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CPA's Guide to Technology in a PFP Practice

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Because personal financial firms vary greatly in size and in their business approach, it is important to understand that there is no "one size fits all" technology solution. On the contrary, the technology needs of a firm will be dictated by a wide variety of factors including the firm's business model, size, client profile and goals. Although arriving at the proper technologies for your firm can be difficult, failing to leverage technology is not an option.

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About the AICPA Personal Financial Planning Section

The AICPA’s Personal Financial Planning (PFP) Section is the premier provider of information, tools, advocacy and guidance for CPAs who specialize in providing estate, tax, retirement, risk management and investment planning advice to individuals and closely held entities. The primary objective of the PFP Section is to support its members by providing resources that enable them to perform valuable personal financial planning services in the highest professional manner. Members of this section broaden their technical expertise, improve their professional competence and receive resources to deliver high-quality, profitable PFP services. aicpa.org/pfp

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Building Blocks

The Technological Components of a Successful PFP Practice

Since personal financial firms vary greatly in size and in their business approach, it is important for the reader to understand that there is no “one size fits all” technology solution. On the contrary, the technology needs of a firm will be dictated by a wide variety of factors including the firm’s business model, size, client profile and goals. To cite just a couple of examples, an independent fee-only wealth management firm will have different software needs than a firm that works with a broker/dealer. A firm devoted to comprehensive financial planning may have different spending priorities than a firm focused primarily on investment management.

Although arriving at the proper technologies for your firm can be difficult, failing to leverage technology is not an option. A 2007 study entitled “Uncharted Waters: Navigating the Forces Shaping the Advisor Industry” by Pershing Advisor Solutions and Moss Adams found that “the demand for comprehensive and objective financial advice is growing rapidly.” The same study also found that the supply of trained talent needed to meet this demand is not currently sufficient. In order to meet increased demand, planning firms must increase their production per employee while lowering incremental costs throughout the firm. This cannot be done without the proper technology.

It must be emphasized at the outset that any discussion of technology starts with the firm’s business plan. For the purpose of this guidance, it will be assumed that your firm already has a written business plan. If it does not, there are a number of excellent, inexpensive software packages that can help you create one. Two competent popular packages are PlanWrite, from Business Resource Software (<http://www.brs-inc.com/>) and Business Plan Pro from Palo Alto Software (www.businessplanpro.com).

A firm’s technology plan should be in writing, and it should be closely aligned with the business plan. Unfortunately, 78% of the firms that participated in the 2008 Financial Planning Association’s Technology Survey do not have a written plan. Furthermore, rather than take a holistic approach to aligning their technology with their overall business plan, many practitioners take a piecemeal approach. According to David Lawrence, President of The Efficient Practice, LLC, in San Diego, CA (<http://www.efficientpractice.com/>) “Many CPA firms take a myopic view of technology. They are often looking to address a very narrow issue. Some don’t really understand the value of integrated systems.” Practice management guru David Drucker of Drucker Knowledge Systems in Albuquerque, NM (<http://www.daviddrucker.com/>) concurs “Many firms fail to achieve the optimal return on their technology investments because they purchase an individual application in a vacuum rather than taking a more holistic approach”.

Now that you’ve been alerted to some pitfalls, let’s look at the essential technology components of the efficient personal financial planning firm. The goal here is to a brief discussion of the tools you will need. In order to facilitate the discussion, we’ll break the components down into two main categories: *general office productivity tools* and *industry specific tools*.

General Office Productivity Tools-Hardware

General office productivity tools are those technology tools that are common in any knowledgeable worker environment today. This category can further be divided into hardware and software tools. Let's start with hardware.

Computers

Every financial planning firm needs computers, but choosing the right mix for your practice can be more complicated than you think; and poor decisions here can become costly over time. We'll start the discussion off with computers because that is the first piece of equipment that most people ask about when building a new practice or upgrading an existing one, but in fact, readers would be better served if they evaluated computer purchases in the context of their software, workflows and networking needs.

For example, if your office has only a few people, but you each need access to files on one or more of your colleague's computers, the traditional approach has been to network those computers; commonly with one or more servers acting as a central data repository. This allows the computers and server(s) to "talk" to each other. For a very small group that only requires limited access to each other's files, a peer to peer network, the most basic type of network, has been the traditional configuration. In this scenario, all the computers are connected to each other, either directly, or more commonly through a router. Since each computer is likely supplying its own storage in this scenario, such computers might require larger hard drives, as well as redundant hard drives to guard against drive failures.

Once you get beyond a few employees, a server/client network is best. In this hub and spoke scenario, one or more servers stores the data, and it then serves the data up on request to the individual client PCs. In a server/client environment, the server does some of the processing, so workers that are performing basic tasks like word processing might find a less powerful PC more adequate than they would if they were working without a server.

The good news with regard to small business servers is that they are more powerful and more affordable than ever. A practice of up to ten can purchase a file sharing, print sharing and email server for under \$2,000. The bad news is that maintaining servers and a computer network is more complex than maintaining one or more individual PC's. Small firms cannot afford a full time IT staff, and finding talented, affordable third parties to service your equipment can be a huge challenge.

Rather than deal with the challenges of maintaining a computer network, many smaller firms are now choosing to outsource their hardware and software maintenance to one or more application service providers. By relying on application service providers (ASPs), a firm can get by with just PCs. Others are retaining servers, but they are having them hosted and maintained offsite. With either ASPs or hosted servers, employees access applications and files through an Internet connection. In the case of an ASP, usually only a web browser is required. In the case of hosted servers, software requirements can vary depending on the configuration desired (more on this later).

Before we move on to the next topic, a word about Apple computers. Until recently, it was virtually impossible to run a financial planning practice with anything other than a Microsoft Windows based

system. That's because all financial planning applications were Windows based. That is no longer strictly the case. Since many developers now offer web based software that requires nothing more than a web-browser, it should, in theory, be possible to run all web based applications on a Mac. Unfortunately, not all web applications are Mac compatible, and those that are do not support all web browsers, so you might have to access some sites using Firefox, for example and others using Safari or Chrome. In spite of these limitations, web applications are supporting a wider variety of web browsers and operating systems. This trend should continue as a small but growing segment of the adviser population adopts Apple products into their practices.

In addition, Apple moved to Intel processors a few years back, making it possible for Mac owners to run Windows applications on a Mac. One way to do this is to use Boot Camp, Apple's free program that allows a Mac to be booted as a Windows PC. An increasingly popular option however is virtualization. This allows a user to run one or more Windows programs in their own "virtual spaces" right within the Mac operating system, so that you can run Windows and Mac programs side by side. The two leading virtualization programs for Mac are Parallels (<http://www.parallels.com/>) and VMware Fusion (<http://www.vmware.com/products/fusion/>). Oracle's VirtualBox for Mac OS X is a free, open source virtualization application. It is not quite as highly evolved as the other Parallels and Fusion, but it may be sufficient for occasional or recreational use.

