For many investors the task of hitting an investment target feels more like an art rather than science. Many average or beginner investors understand that they have to invest for their future, and they likely have one or multiple investment accounts. Despite this good effort, some lingering questions often remain:

1. What really is the target goal and how do you know you're going to actually hit it?
2. How do you know that fees are not going to kill your long term investment strategy?
3. How do you ensure you're properly diversified and what kind of risk can you tolerate?

Fortunately there are now investment services that have sprung up recently to help provide some answers to these nagging question and a popular one available right now is an automated investment service called Betterment.

Automated Investment Service

Betterment is an investment service that makes investing easy and cost effective. Naturally Betterment is not the only service like this out there; there are a number of them on the market today that comprise a group of investment services termed "Robo-Advisors" These software services, backed by some sophisticated algorithms, have been around for some time but it hasn't been until recently that they are widely available to the general public.

So how does Betterment answer some of these questions?

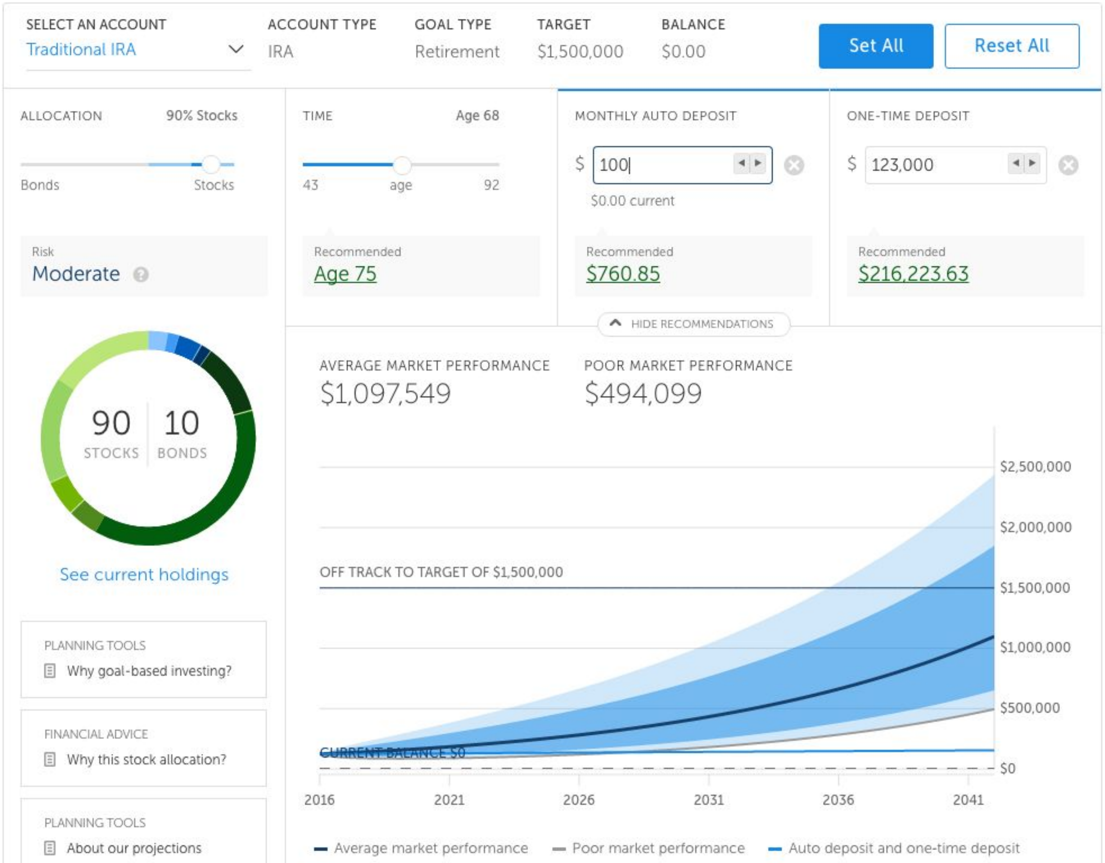
Target Goals

Betterment is completely goal driven. Typical goals include events such as retirement, building an emergency fund, or saving for a child's education. Once Betterment knows an investor's goals, time horizon, target balance, and age, it can calculate the probability of actually hitting that target.

