated participant / automated HR model*

The administrative time savings annually from bi-directional payroll integration with your 401(k) record keeper, for the average small company, is in excess of 100 hours (that's about 2.5 weeks of work per year). For larger companies, the benefit could be much more substantial.

This process allows for real time updating when changes are made, such as in the use of an integrated retirement calculator. The moment an increase in salary is recorded in payroll, the new salary is automatically updated in the participant's personal information in the retirement calculator, no manual process required. This ensures that everyone at all times e has current, accurate and usable information with as little work as possible.

## **A win for employee and employer**

Obvious technological shortfall: "Would you get more benefit from having a higher cost plan with a lot of manual work or a lower cost plan with almost no manual work?"

Up to this point, the focus has been on improving the participant experience. While improving this experience through technology, companies also derive significant benefits with lower cost, reduced

liability, decrease workload, and improved compliance. Now the HR/payroll departments can take a back seat with the elimination of numerous manual tasks once required in order to implement various participant requests.

### ***There is automation***

Plans sponsors often fight an uphill battle in their attempt to increase participation in the company's retirement plan. To initiate the enrollment process, a company starts with an enrollment meeting and stacks of paper. The first problem employer's encounter is the requirement that employees must make decisions about how much to contribute and what investments or model portfolio to choose. Studies have found that employee behavior is typical in these situations and inertia kicks in with employees doing nothing.

Why not make increasing participation easy with automatic enrollment? With automatic enrollment, employees are automatically enrolled at the default contribution rate and invested in the default investment option or default model portfolio. Now, all an employee has to do to increase the benefit of participating is to become engaged in the process.

### ***There is fiduciary relief***

Professional investment managers, who design and manage age-based model portfolios (Qualified Default Investment Alternatives), often act as an ERISA §3(38) investment manager. Plan sponsors may transfer their fiduciary responsibility and legal liability for selecting, managing, and monitoring the investments to an ERISA §3(38) manager when the manager accepts this responsibility in writing.

Plan sponsors often misunderstand that, unless the investment advisor is willing to accept the responsibility and legal liability for the investments –in writing, the sponsor has not transferred this responsibility to the advisor. In fact, the liability for the investments is usually never transferred from the plan sponsor to an investment advisor since most advisors are unwilling to act in the role of an ERISA §3(38) investment manager.

It is easy to understand the reason for this confusion since logically anyone would assume that if you hire a professional to make investment recommendations, that professional would be held accountable for those recommendations. However, that is just not the case.

Instead, the responsibility and legal liability remains with the named fiduciary of the plan who may also sign and file IRS Form 5500 and any other person who may participate as a member of an Investment Policy Committee (IPC). Therefore, it is important for plan fiduciaries, who are by default responsible and legally liable for the investments, to understand the different responsibilities investment advisors will accept as compared to the responsibilities an ERISA §3(38) investment manager will accept.

***There is thorough Due Diligence***

Since the plan sponsor can never delegate away its fiduciary responsibility (and legal liability) for appointing the ERISA §3(38) investment manager, the sponsor is obligated to document its due diligence process in: (a) selecting the 3(38) manager and (b) monitoring and reviewing the manager. The DOL has issued minimum due diligence requirements which a manager must meet before the sponsor can transfer the responsibility and legal liability for the investments to the manager. For plan sponsors, unfamiliar with the DOL's requirements for §3(38) managers, attempting to perform the due diligence process can be daunting.

There is an alternative available to sponsors. Plan sponsors can hire an investment manager that has already undergone an extensive due diligence process by either the Centre for Fiduciary Excellence (CEFEX®); Roland/Criss® or DALBAR®. Each of these organizations not only meet the DOL's minimum requirements, but generally exceed them. For ongoing monitoring, ERISA §3(38) investment managers typically maintain their certification by undergoing an annual review by the organization that certified them. This annual review furthers assists sponsors in documenting their ongoing obligation to monitor and review the manager.

***The plan is low cost***

Speaking of fiduciary duties, making sure costs are reasonable is a top priority. You could battle for a better mutual fund share class, but with ETFs that's not necessary since ETFs are the lowest cost investment options available.<sup>29</sup> When you consider that the overwhelming cost of a retirement plan is the expense associated with the investments, using low cost ETFs seems obvious since the plan can drastically lower its total, "all-in" cost. In fact, using ETFs can easily reduce the total cost by half.<sup>30</sup> Now, before you start screaming "low cost is not always the best solution," followed by some catchy story about a mutual fund that performed well this year, consider performance as a whole; bad performance is bad for a plan (another liability) good performance is good for a plan (reduced liability).

