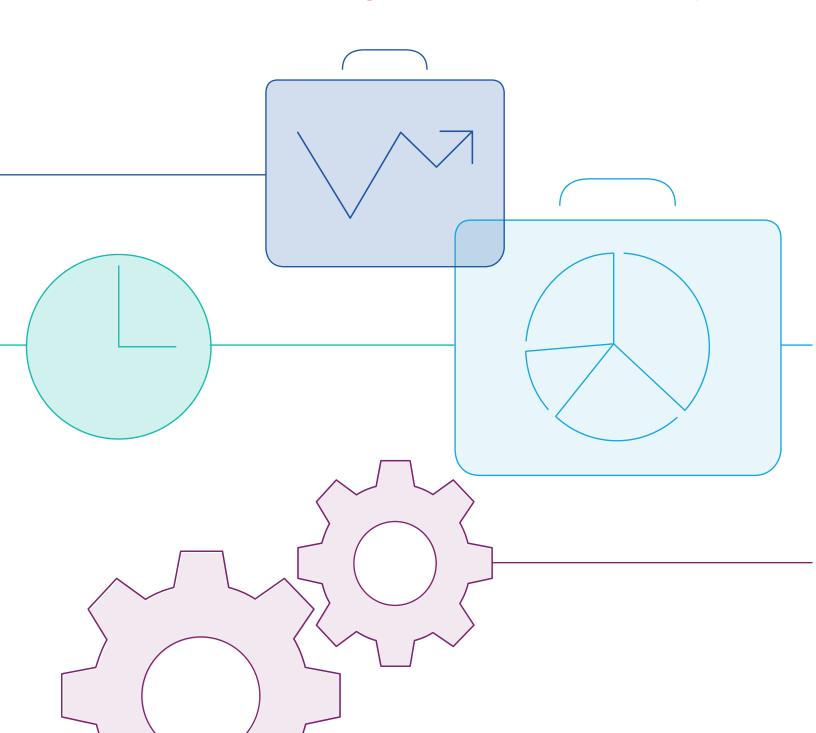


Measuring the Return on Technology Investment:

Morningstar Total Rebalance Expert



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Investment advisors need technology to manage and grow their practices. But many advisors are reluctant to take on new technology due to the cost and time involved, along with uncertainty around the benefits. Even if an advisor is willing to consider new technology, the sheer number of tools and platforms offered can make decisions frustrating and, for some, not worth the effort.

For the majority of investment advisors, rebalancing is the most time-consuming and error-prone part of the business—advisors can spend up to an hour per client on it per rebalance. When time is precious, why haven't advisors jumped to automate rebalancing? The answers might be as simple as cost and complexity.

Morningstar® Total Rebalance Expert® can solve the rebalancing dilemma for advisors. Total Rebalance Expert is tax efficient auto-rebalancing software, designed by CPA and advisor Sheryl Rowling to simplify portfolio management. Using the web-based Total Rebalance Expert, advisors can manage accounts anytime, anywhere on any device. We took a look at Total Rebalance Expert to quantify and illustrate the benefits, relative to cost, for advisors using it. This study was based on a survey (March 2018) and interviews with current users of Morningstar Total Rebalance Expert.

Determining the return on technology investment for any software product presents a challenge. The costs of purchasing, installing, and implementing technology may seem easily quantifiable; but there are many additional soft costs that should also be considered. These costs may include:

- ► Software purchase price or license fee
- ► Hardware purchase, replacement or upgrades
- ► Installation
- ► Training
- ► Support
- ► Personnel time (principals, employees, outside contractors)
- ► Administrative costs

Measuring the value of new technology can't always be based entirely on monetary units. You might also consider:

- ► Decreased personnel time (principals, employees, outside contractors)
- ► Fewer errors
- ► Greater quality control and consistency
- ► Greater responsiveness to client needs, market changes
- ► Greater tax efficiency
- ► Better client satisfaction
- ► Increased assets under management and revenue

Through a detailed survey of our clients and interviews with a random sample of 20 users, we will attempt to quantify the return on technology investment of Morningstar Total Rebalance Expert.

Portfolio Management Challenges

Many investment advisors seek to achieve clients' risk/return goals through asset allocation. But that takes more than just an initial allocation. To maintain consistent risk/return parameters, periodic rebalancing is necessary.

