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Putting It All Together With Web Services: A Unified Technology Platform To Deliver Tomorrow's Managed Accounts Today

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A convergence of changing investor sentiment and advanced technology is reshaping the value proposition of financial institutions and financial advisors. With the transparency of account performance, the financial services industry is finding it must differentiate itself and its advisors on the basis of the depth and breadth of the investment and administrative values it addresses and manages.

Market Dynamics

The demand for adding value has never been greater. The industry has only recently come to the realization that, if left to its own devices, it is not humanly possible for the financial advisor to add value (see ["Crossing the Chasm," Senior Consultant](#), September 2002). The advisor must avail himself to advanced processes and technology in order to address and manage a broad range of investment and administrative values. The six financial service investment process (asset/liability study, investment policy, strategic asset allocation, manager search and selection, performance monitor and tactical asset allocation) that facilitates the management of fiduciary responsibility by empowering the financial advisor to address and manage a broad range of investment and administrative values, as required by regulatory mandate, must be integrated into the industry's core technology. This is essential in the advisor's endeavor to add tangible, quantifiable value in this age of account transparency. The front-end (asset/liability study, investment policy, strategic asset allocation), the middle (manager search and selection/portfolio management) and the back-end (performance monitor, tactical asset allocation) technologies that comprise the six financial services of the

investment process must be viewed and managed as one continuous process that makes it possible for the advisor to add value and to assure fiduciary responsibility. Only then, through embracing process and technology, is it possible for the financial advisor to add value. Thus, the financial services industry has three challenges. The brokerage industry must accept the responsibility of adding value, adopt the six financial services of the investment process necessary to add value, and secure or facilitate the development of technology that will reduce the labor intensity and cost of addressing and managing a broad range of investment and administrative values necessary to fulfill the industry's fiduciary obligations.

Technology Advances and The Evolution of Advice

It is not a question of *if*, but *when* technology will enable the seamless integration of each of these service components necessary to add value. Marketing is simply giving the consumer what they want, and the consumer, who desires value to be added, is rarely denied.

In finding a way to cost effectively reduce the labor intensity of adding value and to make these expert systems accessible, the financial services industry, in essence, must commoditize the investment

process and associated technology. Generally speaking, the processing advances in the investment industry have followed technology's natural course of evolution. The amazing advances in information technology over the past 15+ years have had an enormous impact on the evolution of how investments are recommended and managed.

From the early days of mainframe timesharing, through the introduction of the PC and Windows™, to the early days of the internet and now into the early

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stages of the highly distributable world of web services, these technological advances have profoundly shaped the level of sophistication that can be brought to bear in addressing and managing the full range of investment and administrative values required.

We will briefly retrace this technological evolution in order to assess the impact that technology has had, and will continue to have, on the ability of financial advisors and financial institutions to add value by better managing both the investment process and the corresponding administrative and technical demands.

Mainframe Timesharing

Private banking and the first separate account wrap programs used enterprise computing via timesharing on mainframe systems, but the data gathering, analytics, account maintenance and performance monitors were largely manual processes since the content was very static and required manual intervention to “shape” the data into a form for decision making purposes.

PCs/Windows™ and Distributed Computing

With next generation managed account and early mutual fund wrap programs, program sponsors implemented “distributed computing,” using personal computers which gave firms the ability to support account maintenance while several application vendors created front-end applications to handle the data gathering and analytics via the new and easy to use Microsoft Windows™. This model was not collaborative and still required financial institutions to support primarily manual operational processes with large IT departments and enterprise networks, completely changing the paradigm from outsourcing to insourcing technology development and support.

The Internet and Early “Collaborative” Computing

The internet radically changed the number of people touching technology. As in many other industries, the wealth management industry rapidly adopted the internet as a viable industrial strength information technology conduit.