***The investments have better performance on average***

As mentioned previously, ETFs track an index and compared to actively managed funds, regardless of which study you cite, ETFs are unquestionably a better performing investment compared to actively managed mutual funds. And, the range of ETFs available enables an investment manager to diversify model portfolios across a broad spectrum of market segments allowing asset allocation policies to be implemented with precision.

The methodology of diversification is a widely regarded and accepted principle of asset allocation known as **Modern Portfolio Theory (MPT)**, as pioneered by the esteemed **Nobel Prize** winning economist, **Harry Markowitz**. In 1952 Markowitz demonstrated that there is an "efficient frontier," a point where the maximum return can be achieved for a specific risk level. Reaching this efficient frontier comes from asset allocation and as the Brinson Study outlined long ago, nearly 94% of historical investment returns have come from asset allocation (owning the right mix of stocks and bonds), while around 6% of historic returns have come from market timing- picking the hottest investment.

***Adding a Safe Harbor avoids testing***

By adding a Safe Harbor matching contribution provision, ADP and ACP testing can be avoided. This means that even high income employees can contribute the maximum amount to the plan without going through the hassle of having contributions returned at the end of the year. Companies also receive the benefit of tax deductions for matching contributions, as well as adding a feature to attract and retain quality employees.

***The plan is compliant with fee disclosure***

The recent DOL regulatory changes, known as Fee Disclosure, provide irrefutable evidence that the world of retirement plans is in need of some major changes. If you've heard, "everything's alright," or "there is nothing to worry about" or "we're taking care of it," think again. It is estimated that companies will spend an estimated 39 hours in order to address fee disclosure.<sup>31</sup>

If everything was just "alright," the DOL wouldn't be taking unprecedented steps to force every single company in America to thoroughly examine their retirement plan; specifically with regard to understanding and examining a wide array of previously hidden fees and activities that negatively affect retirement plan returns and are only now being disclosed as a result of federal intervention.

There are two regulatory components at play here, 404(a)(5) and 408(b)(2). 404(a)(5) mandates fees charged and deducted from participants accounts for plan services. 408(b)(2) mandates that plan sponsors obtain, verify, and assess the fees charged for services provided to the plan by each service provider and further, that sponsors confirm the reasonableness of the fees charged for the services provided. Dalbar® estimates that the average small company will need to spend around 39 hours annually to ensure that their plan is compliant; which includes the time and expense of learning compliance requirements, securing the information required to comply, determining accuracy and completeness, accessing success of the plan as a result, assessing necessity, assessing cost through benchmarking and comparison and finally, assessing the reasonableness of services and costs.

Since ETFs have no hidden fees, using ETFs as the investment of choice means there is nothing hidden so there is nothing to verify. On an ETF platform, fees are a direct deduction from plan assets instead of a payment to the service provider or other third party from fees charged within the investment (revenue sharing payment arrangement). As illogical as this may sound, some plan sponsors believe that it is better to choose the highest cost investments, which pay the most revenue sharing, under the misguided belief that this arrangement makes the "cost for managing the plan fee."

Eliminating hidden fees simplifies the reporting requirements for disclosing the cost, in dollars and cents, to participants on their quarterly statements; resulting, in full fee transparency. The ideal 401(k) plan will require information to be fully disclosed, not simply as a basis for understanding, but so that the information can be useable, allowing an entirely new experience for someone using the plan to save for retirement.

## Signs of optimism

The investment world is changing. The era of mutual fund dominance is starting to show measurable signs of approaching dissolution. In the beginning of 1984, mutual funds had no assets in retirement plans. A couple of years later after the completion of the record keeping programming necessary to make mutual funds available in retirement plans, it took little over a decade for mutual funds to become the largest segment of assets in retirement plans (1996).

This sharp rise in asset accumulation within retirement plans paralleled that of conditions for the U.S. market as a whole, which saw steady new cash flows into mutual funds for another decade, until peaking in 2007.<sup>32</sup> What followed, for the overall U.S. market, was an exceptionally steep decline in mutual fund assets, with assets flowing out of mutual funds at an ever increasing pace.