Regular rebalancing can enable the portfolio to capture increased returns (buying low and selling high) while reducing exposure to excess risk (like volatility) and possibly avoiding diminished long-term returns (due to increased volatility). Unfortunately, most advisors attempt rebalancing using only rudimentary spreadsheets and hand calculations.

When rebalancing by hand, advisors are limited by capacity. The advisor must choose between increased complexity and time-consuming calculations, rebalancing less frequently or even simplifying the calculations (for example, by ignoring tax-saving strategies). Most advisors rebalance on a periodic cycle, typically one to four times per year. Advisors may also rebalance when a client need arises, such as a significant cash withdrawal or contribution.

Advisors generally harvest tax losses annually, at the end of each year. If capacity were not an issue, rebalancing would consider the following parameters:

- ► Minimizing transaction costs
- ► Avoiding redemption fees
- ► Minimizing gain recognition
- ► Avoiding short term capital gains
- ► Avoiding wash sales
- ► Location optimization (household level rebalancing)¹

With these factors to consider when rebalancing, it is difficult for an advisor to make consistent decisions client by client. It's also difficult to enforce consistency among multiple advisors in a firm. Written policies and procedures may be helpful but can't guarantee against human errors and inconsistent judgment calls.

Finally, since most advisors wish to grow their practices, spending more time on rebalancing could significantly impact capacity. With a limited number of available hours and a shortage of talent, the advisor could be faced with limiting growth or sacrificing quality. Neither of these are good options — especially when you consider the glut of commission-generating brokers competing for clients.

Manual rebalancing is virtually impossible when considering transaction costs, redemption fees, gain minimization, short term gain avoidance, wash sales, cash needs and location optimization in addition to maintaining consistent management. Automated portfolio management utilizing Morningstar Total Rebalance Expert has shown to solve this challenge.

A client with several accounts, including taxable, non-taxable and/or tax-deferred accounts, can benefit from location optimization strategies. For example, rather than hold ordinary income producing bonds in a taxable account (or possibly settling for diminished returns from municipal bonds). bonds can be held in an IRA (which will ultimately be taxed at ordinary rates). Likewise, rather than hold appreciating securities in an IRA (which will ultimately be taxed at ordinary rates), equities held in a taxable account may be subject to advantageous capital gains rates. Coordinating location decisions along with rebalancing transactions can be quite cumbersome, but the results have the potential for significant tax benefits.

Addressing the Challenges

Total Rebalance Expert provides an automated solution for the rebalancing process, effectively dealing with multiple variables in a consistent and timely manner, including.

- ► Identifying which clients require transactions with Analysis Expert²
- ► Minimization of number of trades (to minimize transaction costs)
- ► Short term gain avoidance

² Patent No.: US 8.321.320

- ► Minimization of realized gain
- ► Redemption fees avoidance
- ► Wash sales avoidance
- ► Location optimization

Total Rebalance Expert also automates processes for:

- ► Tax-loss harvesting
- ► Cash management
- ► Capital gain distribution avoidance

To customize the software to each advisor's specific strategy, Total Rebalance Expert users can set parameters for:

- ► Tolerance ranges at the class and subclass levels, either globally or by model
- ► Ordinary and capital gains rates, globally and by client exception
- ► Minimum cash and cash set-asides
- ► Minimum trade amounts by percentage, dollar amount, lesser, or greater
- ► Tax loss harvesting minimum loss percentage and dollar requirements
- ► Transaction costs maximums
- ► Preferred buys with alternates allowed for type of account (taxable, IRA, Roth), custodian, or client sets
- ► Margin accounts
- ► Legacy positions
- ► Location optimization
- ► Outside accounts and restricted accounts, such as 401(k)s

Total Rebalance Expert also produces client-ready reports including quantified savings from tax-efficient rebalancing.

Inspired by the needs of her own advisory firm, Sheryl Rowling created Total Rebalance Expert to address the specific needs of registered investment advisors. Rowling, with a background as a financial advisor and certified public accountant, was careful to integrate high-level tax functionality in the program from its inception.

Total Rebalance Expert 's new web version allows advisors to access their clients' accounts with full rebalancing functionality anytime, anywhere and on any device.