Although Microsoft has long offered Microsoft Office for Macs, moving Word and Excel documents back and forth between operating systems was far from seamless. Over the last years, however, cross platform compatibility has improved. Finally, even if you intend to stick primarily with Windows, you might want to consider adding a Mac to perform specific tasks. For example, if you do any in house graphics, client brochures, newsletters, etc., purchasing a Mac to perform those tasks will pay for itself in short order.

PDA's and Smart Phones

With PDA's and Smart Phones, the first question is: What is your primary purpose for owning one? The second question is: What type of email network are you on? If your primary purpose for having a device is email communication, and you are on a corporate email network, Blackberry is still a popular choice. It is an adequate phone, but an excellent email device. If you are not on a corporate email system, and you want a good email device, the iPhone from Apple and AT&T is enticing. In addition to email, it browses the web nicely too, and new applications are appearing for it almost daily. The iPhone is an excellent device, but it is available exclusively on the AT&T wireless network, which is overtaxed in certain areas of the country, so if you want one, be sure to test coverage before you commit to a long term contract.

Smartphones powered by Google's Android operating system are now available from all four major wireless providers. Many of the Android phones rival those of Apple in their technical wizardry. They look particularly attractive for heavy Gmail and Google App users.

One fundamental question you have to ask yourself is: "Do I want to be on call all the time?" If you have email capability on your phone, and your clients know it, they will expect you to respond almost

instantaneously whenever they email you. Think about that before showing your new iPhone or Android phone to your clients!

Printers

Although it is highly recommended that firms minimize the amount of paper they use, the need for printers is undeniable. The question is: “What kind of printers work best?” Generally speaking, there are a few rules worth remembering. The first is that multifunction machines often entail compromise. They try to be jacks of all things, and they often end up being masters of none. We usually recommend dedicated printers.

For even the smallest offices, laser printers are preferable to ink jets for addressing normal business tasks. They cost less to operate, and they are more durable. Sharing a networked printer among a small workgroup is fine, as long as all users are in close proximity to each other. If users are spread out over a larger area, you are better off buying multiple printers. Whenever employees leave their immediate work areas, productivity suffers.

Where possible, stick with monochrome laser printers. They are fast and inexpensive. Networkable workgroup color laser printers have become much more affordable recently. If you shop carefully, you can find a networkable color printer capable of speeds up to twenty pages per minute for under \$300.00, but you may want to pay significantly more for duplex printing, more flexible paper handling, and other premium features.

Copiers

We strongly suggest that you consider doing away with your office copier. Paper is inefficient, and the mere presence of a copier encourages the proliferation of paper as opposed to more efficient alternatives. In the rare case where a copy really is necessary, a scanner connected to a printer can serve as an alternative, producing excellent quality copies.

Scanners

Creating, storing and retrieving paper documents can be costly. Back-ups of paper documents are often non-existent because the cost of copying and storing duplicates is prohibitively expensive. Storing, retrieving and backing up digital documents, on the other hand, is relatively easy and inexpensive. If a client comes into your office with supporting documentation for a personal tax return, for example, it would be more efficient and less costly to scan those documents than to make paper copies. The former requires a little space on a hard drive. The latter requires paper, toner, and physical storage, all of which are expensive relative to the scanned images. If you’ve created a backup, the former will be accessible even if some disaster befalls your office. The latter will be destroyed.

Scanners, combined with document management software (DMS) allow you to convert paper to digital media, and then to file, store and retrieve it at will. The first general rule of scanners is to avoid multifunction devices, as stated earlier. The second rule is to avoid consumer scanners. They are not up to the needs of even the smallest practice.

Prosumer scanners, which sell for under \$400, are sufficient for very small firms. These have some limitations, but they are capable of scanning up to twenty pages per minute (ppm) duplex in color. All other firms will need true business scanners. A good quality entry level workgroup scanner capable of 25 ppm or more can cost \$750 or more. A reasonably fast departmental scanner capable of scanning 11 X 17 paper can easily cost over \$3,000. Network scanners, which can operate independently of a computer on a corporate network, and which have the ability to route scanned documents to email, fax, and folders start at about \$2,500.

Fax Machines

Traditional fax machines rely on old technology. To the extent that you can, we advise avoiding traditional fax machines. Instead, consider Internet faxing. With the typical internet fax service, to send a fax you scan the document to a PDF file or TIFF file (two common file formats) and then you either email the document or upload it to the service's website. The service then sends the fax to its final destination. When receiving faxes, the service will either email you incoming faxes as email attachments, or it will send you a notification that a fax has been received, and you can log in to a website to retrieve the fax.

There are a number of advantages to using Internet faxing. One is that you do not need a separate phone line. A second is that you do not need to be near a fixed fax machine to receive faxes. You can receive them anywhere, provided you have Internet access. Third, there are no consumables. In addition, you no longer have to worry about printing junk faxes. You simply delete them. Perhaps the most important is that the quality of your outgoing faxes using a scanner (or computer file) and an Internet fax service will be far superior to that of traditional faxes. That's because the former can be scanned and transmitted at higher resolutions.

The only caveat when transmitting confidential information by fax is that you need to make sure the fax travels across the Internet securely. If you send and receive faxes as email attachments, and those attachments are not encrypted, there is a chance that the information could be at risk. If you send and receive using encrypted attachments, or through a secure, encrypted website, your information will remain secure.

General Office Productivity Tools-Software

Office Suite

It is possible to purchase programs such as a word processor and a spreadsheet program separately, and there are suites other than Microsoft Office out there, but as a practical matter, Microsoft Office is still the de facto standard in business today. An estimated 95% of businesses currently use Microsoft Office. Assuming you own, or plan to own Microsoft Office does not mean that you are home free, however.

There are at least two major issues confronting MS Office users today. The first is that many advisers are still using MS Office 2003 or earlier. Given the fact that MS Office 2003 is two versions old (the current version is MS Office 2010) advisers not using the 2007 or 2010 version need to upgrade.

There are a number of reasons to upgrade. First, MS Office 2007 & 2010 use a different file format than previous versions. They also sport a totally different interface. Most users, once they've had a change to become familiar with the new interface prefer it to the previous one, but it does take a while to acclimate. So, if you have not yet upgraded, expect to encounter a learning curve when you do.

If you are new to the Office 2007/2010 ribbon interface, learning to operate in the new environment recently became easier with the release of Ribbon Hero (<http://www.officelabs.com/ribbonhero>). This free game, available free of charge from Microsoft Office Labs, allows you to play games, score points, and compete against colleagues while improving your MS Office skills. In fact, even if you've already been using MS Office 2007 or 2010 for some time, you may pick up some additional skills by giving Ribbon Hero a try.

MS Office 2007 & 2010 are backward compatible with earlier versions of Office. This means the users of current office versions can open files created in older versions. They can also save files to the older file format, although doing so sacrifices some of the benefits (such as smaller file size) and formatting extras that the newer version allows for. Users of Office XP and Office 2003 can download a compatibility pack that lets them view documents created in MS Office 2007 & 2010, but again, or advice is to upgrade now.