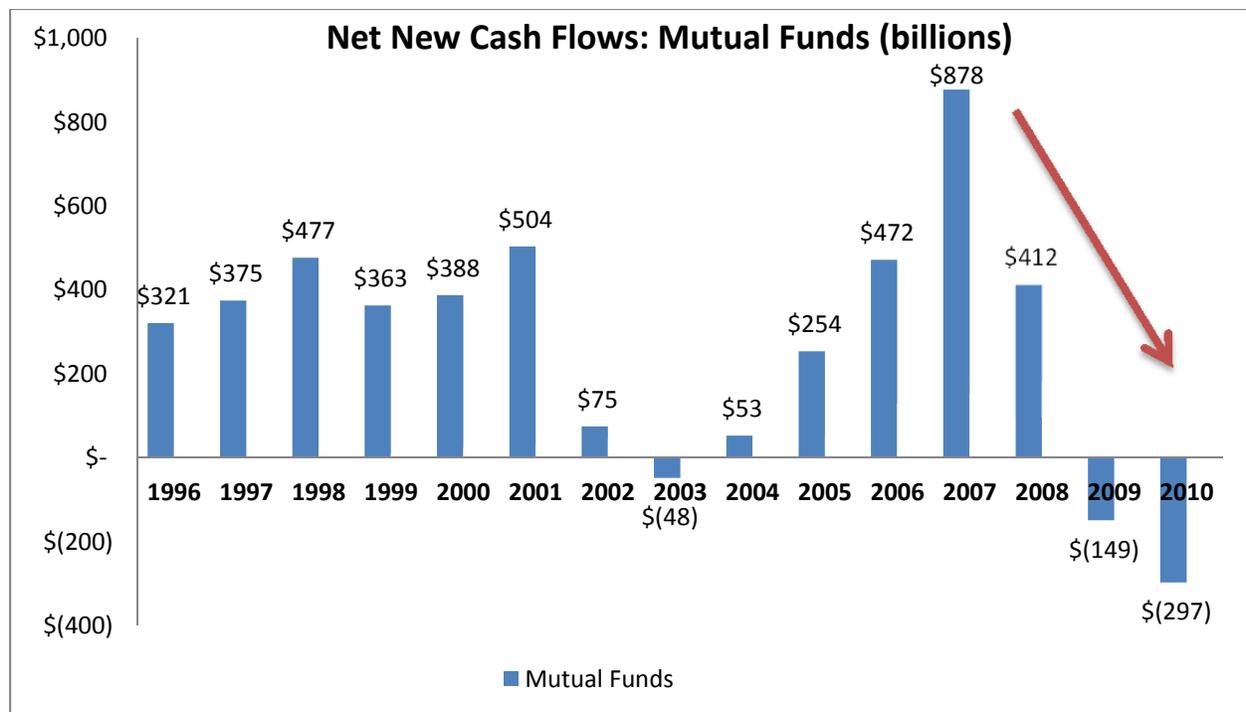


Figure 12: Mutual Fund net new assets in billions of dollars.<sup>33</sup>

Where was all this money going? The answer is into ETFs, which despite the volatile market conditions of 2008, continue to see record setting positive cash flows, indicating that the market was experiencing a committed process of fundamental change.

