



From the Editor

Downsizing, outsourcing, and continued scrutiny of IT portfolios continue to command center stage in a tough market environment. Firms are challenged to obtain greater efficiency and rationalize costs and are impacted by regulatory pressures such as PATRIOT Act compliance. At the same time, firms and investors alike are focused on long term strategic opportunities, looking at alternative investment products to grow their assets.

In this issue, consultant John Greisner takes a look at the challenges and complexities that exist within the **529 Plan** industry, including interviews with several industry insiders from both the state sponsor's and program manager's perspective. Clearly there is growth opportunity driven by the unrelenting rise in the cost of higher education, as well as the opportunity to expand distribution channels beyond sponsor / manager to financial advisors and the workplace.

PATRIOT Act Compliance continues to garner attention with hefty fines already levied against some firms for violations. The challenges to implement and / or upgrade systems to detect money laundering can be daunting. Ditto when it comes to the challenges of managing, integrating, and analyzing the huge volumes of data that are the basis for detecting suspicious activity and verifying compliance. On page 5, Venture Consultant, Mark Spitzner examines some of the challenges and opportunities firms face to ensure compliance with the Patriot Act.

And last, **Managed Accounts** continue to capture the rapt attention of sponsors, managers, and vendors, all scrambling to capture market share. In this issue, we recap the recent SMA Panel discussion, moderated by Venture Managing Consultant Vincent Manning, at the Spring NICSA Tech Forum, where industry experts shared their perspectives on the exponential challenges -- both technical and operational -- of supporting managed accounts.

Complex and Tangled Webs: 529 Plans

It is always remarkable to watch a new product take off beyond initial expectations. The 529 plan is one example of a good idea gone wild. Since 1996, when the IRS provided tax incentives under Internal Revenue Code (IRC) Section 529, 529 plans have become a rather common term in the financial industry. What began as a state-distributed product has changed immensely over the past seven years. The trend now is for the state sponsors to outsource the infrastructures to program managers such as Putnam Investments, Fidelity Investments, TIAA-CREF Tuition Financing Inc., Merrill Lynch, and Hartford Life Insurance Company, to name just a few. Of the fifty states, forty-two outsource to financial organizations as their 529 program managers.

In the short time that the 529 industry has been in existence, **legislation, distribution partners, marketing, and technology dynamics** have resulted in a product that resembles Charlotte's Web. What has transformed this relatively "harmless" product into a complex array of flow charts and never-ending work breakdown structures?

In 1986, the state of Wyoming introduced state legislation that created a program designed as a means of saving for college. The program, which was termed a "prepaid tuition program", initially received limited tax incentives from the Internal Revenue Service. With the lack of tax incentive, it never became a well-known program. In the proceeding years, the idea of a state mandate, which now includes educational institutions, to promote saving for college became recognized as a vi-

able solution to the high cost of college.

As previously mentioned, the actual 529 plan refers to the Internal Revenue Code Section 529, legislation which was introduced in 1996 as part of the Small Business Job Protection Act. In the following year, substantial changes were made as part of the Taxpayer Relief Act of 1997. Further changes were made under the Economic Growth and Tax Relief Reconciliation Act (EGTRRA) of 2001. These acts provided improved tax incentives for parents and students, simplified the distribution process, and broadened the scope of financial transfers and rollovers.

Financial services group involvement was a pivotal turning point in the life of the 529 plan. So, why would a state choose to outsource? One of the driving factors is the cost required to create and distribute such a product. Leveraging resources and providing distribution via an established financial provider is pragmatic and results in a robust program for the state residents.

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Not only does the state save on these expenditures, but they also often receive revenue from the program manager, a win-win situation for the state.