The other issue a new user or upgrader must face is which version of office to buy. The Office product line includes many useful programs, although some, such as OneNote and InfoPath, are relatively unknown. There's a wide array of retail editions and multi-user licenses to choose from. At one end of the spectrum is MS Office Starter 2010. This software, which comes pre-loaded on some new PC's, includes version of MS Word 2010 Starter and MS Excel 2010 Starter. This software is free, ad supported software. It is not a trial version that expires, but it does not offer the full functionality of MS Word or MS Excel.

The real entry level product for 2010 is MS Office Home & Student 2010, which includes Word, Excel, PowerPoint and OneNote, but which is not licensed for business use. PFP's are more likely to be interested in MS Office Home & Business 2010, which adds MS Outlook 2010 to Word, Excel, PowerPoint and OneNote, or MS Office Professional 2010, which adds MS Access and Publisher to those applications previously mentioned.

Those needing five or more licenses have access to two different volume licensing editions, Office Standard 2010 and Office Standard Professional Plus. The former includes MS Word, Excel, PowerPoint, OneNote, Outlook and Publisher. The latter includes all the Standard components but adds MS Access, InfoPath, and SharePoint Workspace, as well as Communicator 2007 R2. In addition, Plus offers Office Web Apps (online versions of Word, Excel, PowerPoint and OneNote), information rights management and policy capabilities, unified instant messaging, business class social networking, integrated electronic forms, and integrated enterprise content management.

As was the case with the 2007 version of MS Office, the 2010 version offers several specialized server products. These include SharePoint Server (for collaborative environments), Exchange Server (email and

messaging), Groove Server (dynamic collaboration), Project Server, and Office Communications Server (unified voice, IM, audio, video and web conferencing).

We will cover productivity software in some detail at a later date. For now, suffice it to say that it is important to carefully analyze your purchase options to get the most out of your MS Office purchase. It is also worth knowing that most purchasers only use well under 20% of an Office application's capabilities. Proper training can yield significant dividends.

Email

This topic is closely related to Office suites because so many businesses use MS Outlook as their email client. Email has become a dominant form of communication in a relatively short period of time, but many firms do not think about email in a comprehensive manner. These are many things to consider. At a minimum, to meet state and federal regulations pertaining to registered investment advisers (RIAs), you must think about retention policies and privacy issues, as well as archiving, retrieval and disaster recovery issues.

There are also internal practice management issues surrounding email. How will you deal with spam? Is your email secure? How will you integrate email into your office workflows? Can and should you integrate email with your client relationship management (CRM) software? If employees will be using smart phones and PDA's, how will that integration work?

Large firms have a great deal of flexibility when designing an email system, but for smaller firms, outsourcing the hosting of email, the archiving, and disaster recovery may be the best alternative. SMARSH (<http://www.smarsh.com/>) is one firm that has built a strong reputation serving the demanding needs of financial services firms. Redtail Email from Redtail Technology and AdvisorMail from LiveOffice are other examples of firms offering email, archiving and compliance services to financial service professionals.

A hosted version of MS Exchange is another way to outsource your email infrastructure. If you perform a web search, you'll find numerous firms offering MS Exchange hosting. To give you just a few examples, 1&1 offers full featured hosted accounts starting at \$6.99 per month per user. Appix offer plans starting at \$4.95 per month per user. USA.NET, a provider of hosted MS Exchange solutions to over 1,500 financial institutions offers a full suite of communication tools at competitive prices.

For those willing to look beyond MS Exchange, Gmail for Business is enticing. For just \$50 per year per user, Gmail for Business offers 25 GB of storage, plus IM, voice and video chat. Archiving and e-discovery tools are available at a modest additional charge per user. Gmail for Business is part of the Google Apps Premier offering, so those who sign up also get Google's excellent calendar, Google Docs (documents, spreadsheets, presentations, drawings), Google Groups (for shared calendaring, shared mailing lists, etc.), Google Sites (Dynamic web pages you can create and share) and Google Video (a private video channel for your business). According to Google, there are already more than two million businesses running on Google Apps, so it might be worth investigating for your firm.

Document Management System (DMS)

There is a great deal of confusion in the industry with regard to what constitutes a document management system. When financial advisers were asked what document management system they use, the top answer in both the 2007 Financial Planning Magazine survey and the 2008 FPA Technology survey was Adobe Acrobat. Sadly, Adobe Acrobat is not a document management system.

A document management system includes the following capabilities at a minimum: A filing system, a retrieval system, and storage. A system for financial professionals should also address some, if not all of these additional areas: Creation (scanning a paper document to create a digital file, for example), optical character recognition (OCR) which makes an image file, such as a picture of a document searchable by converting the image to text, archiving (making sure the documents will be readable in the future), retention policies, workflow, security (preventing unauthorized access), disaster recovery, and authentication.

Adobe Acrobat has creation, OCR, and security capabilities at the document level, but it does not, on its own, meet the minimum requirements to be classified as a document management system because it does not provide filing and retrieval.

A professional document management system is a must for any financial planning office. If possible, one should look for a system that offers a degree of integration with your firm's client relationship management (CRM) system. Fortunately, there's a professional DMS to fit almost any budget. While an enterprise can easily spend tens of thousands of dollars on document management, entry level systems for a single user can be purchased for under \$500. In fact one firm, CEO Image Systems, Inc. (<http://www.ceoimage.com/EA/estore.html>) offers an entry level single user product for as little as \$299. NetDocuments (<http://www.netdocuments.com>) offers their Professional Edition online document management system with prices starting at \$30 per month per user (with a two user minimum purchase).

Client Relationship Management (CRM) Software

CRM software may be the single most important piece of software that you buy. Almost every successful financial professional will tell you that the single key to their success is the strength of their client relationships. The client relationship is enhanced by regular communication. CRM software systematizes those communications so that clients receive the care they need.

In addition, efficient practices employ uniform workflow processes. Good CRM software can be used to manage and record all workflows within the firm. CRM software can do much more. It can help track and analyze the profitability of each client relationship. It can help track the productivity of employees. With this information readily available, the personal financial planner can set fees appropriately. In fact, it is impossible to optimize a personal financial planning firm without good CRM software.

CRM software falls into both the general productivity category and the industry specific category because you can purchase it either way. Within each category, there are both traditional desktop server

software options and online, or applications service provider (ASP) options. ACT! and Goldmine are examples of traditional general products you may be familiar with. Salesforce.com and Oracle CRM (formerly Siebel) are example of online solutions.

The biggest advantage of using a general program like one of the above is that they are widely distributed, so there are many people trained on these systems. Employees may have used one of these systems at a former employer, which can keep training costs low. In addition, there are many independent consultants that can help you configure and maintain one of these solutions.

The greatest disadvantage of using a general CRM program is that it must be configured to meet your firm's needs, and it must be maintained in the future so it continues to meet your needs. A related problem is that in order to properly configure a CRM system, you must know what you need it to do, and you must know what it is capable of doing. Many advisory firms are weak in these areas.