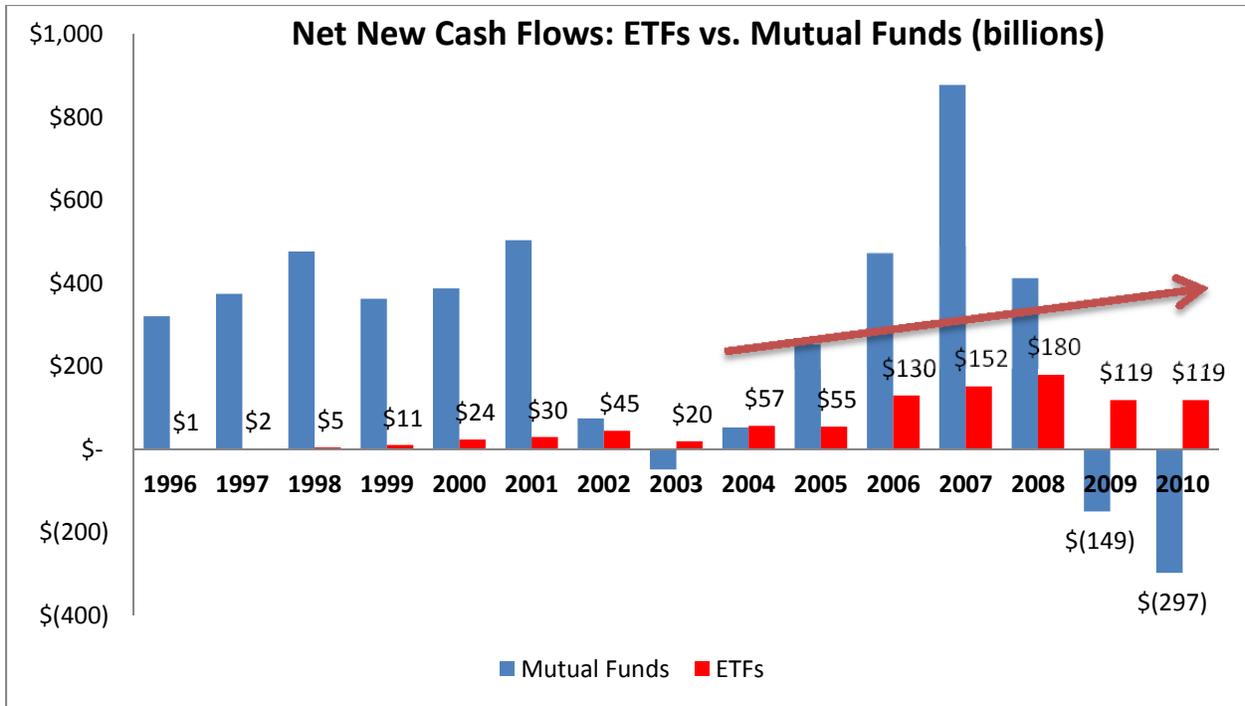


Figure 13: ETF<sup>34</sup> vs. Mutual Fund<sup>35</sup> net new assets in billions of dollars.

There is evidence that the momentum of this fundamental change is building. Since 1996, ETF assets have grown nearly 1000%, dwarfing mutual fund asset growth by comparison.

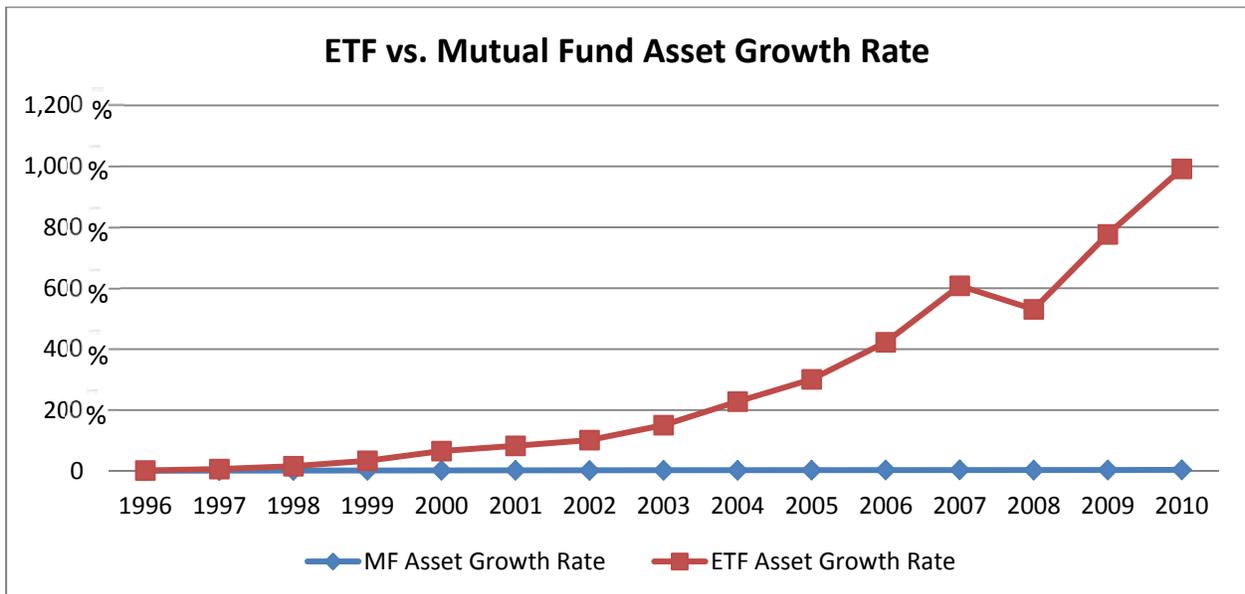


Figure 14: ETF vs. Mutual Fund asset growth rate.<sup>36</sup>

The result has been a growth in assets for ETFs that increased from around \$1 billion in 1996, to \$1 trillion at year end 2010.