The State of Connecticut recognized these challenges and selected a program manager to distribute the state's 529 Plan. "Our aim was to offer Connecticut residents a quality

state programs. One of the primary objectives is to increase their assets under management, an honest fact of doing business. Retail-based institutions seek out products such as the 529 plan to further round out their suite of product offerings. These types of companies are often referred to as financial advisor companies. There are other driving factors, some less compelling than

the 529 plan more visible to the national public such as partnerships between Upromise (NV) and Vanguard, College Foundation Inc. (NC) and J.&W. Seligman & Co., Schoolhouse Capital LLC (NM) and Oppenheimer Funds, and Mercury Advisors (AR) and Franklin Templeton. These types of relationships have added a new level of national recognition to the 529 plan

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Venkateswara Gaddipati, Chief Technology Officer, Upromise Investments

investment option to provide for higher education," said Connecticut Treasurer Denise Nappier, who selected TIAA-CREF to run Connecticut's 529 program in 2000. "We were most impressed with the solid experience and track record of TIAA-CREF, and were confident that they would provide outstanding services for CHET (Connecticut Higher Education Trust) account holders. TIAA-CREF helped us to put CHET on a solid foundation, bringing the vast investment experience of a well-managed and well-capitalized firm. They worked closely with us to establish CHET as one of the nation's leading 529 programs, offering flexibility, affordability, professional management, and low fees for account owners," Nappier said.

In contrast, what do financial institutions have to gain by becoming a program manager? There are actually a number of strategic reasons why financial institutions bid for these

others, that each financial institution considers as reasons to become a program manager. Some of these factors include cross-selling opportunities, strategic initiatives, and even politics. Sociological factors, such as helping our next generation financially prepare for the necessity of a college education is one of the noble reasons that institutions develop these plans. Despite all this, most program managers realize that the 529 industry is still in its infancy and the realization of a return on investment is still a few years away.

In addition, program managers have created distribution partners with other selling networks. For example, T. Rowe Price, the program manager for the State of Alaska, has established a partnership with Manulife Financial Securities LLC, giving T. Rowe Price the ability to sell 529 plans under the Alaska mandate.

Similar partnerships exist making

and have provided a window for new types of distribution in order to engage in the promotion of 529 plans.

One aspect of promotion, which is often taken for granted, is the marketing cost associated with the distribution of a new product. The marketing effort for products, which are already recognized and generally understood by the consumer, such as Coverdells, annuities, and retail mutual fund products, is based primarily on brand recognition. However, when marketing 529 plans, particular attention needs to be placed on both brand recognition and product knowledge. In addition to the basic marketing approach to 529 plans, the state sponsor usually requires its own marketing, which as a rule

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ensures that its program manager does not forget about the state and its residents. In understanding the multiple layers of distribution, as discussed previously, marketing budgets are often attached to the contractual agreements of the program manager and distribution partner. In other words, in order to play, those involved need to pay. The marketing groups have been busy finding innovative ways to build product knowledge and create their own brand recognition. What we have seen used in marketing thus far are media outlets such as the Web, radio, TV, corporate advertisements, event promotions, publications, and newsletters, just to name a few.

Moreover, since 529 plans are considered municipal fund securities, 529 plans must conduct their marketing activities in compliance with MSRB (Municipal Securities Rule-making Board) rules, which are designed to protect investors and the public interest and to ensure a fair and efficient marketplace.

During this progressive period, system integration has been one of the more challenging tasks. Retrofitting the 529 business rules to either a pre-existing or a stand-alone system has caused the industry a number of sleepless nights. Some institutions have gone the way of utilizing a retirement record keeping system since the general workflow resembles a 401(k) plan. Other programs, especially those that require commission processing, have made use of their shareholder system. What is unique regarding the 529 architecture is the relationship between the owner and the beneficiary, or in the case of UGMA/UTMA, the custodian and the mi-

nor-beneficiary. The data relationship between these two groups is a one-to-many relationship. The one owner to many beneficiaries relationship has created a technical challenge since retirement and transfer agency systems do not follow this same model. Whether you are creating a process for contributions, commissions, distributions, reporting, state-

be very different from the next," she explained.

This past March, the DTCC extended more of Fund/SERV's functionality making it even easier for broker/dealers to open a 529 account, thereby eliminating much of the paperwork previously involved. "We recognized the complexity of

"We recognized the complexity of the product and also the potential for stunning growth, similar to when mutual funds took off in the early 1980s. So we are taking an interactive approach to processing the problem, beginning with the elements of the transaction that could be automated quickly. Our services will continue to evolve as state regulations and transaction processing needs evolve."