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Quantifying the Costs and Benefits

To validate and quantify the benefits of Total Rebalance Expert, we surveyed our users and asked a series of questions about the cost savings and increased revenue made possible by this software. These questions were designed to understand a broad range of economic and non-economic benefits including:

- ► Reduction of personnel hours
- ► Reduction of errors
- ► Greater quality control and consistency
- ► Greater responsiveness to client needs, market changes
- ► Greater tax efficiency
- ► Increased client satisfaction
- ► Increased client base and revenue

Non-economic benefits cannot be quantified in terms of monetary units. In spite of this, these benefits can be quite substantial. Users cited increased compliance with clients' investment policy statements, more timely transactions for all clients when reacting to market movements, reduction in errors, increased client satisfaction and better preparation for an eventual SEC audit.

Client Dave O'Brien of Evolution Advisers said, "Of our software suite, the one application that has had the biggest impact on our approach has been TRX." O'Brien added, "As a result, we're handily bringing in assets... and it is a true delight for clients to know that we are acting in a fiduciary capacity in lowering their costs."

To quantify ROTI, it is necessary to quantify both the costs and the benefits of Total Rebalance Expert. The dollar costs include the labor cost and the annual license fee. The annual license fee is on average approximately \$4,500 with incremental increases. At an assumed rate of \$80 per hour, the labor cost associated with implementation is estimated at \$3,000. Thus, the initial year costs average approximately \$7,500 and the ongoing annual cost averages \$4,500.

We must also look at personnel hours saved, as well as new business revenues generated. Based on a sampling of users, annual advisor hours saved averaged 360 hours per year. These estimates may be understated since advisors attempted to quantify only the time saved in calculating and submitting transactions. How much time is spent by the average firm simply identifying which portfolios require transactions due to cash issues or allocations outside of tolerance ranges? This preliminary identification procedure may add a significant time burden on firms without Total Rebalance Expert's Analysis Expert screen.

Ryan Callan, COO of Callan Capital explains, "At this point [TRX] is indispensable. I'm able to come in and take a quick look at our households and see what needs to be done. It takes about five minutes." Assuming a conservative average of 360 annual advisor hours saved and an average professional rate of \$250 per hour, annual labor savings come out to approximately \$90,000. Based on survey results, the average new AUM potential was estimated at approximately \$83.5 million. Assuming an average advisory fee of 0.75 percent, the annual increased revenue generated could be \$626,250.

³ See Table 1

Thus, the total average annual savings from the service is approximately \$716,250. Based on the above, the three-year ROTI is over 125 times the cost of the software.³

Table 1 Three-Year ROTI of Morningstar Total Rebalance Expert: 20 Times

\$1,975,000
-\$15,600
\$1,959,000
\$716,250
\$7,500/\$4,500
6%

Source: Morningstar

For purposes of these calculations:

Discount Rate: A factor of 6% is used to determine present value in today's dollars. Initial Year /Subsequent Years' Investment: Initial year investment is the total of the average labor of \$3,000, and the average undiscounted license fee of \$4,500. Subsequent years' investment is the average license fee of \$4,500. All amounts are paid at the beginning of each year. It should be noted that these amounts are higher than the prior survey because the size of the average TRX client is larger.

Annual Benefit: The annual benefit is the value of labor costs saved plus additional AUM revenues generated.

NPV of 3 -Year Investment: The net present value of the 3-year investment is the cost of Total Rebalance

Expert incurred over three years discounted at 6%.

NPV of 3 -Year Benefit: The net present value of the 3-year benefit is the annual benefits produced by Morningstar® Total Rebalance Expert over three years discounted at 6%.

NPV of 3 -Year Benefit minus Investment: The net present value of the 3-year benefit minus investment is the annual net benefits produced by Morningstar® Total Rebalance Expert in excess of the cost of Morningstar® Total Rebalance Expert over three years discounted at 6%.

Three -Year ROTI of Morningstar® Total Rebalance Expert: The 3-year Return on Technology Investment of Morningstar® Total Rebalance Expert is the net present value of the net benefit divided by net cost (more specifically, the NPV of 3-Year Benefit minus Investment divided by NPV of 3-Year Investment).