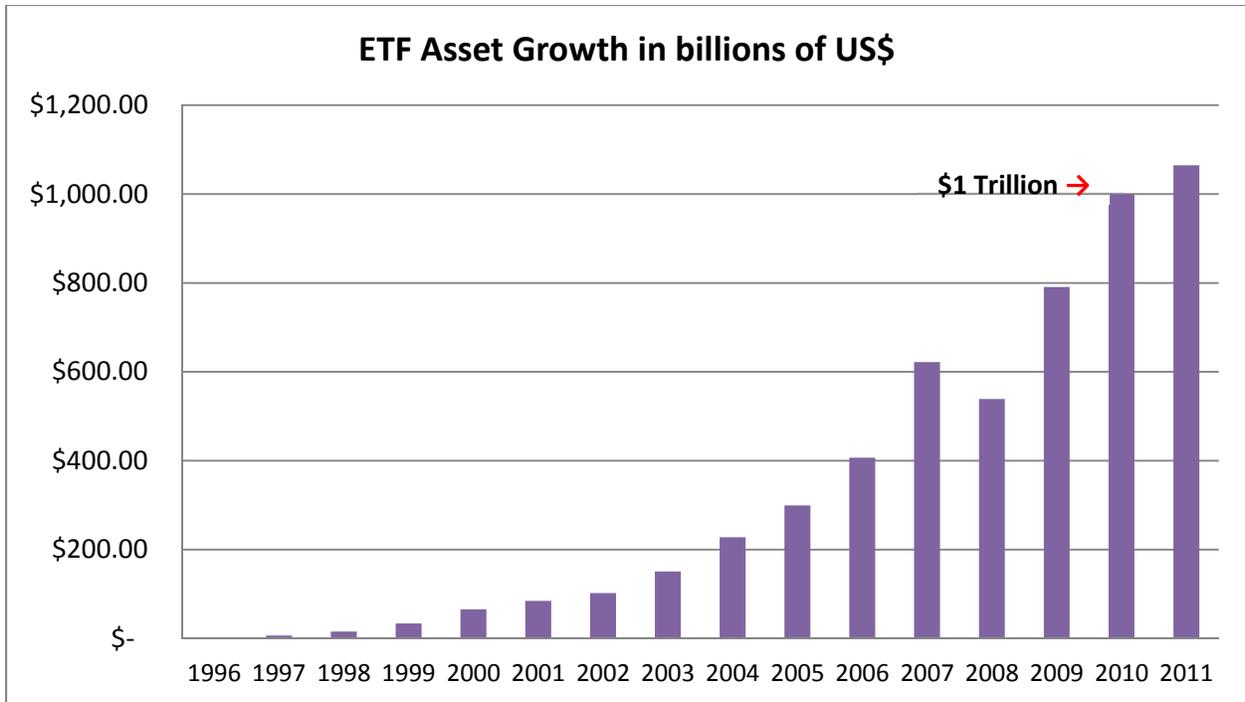


Figure 15: ETF Asset growth in billions of dollars.<sup>37</sup>

Finally, this surge in assets in ETFs has been accompanied by a rise in popularity, as indicated by Google® Trends.<sup>38</sup> Just as 2008 saw the beginning of massive capital outflows from mutual funds, it was also the year that the search volume index for ETFs exceeded that of mutual funds (Fig. 16 Location A), a shift of preference that continues to this day and has been accompanied by a spike in news reference volume as well (Fig. 16 Location B); ETFs are catching headlines and gaining in popularity.