Rita Gribben, Product Manager, DTCC Mutual Fund Services

ments, or confirms, you are commonly faced with a data integrity issue.

The Depository Trust & Clearing Corporation, through its National Securities Clearing Corporation (NSCC) subsidiary, is facing similar challenges. Its Fund/SERV[®] system (considered the industry standard for processing mutual fund purchases, redemptions, and exchanges) was recently enhanced to incorporate 529 Plans.

Rita Gribben, a product manager in the DTCC's Mutual Fund Services business, said that the challenge has been to try to develop the same type of standards that are used by the national marketplace for mutual fund processing. "Broker/dealers need to provide much more information on the account owner, beneficiary, and successor-owner of a 529 account, and one state's requirements could

the product and also the potential for stunning growth, similar to when mutual funds took off in the early 1980s. So we are taking an interactive approach to the processing problem, beginning with elements of the transaction that could be automated quickly. Our services will continue to evolve as state regulations and transaction processing needs evolve," Gribben noted.

The challenges of integrating systems have led some institutions to build a wrapper around their base systems utilizing a relational database for a front-end system. The front-end system in many ways becomes a safety net for transaction processing and for Web and

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customer service interfaces.

Venkateswara Gaddipati, Chief Technology Officer at Upromise Investments, explains the approach that provided them with a robust 529 platform. “The biggest challenge that we faced when building the 529 platform was trying to figure out a clean separation of duties between the recordkeeping system, OmniPlus®, and the front-end system, Oracle. OmniPlus is the dominant platform for recordkeeping retirement plans, while Oracle is more suitable for the Web. We ended up using OmniPlus for core financial processing, pricing and trading, and management reports, while Oracle was adopted for web authentication, enrollment, account management, confirm/statement processing, viewing financial history, and for our customer service application. This division of labor has worked extremely well for us.”

What does this mean for those institutions involved in the establishment of a 529 program? Typically it equates to significant development costs and increased complexity surrounding support and processing. The job is not for the “weak at heart” and there are substantial financial risks to create such a program.

With a base-line product in place, and distribution channels intact, the final question remaining is whether or not consumers will gravitate to this product as the next 401(k) plan. Despite the current uncertainty of the markets, the 529 plans

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**Denise Nappier,
Treasurer,
State of Connecticut**

have shown an indication that substantial product growth is in the near future. Consider this: as of the end of 2002, \$20 billion has been invested into the 529 plans, more than double the amount invested as of the end of the prior year. In comparison to the assets accumulated in the 401(k) industry, which stood at about \$632 billion in 2001, the growth potential of the 529 plan is impressive.

The comparison figures shown in Figure 1.0 provide a glimpse of why so many financial institutions are willing to tackle these issues and overcome the challenges of creating the infrastructure to distribute a 529 program during this infancy stage.

The 529 industry’s key components discussed here were not the original vision of its founders. Instead, what has evolved since 1996 is a product that has been defined, in part, by current demographic educational needs. For those involved with 529 plans during these past seven years, it has clearly been an exciting time. To have come this far in such a short period of time required long hours, ambition, creativity, and expertise. The result: a superior product ready to bear fruit for the future students of tomorrow.

Venture staff are helping clients manage the inherent operational and technical complexities of 529 plans. Please contact us if you wish to have an informal discussion about 529 plans or any other topics.

Your Suggestions Please...

Are you pleased with the results of a recent or current engagement with Venture staff and interested in sharing your experiences with others? Submit your suggestions to Annmarie Rogers via phone at 781.932.7544 or via email at arogers@venturefsg.com. Articles and/or interviews selected for publication will be entered into a drawing for a \$100 American Express Gift Certificate.

Figure 1.0

Year End	401(K) Assets	529 Assets
1998	\$ 372.0	\$ 0.2
1999	573.4	0.9
2000	579.8	2.6
2001	632.7	8.5
2002*		20.0

(Assets in billions of dollars)

* 2002—401(k) assets are published during the month of June by Investment Company Institute.

Sources: Investment Company Institute, SavingforColleg.com, College Savings Plans Network, individual states, and investment managers.