The greatest advantage of using an online product is that your CRM solution is available to you anytime, anywhere, as long as you have an Internet connection. This can also be its greatest disadvantage, particularly when you are at the mercy of a slow Internet connection.

As a general rule, advisory firms that purchase products in the general CRM category tend to underestimate the cost of configuring the software, training staff to use it, and maintenance. When comparing the cost of an industry specific program with a general purpose one, be sure you don't fall into this trap.

Note Taking Software

Ideally, all notes relating to clients will be recorded within the CRM software, but many employees within a firm are constantly taking notes that are not client related. For those employees, note taking software may be appropriate to create, file and retrieve notes. Examples of note taking software include OneNote (<http://office.microsoft.com/en-us/onenote/>) and Evernote (<http://www.evernote.com/>).

Industry Specific Software Applications

Many applications are designed specifically to support the personal financial planning practice. This category includes financial planning software, portfolio management software, and investment analysis software. It also includes things like CRM software designed specifically to meet the needs of PFPs.

Financial Planning Software

Like CRM software, Financial planning software can be categorized a number of different ways. You can look at desktop/server software vs. online or ASP software. You can compare goals based planning programs vs. cash-flow based programs. You can also segment comprehensive financial planning software vs. modular and/or specialized programs.

Later in this guidance we will explore financial planning software. For now, here are a few general observations. Online financial planning applications are gaining in popularity, particularly among small and midsized firms because using an ASP alleviates the need to install, maintain, and back-up the

financial planning related files. Many online programs also offer the ability to collaborate online in real time with the client and with the clients other advisers.

As is the case with most other programs you use, the ideal financial planning program will offer integration with your other applications. Integration alleviates the need for repetitive data entry and it significantly reduces errors while lowering the overall cost of plan production.

For projections going out more than a few years into the future, thought leaders in the industry have been moving away from cash-flow based planning and more towards goal based planning. There are a number of reasons for this. One is that projecting out cash flows more than a few years can often give the client a false sense of accuracy that just does not exist. If we don't know what rates of return, inflation rates, tax rates, etc. will be far into the future, it is hard to argue that cash-flow based plans will offer a more accurate result than goal based plans will. Second, goal based plans are often easier for the client to relate to and understand. Third, goal based plans are often less expensive to produce, so they are available to a broader range of prospects. On the other hand, for more immediate needs, particularly when a client is planning on any major financial changes, a full cash-flow analysis can be a necessity. For that reason, some firms choose to use two financial planning programs, or they choose a single program capable of handling both types of planning.

The better comprehensive financial planning packages are suitable for a wide range of needs, but there are instances that require a specialized sophisticated tool. Advanced estate planning and advanced employee compensation planning are two areas where specialized programs are often employed.

Portfolio Management and Reporting Software

If you are going to manage client assets in house, or if you are going to oversee the management of client assets by subcontracting asset management to others, you will require portfolio management software. Portfolio management software can cost as little as a few thousand dollars or it can cost over one hundred thousand dollars, depending on the nature of assets you are dealing with, the size of your practice, where the assets are being held, and your reporting needs.

One key thing to look for when shopping for portfolio management software is the nature of the database being used to store the data. SQL databases are becoming the industry standard, but there are exceptions. SQL is fast, reliable and scalable. If you need to move your data from one vendor to another, moving from one SQL database to another will be easier and less expensive than moving from a proprietary database to SQL or another proprietary database.

As is the case with most other categories of software, a number of vendors offer online portfolio management solutions. In addition to the usual advantages of online software (no maintenance, reduced hardware needs, almost universal access, etc.) online portfolio management software offers additional advantages.

In the typical PFP practice, an employee will download portfolio data daily from the custodians of the data and then reconcile the data. With an ASP provider, the provider downloads and reconciles the data

with the custodian. So, when you use an ASP for portfolio management, you are in essence outsourcing not only the maintenance of the software, but also the downloading and reconciliation functions as well.

Some online providers offer services well beyond downloads and reconciliation. They will print and mail periodic client reports (or deliver them electronically), calculate fees, bill clients, and much more. In addition, some offer client portals (or “vaults”) where advisers can post and store client documents, which can then be accessed by the client through their own private web portal.

Historically, PFPs have found that changing portfolio management software providers is more difficult than changing any other software provider. Although it is likely that changing portfolio management providers will become somewhat less painful in the future, we still recommend that you exercise the utmost care when evaluating and selecting portfolio management software.

CRM Software

As mentioned earlier, there are both general purpose and industry specific CRM applications available to PFPs. While it is possible to customize a general purpose CRM application and while there are sometimes legitimate reasons to do so, many PFPs underestimate the cost and difficulty of either customizing a general CRM application or building one’s own from the ground up. Industry specific programs are available as both desktop/server applications and as online services, and there is a reasonable variety to choose from.

For the smaller firm, an industry specific program is almost always the wisest choice. Larger firms may have unique needs that cannot be met by one of these programs, but building or customizing your own should only be considered after examining your industry specific options. If nothing else, you may find these programs offer some functions that you never considered, so looking at what others have developed can help educate you should you eventually choose to build your own.

Portfolio Rebalancing Software

Manually rebalancing a large number of client portfolios can be time consuming and expensive. Today, rebalancing software comes in a wide range of prices and capabilities. Some that rebalance at the individual account level can be very inexpensive, however software that is highly automated, tax sensitive and capable of grouping accounts in a variety of ways can easily cost tens of thousands of dollars. Larger wealth management firms are increasingly investing in sophisticated rebalancing software because the alternate is more expensive and less accurate. As the number of advisers using more sophisticated rebalancing software increases, and as the number of providers of rebalancing software increases, it is likely that we will continue to see a downward trend in the pricing of rebalancing software.

Custodians

Although generally not thought of as a technology decision, the choice of a custodian or custodians for your client’s assets can have technology implications. For a number of years, Schwab, Fidelity and TD Ameritrade dominated the independent adviser custodial space. More recently, Pershing, Shareholder

Services Group, Scottrade, and Trade PMR have been actively competing for adviser's custodial business.

The choice of custodians can influence your overall technology plan in a number of ways. First, each firm offers advisers some connectivity to their back office, but standards and file types are not uniform. For example, some custodial websites may be accessible through multiple web browsers (Internet Explorer, Firefox, Safari, Chrome, etc.); some may be limited to one. Some custodians may offer discounts on third party CRM, portfolio management, financial planning, and rebalancing software. A number of firms offer you their own proprietary software as an inducement to do business with them.

More recently, custodians are software integration has become a competitive battle among custodians. All are trying to offer advisers a higher level of integration, but each is taking a somewhat different approach. As a result, some third party software may integrate better with one custodial platforms than with another. All of this should be noted before final technology purchase decisions are finalized.

Other Considerations

Although we have highlighted the major technological building blocks of a modern PFP practice, there are many other tools you will want to consider. These include communications/collaboration tools such as podcasts, video clips, video conferences, and online collaboration tools. Other optional tools include survey software, account aggregation tools, website design, desktop publishing and human resource tools. Finally, do not overlook opportunities to outsource. As an alternative to purchasing and operating the software discussed above, you can often find a firm to operate and maintain the software for you.