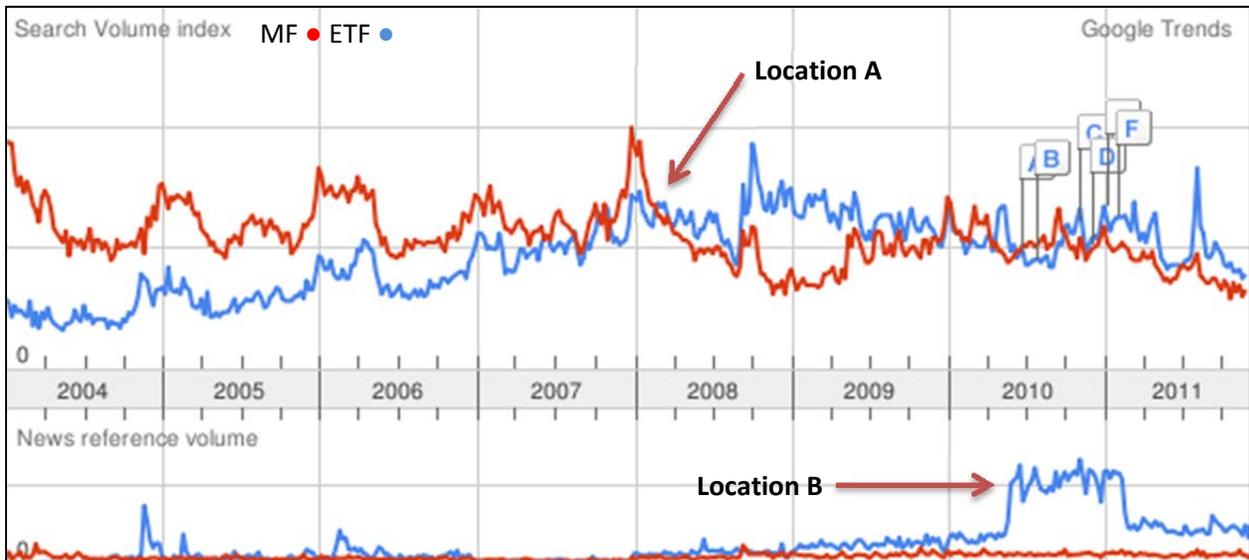


Figure 16: ETF rise in search volume and news reference volume compared to mutual funds.<sup>39</sup>

The result of all this change has been an ETF asset presence that is approaching 10% of U.S. investment company total assets at year end 2010, a rise of 26% from year end 2009.<sup>40</sup> However, in retirement plans, ETFs make up less than 1% of assets, a disparity distanced 10 fold from the mainstream market.<sup>41</sup>

What can be seen is that mutual funds are losing assets and popularity. The market is heading unquestionably in the direction of ETFs with ever greater momentum and there is no indication that this will change. As a result, it is unrealistic to expect that mutual funds will retain their asset dominance in retirement plans for much longer.

## Summary

The retirement industry has been suspended in a time warp, operating on antique systems developed in the '70s. With INR's patented technology the industry no longer has to be constrained, moving forward with modern technology and better investment choices -ETFs.

INR offers plan sponsors and participants a new experience: a modern record keeping system that trades and record keeps the fastest growing investment vehicle in history -ETFs, eliminates manual processes for all parties involved in the process (participants, sponsors and service providers); while at the same time, providing plan sponsors with a system that facilitates the transfer of their fiduciary responsibility and legal liability for the investments to an ERISA §3(38) investment manager.

*Our approach to solving the countless problems facing the retirement industry is unprecedented.*

Darwin Abrahamson

## Conclusion – Joe's company switches to an ETF 401(k)

Remember Joe Employee? His company switched to an ETF 401(k) plan several years ago. As Joe is relaxing at home with his family watching the news, stories about the troubled economy in Greece and Europe are splashed across the screen. While confusion and worry spread across the Euro-Zone with reports of an eminent recession, Joe starts to worry that these events might be impacting his finances.

Thinking about the last time he checked his 401(k) account, Joe reaches for his iPad® and clicks the app for the 401(k) site. To find out if he is still on track, Joe jumps to the retirement calculator, checks the pre-populated information and clicks next. Joe discovers that, in spite of stories of pandemonium in the financial markets, his account has only been minimally affected.

The screen shows that in order to stay on track, Joe should consider increasing his contribution by 1%. Joe goes to the previous screen and increases his rate 1% higher, clicks next and sees that by making that simple adjustment he is estimated to have a slight surplus at retirement. This is a no brainer for Joe. He clicks the button at the bottom of the screen and lands on the contribution change screen. Joe makes his change request to increase his contribution rate by 1%, hits submits, receives a confirmation, logs out and returns to his family.

This is how we all interact with almost every facet of our lives -finding information and giving instructions quickly and easily over the Web. Isn't it about time 401(k) plans came up to speed?

## About the Author



Neil Plein is Vice President of Invest n Retire, LLC, a Portland, Ore. Based 401(k) record keeper specializing in offering ETFs to defined contribution plans through its patented technology for managing tax-deferred retirement accounts (patent US 8,060,428). Neil's passion is working to find the best macro solutions that genuinely help participants. He studied at Reed College, The University of Oxford and also worked at several major broker-dealers, including Merrill Lynch. Drawing on a background of high level excellence in academic and professional research, analysis and clearly presented solutions, Neil is a firm advocate of truly positive evolutions.

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