Client Advisory: USA PATRIOT Act Compliance

The USA PATRIOT Act (Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism) was enacted in October of 2001 in response to the events of September 11, 2001. The Patriot Act broadens and extends anti-money laundering (AML) regulations and applies them to all financial institutions, not just retail banks. Financial institutions, as broadly defined by the Patriot Act include (but are not limited to) retail banks, institutional banks, securities firms, broker/dealers, private investment funds, mutual funds, futures/commodities traders, credit card companies, wire transfer businesses, check cashiers, and insurance companies.

The Act requires financial institutions to: establish anti-money laundering policies and procedures, train employees, designate a compliance officer, establish Customer Identification Programs (CIP), and file Suspicious Activity Reports (SAR) for questionable transactions. These provisions are just the tip of the iceberg, and are likely to be revised and enhanced as money laundering and fraud techniques change. As these rules change, financial institutions will have tight deadlines to enhance systems and procedures to meet new regulations.

Risks of Non-Compliance

The greatest risk for not complying with the Patriot Act will be measured

in dollars. Heavy fines will be leveled against financial institutions that do not comply with Patriot Act rules. The Treasury Department has already fined some large financial institutions for violations. Any legal action associated with non-compliance will certainly create unwanted legal fees and management overhead to deal with the issue. The Treasury Department has also promised heavy media coverage for financial institutions that do not comply. Negative media exposure will have an impact on the financial institution's reputation with the general public as well as industry peers.

Challenges & Opportunities

The greatest challenge the Patriot Act presents is updating or implementing new systems. Detecting money laundering and fraud is not a process that can be performed manually, especially for financial institutions dealing with large volumes of transactions on a daily basis.

Most retail banks already have systems in place that will require a smaller development effort. For other financial institutions, the challenge will be researching vendors, making build versus buy decisions, determining their business and data requirements, integrating with current architectures, and implementing any new systems. Once these systems are in place,

the challenge will be keeping up with changing requirements within the tight timeframes set forth by the Treasury Department.

As great as these challenges appear to be, financial institutions can create opportunities:

- By improving systems and systems procedure, financial institutions can reduce losses from fraud.
- Implementing new systems and business procedures can replace currently out-dated and inefficient processes.
- While implementing new systems, financial institutions can take the opportunity to update legacy systems and architectures.
- Finally, financial institutions can take advantage of the data they gather on their clients for marketing and client relationship management purposes.

Solutions & Products

Patriot Act compliance monitoring is no simple task for any system. There is an enormous amount of data from various systems that needs to be analyzed together to detect money laundering and fraud. There are different types of technical solutions available to financial institutions. These solutions range from basic rules and exception reporting based systems and transaction filtering technology, to artificial intelligence and adaptive learning systems that search for patterns

COMING SOON: Watch for a future Venture NAVIGATOR for further analysis of some of the legal issues that firms need to consider when implementing and updating systems and processes to meet USA Patriot Act Compliance requirements.

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USA PATRIOT Act Compliance (continued)

in transactions to detect money laundering and fraud.

Regardless of the type of technology used, these systems will need to meet certain critical criteria:

- High performance
- Real-time processing and reporting
- Intuitive front-end design
- Robust SAR reporting & general reporting
- Storage facility to meet data retention requirements
- Access to data across platforms
- Access to data from external sources/data feeds
- Security for protecting customer information

Beyond AML and fraud detection, financial institutions must also update and enhance current systems. Customer Identification Program regulations may require financial institutions to gather additional information on customers. This will require updates and enhancements to current account application systems and web-based systems.

There are some big players and established software companies that

have systems specifically designed for AML & Patriot Act compliance.

These packaged solutions allow financial institutions to avoid long-term, costly, in-house development. However, financial institutions will still be required to evaluate products and vendors, perform significant business, data and technical analysis, to integrate these solutions within current architectures, and perform the final implementation of the solution.

How Venture Can Help

Whether you need to implement a new system or update an existing system to comply with the Patriot Act, or simply keep pace with changing regulatory requirements, you are faced with some complex and challenging tasks.