For example, suppose an individual investor (John P.) has a traditional IRA with a value of $123,000 that he wants to rollover into Betterment. His age is 39, he wants to retire at 68, and his current gross salary is $105,000. Here is what Betterment does with this information:

- Age → Calculates a time horizon of 29 years
- Time Horizon → Identifies a risk profile (low, moderate, high) and asset mix
- Salary → Calculates a target living expense and required savings balance ($1,500,000)
- Target Balance → Factored into risk profile and asset mix

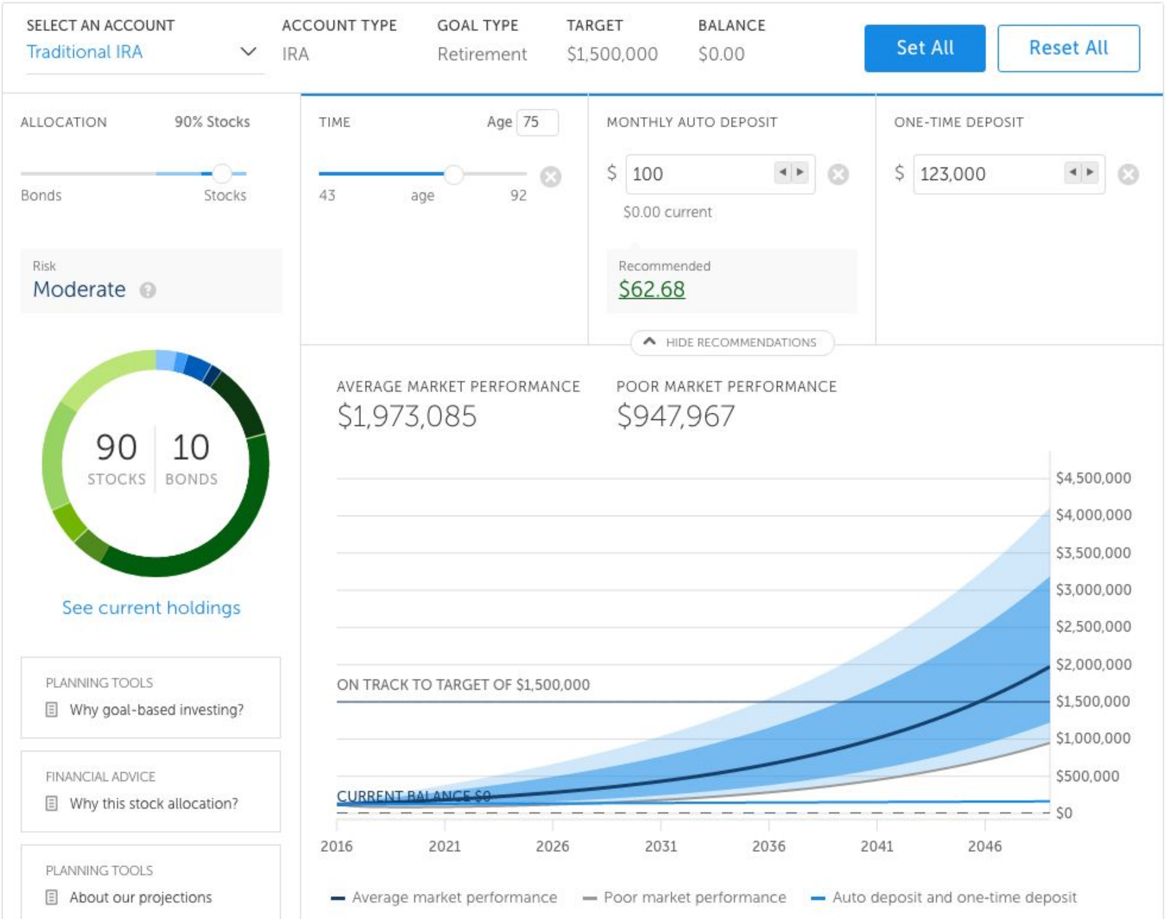
The image below is the advice tab that Betterment provides showing the likelihood that John will hit his target retirement balance of $1,500,000.



A couple things to note within the figure. First, Betterment has calculated a moderate risk profile based on the time horizon and target balance. It also has advised a 90/10, stock/bond asset mix. The graph with blue lines is depicting a set of probabilities of hitting the target, and based on the information entered here, the probability of hitting a $1,500,000 retirement balance is relatively low unless the market does amazingly well.

This kind of information is determined in a matter of minutes and is backed by some pretty sophisticated investment algorithms. These projections are not a guarantee of hitting any particular goal, but they are a strong indication of potential performance while providing an objective assessment of the likelihood of hitting an investment goal.

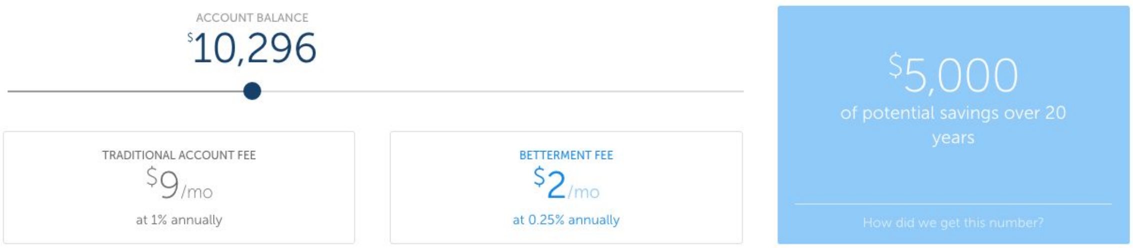
The last thing to notice in the figure above is that Betterment is providing a recommended retirement age of 75. What Betterment is indicating is that if John defers his retirement until age 75 (instead of 68), he's much more likely to hit the $1,500,000 target. The figure below shows what the graph looks like with the retirement age tweaked from 68 to 75. Now the graph indicates that the probability of hitting the goal is significantly higher.