Survey Results

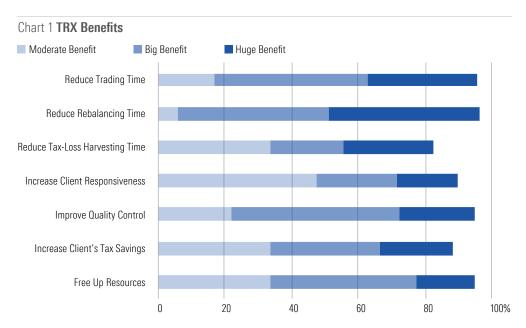
Survey Demographics: For this survey, we interviewed 20 users of Morningstar® Total Rebalance Expert. The firms range in size from under \$50 million to over \$1 billion AUM. These firms are all Registered Investment Advisors, over 75% are CFPs and over 60% are NAPFA members.⁴

⁴ It should be noted that there were no significant differences in the response distributions in any of the categories discussed when respondents are segmented based on the following differentiators:

⁻ DFA advisors/non-DFA advisors Large firms/small firms CPAs/non-CPAs

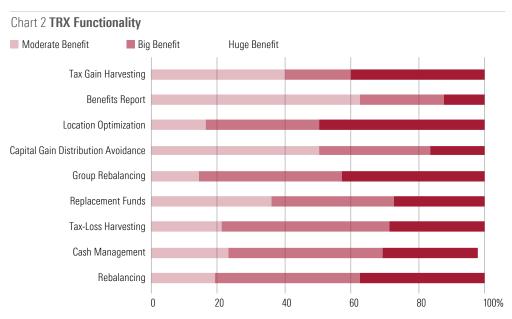
⁻ Solo practitioners/multi-advisor firms

Chart 1 below shows that 73% to 100% of TRX users found moderate to huge efficiency improvements in the areas of freeing up resources, increasing client tax savings, improving quality control, increasing client responsiveness, reducing tax loss harvesting time, reducing rebalancing time and reducing trading time.



Source: Morningstar

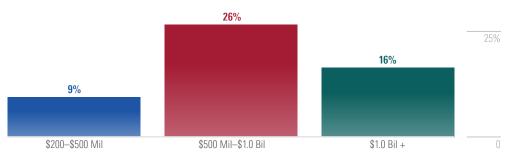
Chart 2 below shows that about 75% - 90% of TRX users rated individual areas of functionality as good to great (3 to 5) on a scale of 1 to 5.



Source: Morningstar

Chart 3 below shows the estimated increased capacity created by TRX, as reported by the users managing over \$200 million of assets. The average TRX firm estimates increased capacity of 16%.

Chart 3 Estimated Additional AUM Capacity As % of Current AUM (Firms > \$200 Mil AUM)



Source: Morningstar

Finally, users commented on specific benefits experienced by their firms. Charles Parker, of Parker Financial Advisors, agreed stating "A prospect hired us based on knowing we are able to rebalance every day if necessary." Paul Carroll, of Efficient Wealth Management, said "TRX has massively improved the productivity of our practice. We've been able to refocus energies towards practice growth. Our asset allocation models are complex, often customized, and include advanced cash management techniques. TRX has no trouble handling our complexities. Also, we've been able to engage in multi-custodian household level asset allocation and rebalancing. This really is a 'WOW' feature."

Ryan Callan likes to use TRX's client benefit report, saying that "Clients like to see where rebalancing is adding value. Our firm uses the client benefit report during prospect meetings to show the value we add through rebalancing tax effectively." Wendy Wildey, of Hearthstone Private Wealth Management stated "We were able to build such a complex trading rationale into [TRX] that the trade proposals have an integrity to our process that we can trust."

When asked what she liked best about TRX, Elizabeth Barrett, owner and President of Sterling Wealth Advisors, said "Peace of mind. No trade errors!" Using a unique analogy, Tim Armstrong, Wealth Coach at FirstWave Financial, commented "This is how I look at it. Imagine a little drip coming out of a faucet. That is how we were rebalancing before. With TRX, we now have a fire hose! We have to control it, but the power is amazing."

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Conclusion

The data collected in this study strongly suggests that firms utilizing Morningstar Total Rebalance Expert will realize substantial benefits compared to costs. Although not all benefits can be quantified in monetary units, the quantifiable benefits of personnel time savings and greater firm capacity combined with the non- quantifiable benefits of increased client satisfaction, better quality control and high-level tax saving functionality can significantly add to an advisory firm's bottom line as well as its reputation.