In Summary

The reader should now have a basic understanding of the technology building block necessary to construct a modern PFP practice. Subsequent guidance will address these components in more detail, and offer specific purchasing recommendations in each category.

Selecting the Right CRM Application for Your Firm

In the technology overview portion of this technology guidance we stated that CRM software may be the single most important software application within your firm. If CRM software is not playing a critical role within your firm you are either using the wrong product or you are not using the product you have properly.

Many financial planners use their CRM systems as nothing more than a digital Rolodex. These advisers are failing to take advantage of the leverage that the right CRM system can bring to any practice. When used properly, a good CRM system will touch almost every aspect of your business. In order to understand why this is the case, you must first understand what a CRM system is and what it does. Only then can you understand how it can be used to transform your business; so let's take a step back and start at the beginning...

According to Wikipedia, "Customer relationship management (CRM) is a term applied to processes implemented by a company to handle its contact with its customers. CRM software is used to support these processes, storing information on current and prospective customers. Information in the system can be accessed and entered by employees in different departments. Details on any customer contacts can also be stored in the system. The rationale behind this approach is to improve services provided directly to customers and to use the information in the system for targeted marketing and sales purposes."

The concise definition above actually encompasses a wide range of tasks within a financial planning organization. One aspect that is particularly important to new firms, or those who are trying to grow rapidly is sales force automation (SFA). In our industry, this is often referred to as prospecting.

How does your firm attract and "process" prospects? Do you advertise or conduct mailing campaigns? If so, how do you track responses and measure the effectiveness of your campaigns? CRM software can do this for you. In fact, some CRM products can actually help you create and implement marketing campaigns.

When a prospect first contacts your office in response to a marketing campaign or as the result of a referral, how is that prospect handled? Is there a uniform process or workflow in place that makes sure every prospect is handled in a consistent manner? For example, if a prospect phones in, perhaps your process is to immediately get basic demographic information (name, address, telephone, email, etc.) and enter that information in the CRM system as a prospect. Someone, either the person who takes the initial call or someone else, performs an initial screen in order to determine if the caller is a "qualified prospect". Perhaps you set minimums on assets or you set a minimum fee. Maybe the prospect is not a good fit because they have unique needs that are not your firm's core strength. The interaction between staff and prospect, as well as any information resulting from these interactions, should be noted in the CRM system.

If a prospect is not qualified, the workflow may end there; or you might decide to send a thank you card in the hopes of maintaining contact and converting the prospect at a later date. If the prospect is

qualified, the next steps could be to assign the prospect to a planner, schedule an appointment, and then send a follow-up email or letter to the prospect a few days before the appointment that includes a checklist of things to bring and driving directions to the office.

All of the steps outlined above can be programmed into most CRM systems as a single workflow. By simply clicking a “new prospect workflow” all of the items listed above can be created as action items and assigned to the appropriate staff members. Better CRM packages allow more than one decision path, so in the case above, if a prospect is not qualified, the next step automatically triggered would be a thank you card; if the prospect was qualified, the CRM system would automatically trigger the assignment of the prospect to a planner, as well as all subsequent steps.

The example above touches on a second function of a CRM system in your office: collaboration. A process or workflow (such as new prospect, new client, annual review, etc.) can include multiple steps and multiple employees within the firm. Allowing all authorized persons within the firm access to relevant information as well as permission to add new information enables all employees within the firm to contribute to a team approach to client service. Some firms take even a broader approach to collaboration, allowing virtual work partners and even clients to access select information from the CRM system in order to further facilitate cooperation and collaboration.

Clearly, in the context of client service, automation is not the goal; it is merely the means to an end. The endgame here is client satisfaction and trust. In order to build client trust and satisfaction, it is helpful to know as much about a client as possible, and to make sure that anyone within your office interacting with a client has the requisite information readily available.

CRM software can help organize and provide this information as needed. Automated workflows ensure that all prospects and clients will receive a uniform experience. If the various processes are mapped out and programmed in advance, your staff will follow the same steps, in the same order, for each client. This approach also improves efficiency, because everyone can see, at any time, where the firm is with regard to each process, and who is currently working on a given action item.

That’s not to say that you can’t have more multiple workflows addressing a single process; you can. For example, if you segment your clients into two groups, executives and small business owners, you can create two annual meeting workflow templates, one for each group, so that each segment’s unique needs can be addressed.

There are other sub-categories of CRM that may be important to you. If so, you will want to make sure that the system you select is strong in these areas. Sales intelligence may be of particular interest to CPA firms. Sales intelligence includes cross selling, client trends, and client margins, to name a few examples. Obviously, if a tax client meets with a CPA and voices concern about an investment portfolio that is not managed by the CPA firm’s wealth management department, a sales opportunity exists. There should be a formalized process within the CRM system to initiate and monitor a workflow designed to secure this potential new business. If a number of clients mention a need they have that is not being satisfied, that is a trend that is worth tracking.

Campaign management through the CRM system can be applied to both existing clients and prospects. For example, you may want to target all small business owners to let them know about a new small business service you are launching. If a subset of clients own equities or bonds in a firm that is experiencing financial trouble, you may want to start a campaign to offer analysis and advice regarding the situation. As the Federal government adapts new tax policies, as it surely will in the coming years, you can use your CRM system to capitalize on the marketing opportunity by implementing a campaign that invites clients and prospect in for a tax check-up.

Analytical CRM is an essential ingredient for all financial service firms. Using all the information you have gathered about prospects, clients and workflows, managers can analyze how the firm is functioning and institute changes where necessary. For example, you might find that clients in a certain industry tend to make greater demands on your staff's time, so you may want to adjust prices accordingly; or you may find that certain workflows you've established consistently run into a bottleneck, indicating that the workflow may require modification.

Now that you (hopefully) have a better understanding of what CRM software is and how it can help improve your practice, let's turn our attention to an analysis of some specific CRM software products.

Categorizing CRM Applications

CRM software is a broad topic, so in order to better understand one's options, it is useful to subdivide applications by their target audience and by the way the software is delivered. For the purpose of this guidance, we'll divide the target audience into those products that are aimed at a broad, general business audience (General Purpose CRM) and those targeted at personal financial planners (Industry Specific CRM). We'll also consider two delivery methods: desktop/server based and web-based.

A word of warning with regard to delivery method: these terms are not absolute. For example, when most people think of desktop/server software, they think of software that they purchase and then install on computer(s) or server(s) in their own office or offices. It may be possible, however, to have a third party install and run server software for you at another location, with the third party assuming responsibility for the purchase/maintenance of the hardware and software.

By the same token, many folks assume that web based software is always provided through an application service provider (ASP) model where the software exists "on the Internet" and users "rent" the software on a periodic basis. Readers should be aware that it is sometimes possible to purchase a web application and run it on one's own web server behind one's own corporate firewall. The advantage of such a set up is that it allows the firm to have better control over the application, while still offering a software solution that requires only a web browser to use. For simplicity, when we refer to web-based software here, we'll be referring to an ASP unless otherwise specified; and when we refer to desktop/server software we'll assume it is housed in your office and maintained by your staff unless otherwise specified.