Fee Transparency

One of Betterment's major selling propositions is its ability to provide fee transparency. Fees are something often overlooked by beginner and hands-off investors. What often comes as a surprise though is how much money can actually be saved or lost by just 40 or 50 basis points.

According to Betterment's website, many typical mutual fund fees can come close to a 1% of the total portfolio. Betterment advertises a total cost for a typical 70/30 stock portfolio of low-cost ETFs to run close to 0.31%. To a new investor, fees of 0.3%, 0.4% or 0.5% may not seem like much, but when factored against time they have a dramatic impact over the life of an investment. In the next figure, Betterment's web site helps visualize this point.



In this example, for a modest investment of about $10,000, the difference between a 1% account fee and a 0.25% fee can save an investor up to $5K over 20 years. For a $100K investment, up to $55K can be saved, and a $500K investment can see savings close to $280K.

Betterment's fees can be broken down into management fees and fund fees.

Management Fees

Balance	Fee Rate
X < $10,000	0.35%
$10,000 < X < $100,000	0.25%
X > $100,000	0.15%

The management fee includes everything including advice, trades and transfers.

Fund Fees

Each of the ETF funds that make up the Betterment index-fund portfolio have an expense ratio that is typically between 0.09% - 0.17%. This is a cost that an investor would pay regardless of which brokerage the fund was purchased through.

Index Fund Portfolio

Betterment's investment portfolio consists of 12 index tracking exchange traded funds (ETFs). The goal is to maximize diversification while keeping fund costs low and investor assets highly liquid.

This basic set of 12 funds can seem quite limited compared to a traditional brokerage that offers hundreds of investment vehicles to choose from. Certainly this can be a con for those investors who want to be more hands-on. But Betterment is able to combine these 12 funds to provide the appropriate asset allocation for an investor's calculated risk and potential return.

Again Betterment makes it easy to visualize this. Take the example of John P. again. As shown in the next figure, the Betterment advice tab is showing 90/10, stock/bond portfolio mix, set at a moderate risk level, giving John a decent shot at making his goal of $1.5M by age 75. In seconds John can see his portfolio allocation.

HOLDINGS	CURRENT WEIGHT
US Total Stock Market: VTI	16.2%
US Large-Cap Value: VTV	16.2%
US Mid-Cap Value: VOE	5.2%
US Small-Cap Value: VBR	4.5%
Developed Markets: VEA	37.5%
Emerging Markets: VWO	10.5%
US High-Quality Bonds: BND	3.2%
US Corporate Bonds: LQD	1.7%
International Bonds: BNDX	3.6%
Emerging Markets Bonds: VWOB	1.6%
Total	100%

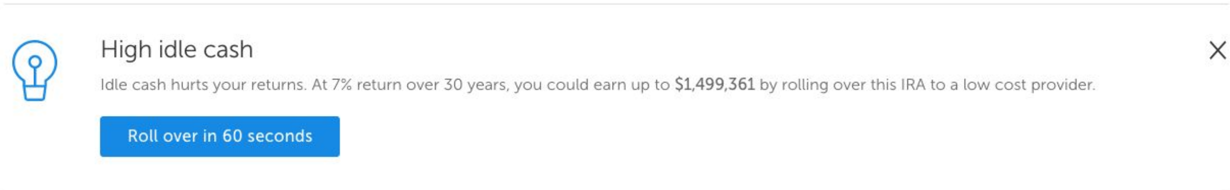
Even though there are only 12 funds, this portfolio is highly diversified. Additionally, each fund is highly-liquid, and the fees are very competitive. Though not for everyone perhaps, sometimes simple is better.

External Account Linking

Continuing on the theme of advice, another Betterment feature that investors may find helpful is the ability to link with existing external investment accounts. Once the linking process is complete, Betterment can provide some insight into two important factors:

1. Total fees per year, and whether a move to Betterment could improve the investment
2. Amount of idle cash in the account and how this is affecting account performance

Once linked, at the top of the external account web page Betterment will summarize any improvements that can be made, and provides a streamlined process to start the transfer or rollover process.



Take Away

Betterment brings sophisticated, low-cost, highly-diversified passive income strategies to the average person. The service is online 24 x 7 and available on both desktop and mobile devices. Its user interface is simple, clean and elegant. Important investment questions can be answered within minutes. Fees are transparent and highly competitive. Portfolio allocations are objective and backed by solid investment algorithms that have been around for years. If you're looking for a simple, cost-effective solution to the relatively complex task of financial investment, Betterment may be worth a second look.