Business Requirements and Data Analysis

Determining your business requirements and, more importantly, your data needs will consume a large part of your overall Patriot Act compliance initiative. Pristine record keeping and accurate data are

paramount in ensuring that you have a complete and accurate picture of who investors are and that you are able to discern trading patterns that are veering from the norm, requiring that you collect, scrub, and manage large volumes of data from multiple disparate sources

Vendor and Product Evaluations

Solutions to your business problems can often be found through existing software or outside vendor services. These avenues are often less expensive than building an internal system. However, your needs may be so customized that in-house development is the correct approach. Efforts need to be focused on RFP development, structured comparison and analysis of system alternatives, and vendor system demonstrations.

System Implementation and Integration

Whether you are buying or building, you need to ensure that the end result is a streamlined process that suits your organization. Any integration effort is likely to cross many lines of business. A well thought out process and identification of critical steps in the planning stages of any integration is essential to success.

AML & PATRIOT Act Compliance Systems Providers

- Sybase: *PATRIOTcompliance Solution*
- Concord EFS, Inc.: *IDENTITY CHEK*
- SAS Institute, Inc.: *SAS AML Solution*
- GIFTS Software, Inc.: *GIFTSWEB EDD*
- Mantas, Inc.: *Behavior Detection Platform*
- TREEV, Inc.: *Compliance Solution*
- Computer Sciences Corporation: *Patriot Protector*
- Actimize, Ltd.: *Anti-Money Laundering Solution*
- STB Solutions: *STB Detector & OFAC Agent*
- Prime Associate, Inc.: *OFAC Reporter*
- Net Economy: *ERASE*
- Searchspace, Inc.: *Intelligent Enterprise Framework and AML Sentinel*

Venture Financial Systems Group, Ltd. has a proven track in all of these areas. For additional information on how Venture can assist in your Patriot Act technology initiatives, please contact us at 781.932.7544 or visit our website at www.venturefsg.com.





Highlights from the 2003 NICS A Technology Forum

Supporting Managed Accounts Session: Assets to Continue Growth but Operational Solutions Remain Elusive

With lofty projections of assets under management accelerating towards \$2 trillion over the next decade, separately managed accounts (SMAs) remain a major focus of investors, investment managers, and service providers. While asset growth continues to outpace industry averages, there remains an operational and technical void within the industry when it comes to providing management firms with a standardized, widely acceptable solution. The disconnect results in an operational nightmare dependent upon manual processes and outdated technology.

What we learned in the Managed Accounts session during the Spring NICS A Tech Forum was that the lack of standards within the industry has created undue operational pressures while at the same time opening the door for a myriad of service providers to enter the space.

Investment Managers Perspective

The attraction of SMAs is in the notion of customizable portfolios delivering specific individualized portfolio management expertise. However, the delivery of that customization is wherein the problems lie. To be more specific, back-office operations present the greatest hurdle to entry and ongoing success. To be successful firms must address functionality, scal-

ability, and sponsor interfaces (connectivity).

From panel participants, MFS and Phoenix Investment Partners, we learned how each has approached the operational and technical side from a strategic perspective. Both firms have gone through an intensive strategic analysis of their business and potential SMA models.

Following a classic internal servicing vs. outsourcing analysis, MFS decided to build from within. Using an operational model that will continue to gain in popularity, MFS paired the best of the new with existing technology to provide a seamlessly integrated back-office solution into its operations. By leveraging CheckFree APL's market dominance coupled with newer portfolio management technology from LifeHarbor and automated workflow tools from DST, MFS was able to deliver a solution that minimized its operational risk.

As a holding company, Phoenix Investment Partners was faced with the task of tying together multiple back offices currently supporting a number of its affiliates. Through a strategic analysis of the current market landscape, Phoenix wanted to see if there was a way to bring scale and efficiencies to its disparate operations across managers. Many of the critical success factors it examined are those that any firm needs to analyze before entering, or

altering, its operational architecture. Those factors included looking at:

- Connectivity to sponsors (former and reigning critical factor);
- Impact to workflows (ability to limit/eliminate manual processes); and,
- Where was the industry model going and how would any potential solution be impacted?

Phoenix has gone through an RFI process, which is critical to properly assess any service provider's ability to deliver functionality and as a means to properly establish pricing models. Its next step, like that of many others, is to determine the next steps.