As we can see in Figure 1, when we plot the software options on an X, Y axis, there are four quadrants to choose from. Clearly, our pool of potential candidates can often be narrowed immediately provided we

have a preference for one quadrant over the others. Let's start by looking at the general purpose products and then move on to the industry specific ones.

General Purpose	Industry Specific
Desktop/Server Based	Desktop/Server Based
General Purpose	Industry Specific
Web Based /Application Service Provider	Web Based/Application Service Provider

Figure 1

General Purpose Applications

Historically, general purpose products have found wide acceptance in financial services circles. One of the reasons is that as recently as ten years ago there were only a few widely distributed industry specific programs available for personal financial planners.

General desktop/server products (upper left quadrant) such as ACT! (www.act.com) and Goldmine (www.goldmine.com) have been used extensively for years in the financial service industry with some degree of success. There are a number of advantages to choosing a general purpose product. As a rule, the initial software purchase can be fairly inexpensive when compared to industry specific desktop/server applications. All are highly customizable. Since they are widely used, and since they have been around for a long time, it is likely that your staff will already be familiar with one or more of these products. Again, due to the large installed user base, all sorts of help is available. There have been books written by third parties about many of these applications. There are consultants that can help with complex installations, for a price. There may be user groups, blogs, and other sources of online information.

This type of software entails some disadvantages, however. Perhaps the greatest disadvantage is that the software needs to be configured. Out of the box, it does not include any of the industry specific fields, let alone workflows that planners require. Of course the software can be customized to meet your needs, but that assumes you already know what you need; and the actual customization process itself is time consuming. There are consultants out there who will be happy to configure and customize your software for you, but if they are not intimately familiar with this industry, the odds of success are low. Even if a consultant does know the industry, it is sometimes difficult to gauge in advance whether or not the consultant is a good fit for your firm.

Another disadvantage is that this type of software requires periodic upgrades, so you will have to purchase and install them, or hire someone to do it for you. Occasionally, you may discover that an

upgrade interferes with some of your existing customizations, so when you upgrade, you may also have to re-customize parts of the application. The bottom line is that the time and cost of configuring a general purpose program to your satisfaction can exceed that of deploying an industry specific program.

General web-based/ASP products (lower left quadrant) such as Salesforce (www.salesforce.com), Oracle CRM (<http://crmondemand.oracle.com/en/index.htm>) and Microsoft Dynamics CRM Online (<http://crm.dynamics.com/>) offer many of the same advantages that their desktop/server brethren do. They are widely distributed, have a large base of installed users, they are customizable, and consultants are available to help you configure them. In addition, there is, generally speaking, a good deal of online information available to help you use these products more effectively. You also get the advantages of a hosted solution meaning that you do not have to buy and maintain the hardware. Software updates are performed by the provider, as is maintenance and support. The provider is responsible for redundancy and archiving.

The selection of general web-based/ASP solutions, however, entails many of the disadvantages that general desktop/server based applications do. Someone needs to configure and customize the product. This includes adding industry specific fields, industry specific workflows and the like. Such customizations require specialized knowledge of both the product and our industry. The required expertise is not easy to find and it does not come cheap.

Among online CRM providers, pricing varies greatly. In some cases, a minimum number of licenses may be required, or volume discounting mean that smaller firms pay much more per licensee than larger firms do. Another consideration is Internet access. You need an Internet connection and sufficient bandwidth in order to use such a solution effectively. Ideally, you'll also want redundant Internet connections, so if your primary provider experiences a service interruption you can still access your data.

In spite of these disadvantages, there has been some growth in general purpose web-based applications recently. From a user base of close to zero a few years ago, it appears that usage of these programs combined has grown to approximately 12%, based on the results of Financial Planning Magazine's 2009 technology survey.

Overlays and Customizations

A number of firms offer mass customization of general web-based ASP CRM systems. For example AppCrown offers a customized version of Salesforce for PFPs. Fidelity's WealthCentral offers a customized version of Oracle on Demand CRM. Galeforce is a solution created on top of the Microsoft CRM and SharePoint Platforms. Salentica is another solution built on the Microsoft CRM platform as is the CRM portion of the Tamarac Advisor offering. The advantage of these solutions is that, at their best, they can harness the power of sophisticated cloud-based solutions and offer them in an environment geared specifically towards financial service professionals. If they have sufficient scale (Fidelity uses Oracle CRM internally, so they presumably get a substantial volume discount) they can provide the underlying product at a reduced price. The disadvantage of these offerings is that you are often paying, either directly or indirectly, for two products; the underlying CRM and the overlay or customization. In

some cases, the total cost of the two components makes less attractive, financially speaking, for smaller firms.

Since there are many variables that come into play with customization/overly providers, it is very difficult to generalize, however with the possible exception of WealthCentral's Oracle CRM solution; these providers are more likely to appeal to the midsize and larger forms as opposed to the smaller ones.

Industry Specific Applications

CRM software products designed exclusively for financial planners offer some unique advantages, so it comes as no surprise that sales of industry specific CRM software has been robust over the last several years. The single greatest advantage that industry specific CRM has over general purpose CRM is that much of the customization has already been done for you. This means that the application is going to be delivered to you with most of the fields you need; including some you probably have not even thought of. There will be fields for driver's license numbers, Social Security numbers, investment related information, insurance related information, tax information, estate planning information, etc.

In Figure 2 below we see an example of an account detail page from ProTracker, one popular package. As you can see, there are "account flags" designating whether the firm manages assets for the client, whether those assets are discretionary, etc. There are fields with pre-populated drop down lists in many cases that speed the data entry process while minimizing mistakes. If you were to purchase a general purpose program, your firm would have to create and customize each of these fields.

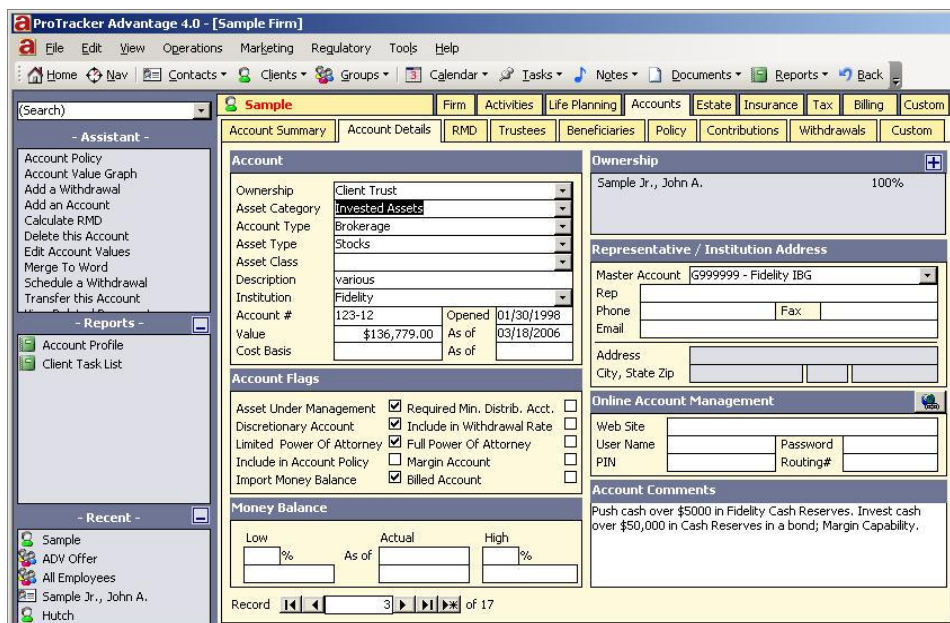


Figure 2

Many systems also include, either in the base package or at an additional cost, document templates and workflow templates. The value of such templates should not be underestimated. To the uninitiated,