The internet was inherently designed to be a collaborative tool, yet very few businesses implemented the appropriate technology model. Instead most businesses put “static” content on their web sites and still supported most collaborative operational processes manually or with legacy systems

Many financial institutions have simply put a web server on top of their legacy systems and are in actuality “web enabling” old technology to give the impression that their technology is “web-based.” In most cases, this means the continued use of antiquated, inflexible technology in the background and the simple publishing of the results and other related content on the web. This has resulted in the continuation of highly manual, inflexible and

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expensive processing to support managed account programs and has greatly impeded the development of more sophisticated product neutral consulting platforms.

This “web-enabling” approach is not only terribly expensive and inflexible, but it is inadequate to what is becoming an increasingly urgent demand for the more sophisticated, horizontal, expert systems necessary for advisors to add value through providing asset/liability studies, investment policy, manager search and selection, and performance monitors, etc., for each of the ten major market segments of the individual (mass, retail, high net worth, ultra high net worth) and institutional (defined benefits, defined contribution, foundation and endowment, profit sharing, public funds and Taft-Hartley) investor markets. Truly collaborative web-based technology that is capable of facilitating integrated solutions is required.

Web Services: The Ultimate Collaborative Technology

The next rapid shift in technology will be for businesses to use web services to actually provide the benefits of distributed computing via the internet. To do so requires that the underlying technology allows for web sites to interact with other web sites, operating systems and applications. With web services, it is finally possible to create functions that can easily be accessed over the internet by both internal and external parties.

Web services are simply small standardized web components that can be easily shared across applications by business partners to make their web sites dynamic and collaborative. Web services are a general model for building applications such as an electronic asset/liability study or electronic performance monitor, which could be implemented for any operating system that supports communication over the internet.

Open standards and the focus on communication and collaboration among people and applications have created an environment where web services are rapidly becoming the platform of choice for application integration. Applications are constructed using multiple web services from various sources that work together to provide secure, free-flowing data and services for the application, regardless of where they reside or how they were implemented.

A particularly timely example, given the AIMR reporting deadline in June for separate account managers, would be a web service like Investment Scorecard that calculates AIMR performance. A company can send files via the internet from their recordkeeping system to Investment Scorecard which, in turn, would calculate performance numbers and post them to the company’s web site. The final advantage to web services is that they allow companies to create unique web application across multiple users. This allows financial services companies to have unique web pages for both internal and external users, all on one technology platform.

From a business perspective, web services allow businesses to enhance, not replace, their



existing technology. But most importantly web services, like the early mainframe time-sharing model, provide tremendous cost savings to businesses as one web service supported by one organization can be leveraged efficiently across many different business partners.

For example, IAN's first implementation of its standardized web services platform was for a very large program sponsor of a multi-manager separate account program, who did not want to use the most popular legacy accounting system due to its large cost per unit to support reconciliation. In addition, they wanted to use their existing web portal as a point of entry. Finally, their advisor clients used a local application developed by the program sponsor to conduct portfolio optimization, which required duplicate data entry for the advisor and technical support for the program sponsor.

IAN implemented web services into their existing web portal to handle the client data gathering, asset allocation process, messaging among the separate account managers and performance reporting. In addition, IAN replicated their proprietary optimization application

as a web service and automated the reconciliation process. The final product is a purely web-based, multi-manager separate account program distributed across a wide range of financial advisory firms.

Putting It All Together With a Standard Web Services Platform

As stated earlier, it is only a matter of when a seamless integration of web applications satisfies advisors' need to gain access to the six financial services of investment process (asset/liability study, investment policy, strategic asset allocation, manager search and selection, performance monitor, tactical asset allocation) that empower them to address and manage a broad range of investment and administrative values required to fulfill their fiduciary obligations.

The web has dramatically and rapidly reduced the barrier to entry for components of enabling technology in these six distinct vertical services to be distributed cost effectively. These truly "web-based" applications will be readily accessible to financial institu-

tions and their brokers/advisors, as well as directly to investors in some cases.

Now its a matter of pulling them all together. The required foundation for application integration and aggregation is an enterprise-class platform and hosting environment to standardize the seamless integration of web services, regardless of whether they are created internally or originate externally. This will allow for the "best of breed" integration of unbundled "applications" and data sources described above.