Service Providers

The number of service providers in the SMA space continues to grow seemingly every month. In fact, technology platforms will be greatly influenced by standardization efforts currently underway at the DTCC, in conjunction with the Money Management Institute (MMI). With a test pilot due to be completed June 30, the industry

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For a checklist of the functional and operational requirements that must be assessed when deciding on an operational infrastructure for separately managed accounts, download our *Managed Accounts Solutions: Operational Due Diligence* paper via our web site at <http://www.venturefsg.com/publications>.





NICSA 2003 Spring Technology Forum: Managed Accounts

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could, theoretically, have a standardized account management solution in place sometime in the 3rd or 4th quarter of 2003. This would create an immediate leveling of the playing field for managers, and mutual fund shops would be in a position to make immediate giant strides.

Our panelists from Bank of New York Separate Account Services and DST International provided the audience with an understanding of the added benefits specific solutions could provide. From DST we heard the importance of determining your firm's position in the market (e.g., sponsor, product provider, supermarket, etc.) and core functions available to deliver (e.g., distribution channel, planning, execution or custody, etc.). By properly defining who and what it can deliver, a firm is then better positioned to make intelligent, informed decisions on operational and technological models by which to support its plans.

As for helping to settle that in-house vs. outsource question, we had BONY speak about the special challenges presented by the SMA business and the advantages outsourcing can provide. While clearly not for everyone there was sufficient evidence presented to

suggest that outsourcing can provide a means by which to mitigate some operational and technical risks while leveraging industry expertise to help speed the time to market for new entrants and additional products. By focusing on the stability of the provider along with its expertise and service offerings as much as cost, firms can properly assess the feasibility of going with an outsource provider.

In the end, what we heard from all of our panelists was that the market continues to evolve rapidly requiring proper due diligence and analysis. Given the asset flows, it is easy to see a herd mentality developing around the rush to enter the SMA space. Be it service providers or investment managers, everyone is chasing those available fees. However, SMAs operate on razor thin margins and any firm entering into the market needs to ensure it is properly equipped and prepared for a long-term commitment.

The final message to the audience was to stay informed as the market continues to evolve. The pendulum is swinging from the present day where technology forces operational models towards the day when technology becomes neutral, or value-added propositions, acting as a tool to support and foster efficient growth in the industry. *Stay tuned....*

About VENTURE Financial Systems Group, LTD.

Venture Financial Systems Group, LTD. is a consulting firm specifically focused on delivering business and technology solutions to the investment industry. Venture offers a wide range of consulting services including strategic planning, software and vendor service evaluations, system integration, customized software solutions, and implementation services. For more information, visit: www.venturefsg.com.

Industry Hot Topics

STP. While reduced settlement cycles are no longer a focus, there are nonetheless significant opportunities to improve the trade process and reduce or eliminate costs in the current economic environment. Areas ripe for improvement, both of which are generating much focus include:

Data Management. Reference data fragmentation and inconsistency, high maintenance costs, and even data and operational redundancies, impact operations and workflows and often compromise service.

Corporate Actions. Corporate actions processing is often wrought with risk due to inaccurate or incomplete data from multiple disparate sources. This is typically coupled with manually-intensive processes for validating and responding to corporate action events.

FIX 4.4. FIX 4.4, released in April, introduces standards-based trading in fixed income and derivatives instruments and has been significantly enhanced to cover post-trade processing with respect to enhanced allocation and trade-capture-report messaging. With many firms still using FIX 4.0, which supports equity trading, as well as tight budgets, upgrades may be initially slow. However, for fixed income and derivatives shops, there is opportunity to lower costs and reduce operational errors. There is also some thought that the new features will enable some firms to switch their processing from VMU providers, thereby realizing cost savings.

Watch for a future Venture NAVIGATOR for more discussion about these topics. Also, be sure to check our web site at www.venturefsg.com for information about RUP4STP®, Venture's business modeling framework that helps you understand the current interactions of data, systems, and people in the current trading cycle model and develop a vision for the future trading cycle model with real-time data feeds and connectivity to external trading parties, custodian banks, and virtual matching utilities.