building workflows from scratch can be particularly challenging. When you start from a workflow template and modify it to better meet your firm's needs, the task becomes immeasurably easier. Figure 3 illustrates a workflow template for a new financial planning client. (Since this workflow does not include steps for processing new client forms, this firm obviously has created a separate workflow process for those tasks).

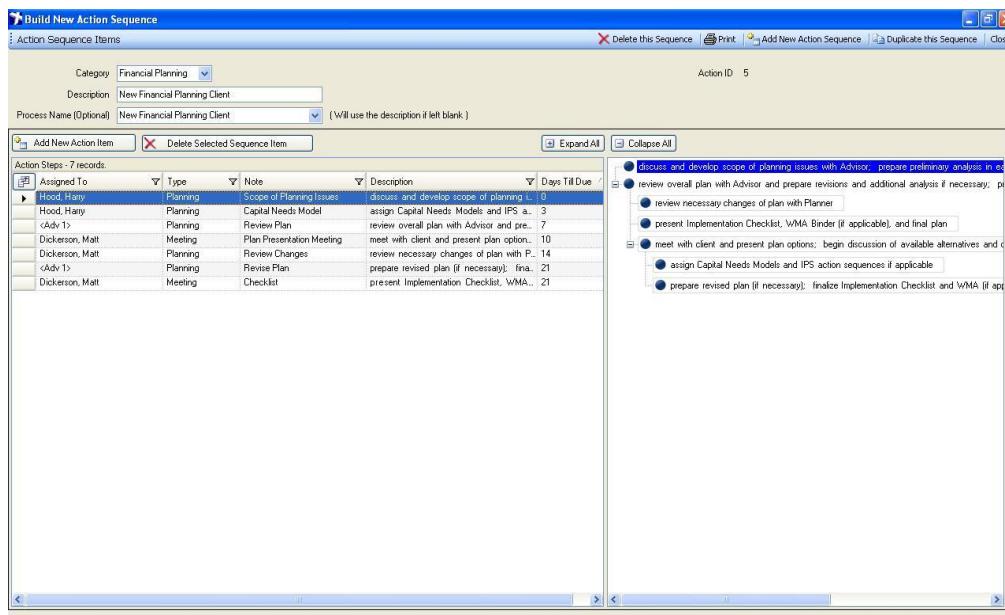


Figure 3

The other major advantage of industry specific CRM software and one that is often overlooked or underappreciated by potential purchasers is the underlying intellectual property contained in these programs. A few applications in this category were originally designed by financial planners for use in their own practice. All have been used almost exclusively by industry participants, so the vendors have benefitted from the feedback they have received, and they've modified these programs accordingly over time. The result is CRM applications that reflect the collective wisdom of the financial planning community.

A couple of the better known and more widely used desktop/server based industry specific CRM applications (upper right quadrant), Junxure (www.junxure.com) and ProTracker (www.protracker.com), were originally designed by financial planners for use within their own practice. According to the 2009 Financial Planning Magazine technology survey, Junxure, with a 24% market share, was the most popular industry specific program in the study; but each program has enthusiastic proponents.

Both of these programs offer a wide range of industry specific fields, a picture field (so the receptionist can recognize unfamiliar office guests and greet them by name), document templates, and workflow templates. In addition, both allow you to assign tasks, track every action that takes place in the office, set reminders, schedule appointments, perform all the marketing chores discussed earlier (often with

industry specific document templates, action templates and workflow templates), and track the way time is expended within the office.

These systems also allow for granular security, so that only those who need to see specific client records, or fields within records have access to them. For example, a receptionist may need to see general information and pictures of clients, but not their financial information. An administrator can set up access so the receptionists only see the information you want them to see. If a junior planner has ten clients, it may be necessary for them to view all records relating to those clients, but you may not want to allow that employee to copy, edit or print those records. This too can be easily configured into the system. Figure 4 illustrates a page in Junxure that allows the administrator to assign various rights to individuals and groups.

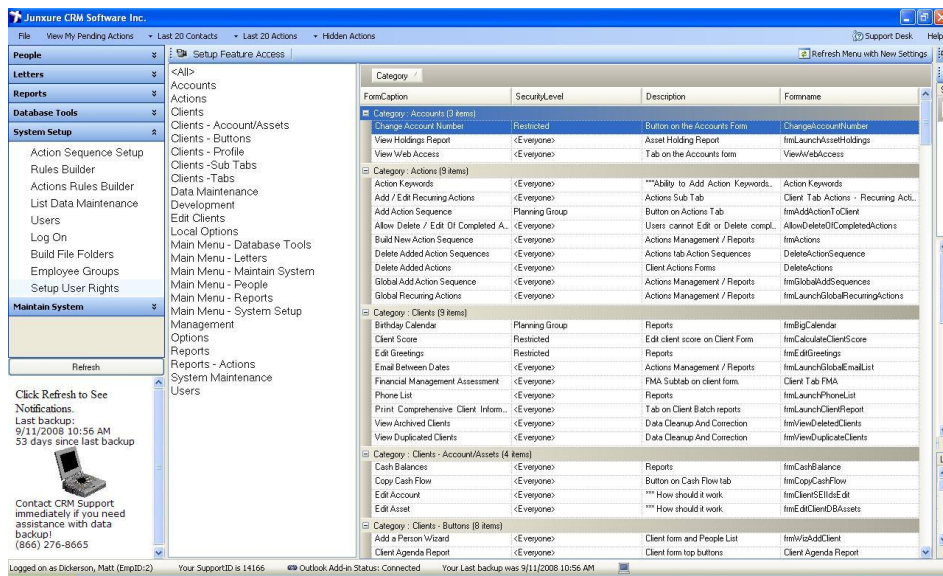


Figure 4

Once you build an extensive database of client information, you want to be able to search the database to find information pertaining to a single client or, in many cases to a group of clients. Here again, the industry specific programs often have an advantage. That's because if there is a set of information you'd like to see in a report, the odds are other advisers have made the same request, so it is likely that a search template or a report template already exists for the information you need. This saves you the trouble of building your own search templates and report templates. Some programs such as Junxure even include a report building wizard like the one illustrated below in Figure 5 so that you can build your own custom reports if one does not already exist. Others will build custom reports for a nominal fee.