This approach is essential to accommodate the inevitable consolidation of the six investment management activities into a single process through which the advisor is empowered to add value. One process to gather data from clients, evaluate the client financial profile and goals, create an asset allocation based upon all the client's assets and liabilities, determine the appropriate mix between mutual funds, insurance products, separate accounts or brokerage assets, and monitor the entire portfolio in a consolidated manner.

Web services are the ideal solution for handling this process as they can be overlaid

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upon the recordkeeping systems supporting these various products to provide a consolidated web-based system to handle data gathering, financial analytics, the investment policy statement, account trading across all products, account monitoring and rebalancing, as well as provide a web-based consolidated statement. Web services can also provide collaborative web support for the investment process from an operational, compliance and sales perspective.

Another program deployed on IAN's standard distributed web services platform is a large mutual fund company that had been supporting a modestly successful mutual fund wrap program for some time. They wanted to add both internal and third-party separate account managers but did not want to run the two programs on separate systems. Instead they wanted their data gathering method to determine if the client should be invested in mutual funds, separate accounts or a combination of both. IAN implemented web services into their existing web portal to allow financial advisors to gather the client's complete financial profile, compare the existing portfolio to a proposed portfolio by asset class relative to the efficient frontier, determine what investment products were appropriate based upon the amount being invested, produce an investment policy statement, automate trading and provide on-going account maintenance and performance reporting for both mutual funds and separate accounts. The program, essentially a first-generation electronic investment process, incorporating mutual funds and managed accounts, is now gathering assets successfully at an accelerating rate.

Conclusion

Web services technology is poised for rapid and broad-reaching advances towards the seamless integration of the six financial services investment process. There is considerable access to a broad range of independent web-based tools that address the six distinct vertical services necessary by regulatory mandate in order to add value.

But we are in an environment where having more tools is not necessarily good. The challenge is to provide firms/institutions and financial advisors with a seamless connective environment to properly integrate the appropriate tools to add value across the full range of investment vehicles, from which the investor may avail themselves.

A true web services platform fulfills the vision of "adding value" which, through the six financial services investment process, takes all of the disparate components of an investment portfolio and "glues" them all together into a usable form, illustrating the effective management of the full range of values critical to the

investor achieving their goals and objectives. The process is governed by the combination of a flexible permission-driven security structure and an extensive library of existing core business objects/tools (real-time style-based attribution analysis, tax efficiency methodology through overlay management, etc.), which can be easily and inexpensively integrated with other distinct web services that facilitate the overall process.

This single, seamlessly integrated platform approach empowers the financial advisor to address and manage the full range of investment and administrative values required under regulatory mandate, cutting across the broad spectrum of investment offerings by allowing the financial advisor access to enabling technology in a standardized, yet flexible, environment that promotes portfolio differentiation through complex data processing.

IAN suggests that it is highly advisable for financial institutions and financial advisors to stick to their core function of adding value through their investment expertise and to outsource the technology platform to a web services partner, who is an independent third party, focused on enhancing the technology and the process as a core business.

The underlying plumbing of an enabling-web services platform requires an innate knowledge of the complexities of the process, the compliance requirements and the standardization necessary to provide a high level of data integrity. This combined with the capability to rapidly and inexpensively customize the technology creates the necessary environment for maximizing value ... essentially access to leading-edge, stable, scalable technology at far less cost in both money and time than most firms can accomplish internally.

Perhaps we have gone full circle back to timesharing!

In conclusion, web services are not an incremental expense for financial institutions but rather a cost-saving, outsourcing solution to automate the complex and historically manual processes inherent in properly delivering professional investment and administrative counsel. The early adopters of these technology advances in the wealth management industry will surely reap the financial and first-mover benefits of being truly web-based as opposed to losing competitive ground by continuing the inefficient practices associated with simply being "web enabled." ■

About the Authors

Russ Isaac and Clark Underwood are co-founders of IAN, LLC, a firm providing innovative managed account processing technology solutions to major financial institutions since 1992. For more information, visit their web site at www.ianinc.com.

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