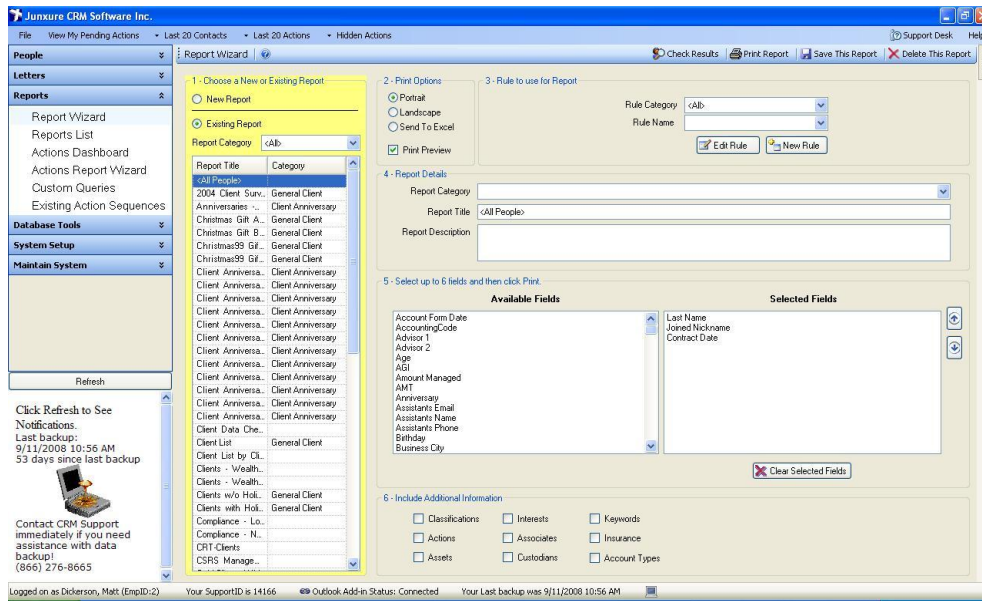


Figure 5

As an example, one report you might want to pull is a list of all tasks that anyone within the firm has taken on behalf of a client or a household over the course of a year. Most clients have no idea what goes on behind the scenes, so they do not understand all of the things that your firm does for them. By displaying such a report, you can easily justify the fees you charge.

You can also run analytic CRM reports to gauge performance within the firm, and to benchmark performance within the firm over time, as well as to industry wide benchmarks. For example, if you have two customer service teams within the firm, and one is consistently processing the “new client” workflow 35% faster than the other team, you have identified an issue that needs to be examined. If, two years from today, the same process takes longer on average than it does today, you will want to find out why that is. There could be a valid reason, such as the need for additional steps to be added to a process, but if not, some corrective action may be required. On a more positive note, if employees or teams are shown to be consistently improving performance and task management, the principals of the firm will want to reward employees appropriately.

Another way to use analytics is to get a snapshot of every outstanding action item within the firm. Junxure’s Action Dashboard (see Figure 6), and similar reports generated by competing products can serve up this information almost instantaneously. This example summarizes the total number of clients with actions pending, the number of employees with pending actions, and the number of processes that have actions pending. There is also a list of all pending actions. This list can be sorted by any of the column headers.

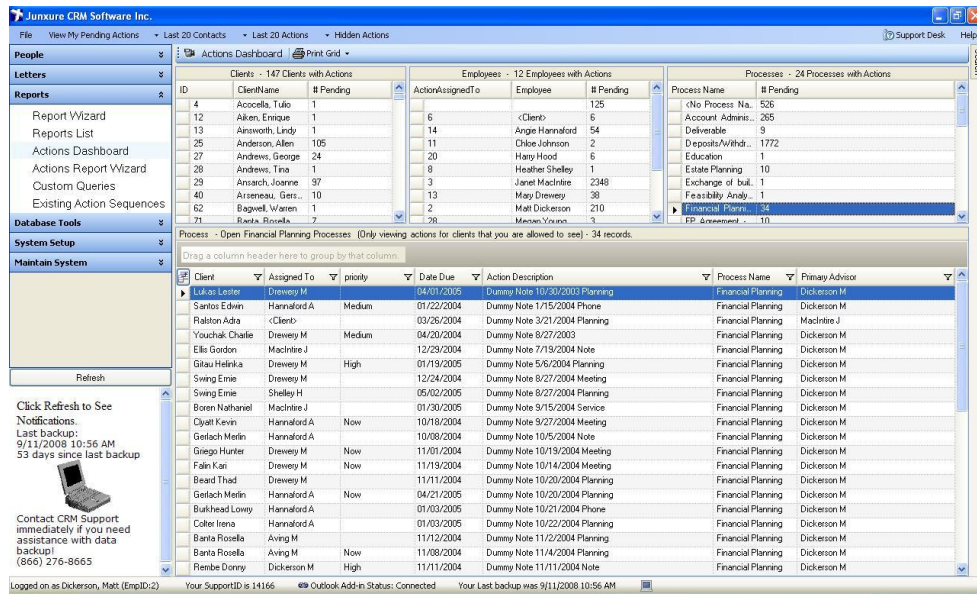


Figure 6

Yet another advantage of industry specific CRM applications, and one that applies to both online and offline software, is that many have already facilitated some level of integration with other leading vendors of software to the financial planning community. For example Junxure, ProTracker and Redtail all offer integration with at least one financial planning software vendor, one portfolio management software vendor, one document management software vendor and one account aggregation provider. The three firms mentioned above, as well as all members of the Your Silver Bullet organization, offer a complete list of firms they integrate with on the Your Silver Bullet website (www.yoursilverbullet.net).

As a general rule, the best of the desktop/server based industry specific programs currently possess a depth and breadth that their online counterparts have yet to match. This is primarily due to the fact that these products are more mature than their online competitors; but the gap is narrowing.

There has been substantial growth in the online, industry specific sector (lower right quadrant) over the last few years. Relatively new firms like Redtail Technology (www.redtailtechnology.com), smarshCRM (www.smarshcrm.com), Upswing CRM (www.upswingcrm.com) and Grendel Online from Big Brain Works (<https://www.grendelonline.com/grendel/>) are attracting the interest of advisers, as are older more established firm that have created online applications, such as EBIX SmartOffice (<http://www.ez-data.com/products/>), formerly known as EZ Data Smart Office.

Early attempts at online industry specific CRM packages were handcuffed to some extent by the web architecture of the past. If you had a slow Internet connection, you were not going to be pleased with online CRM. These days, the vast majority of PFPs have access to sufficient bandwidth, and many have multiple providers to choose from.

In addition, usability was somewhat limited due to the lack of responsiveness inherent in older web applications. For example, until the advent of AJAX (asynchronous JavaScript and XML) and other

modern technologies, you could not drag and drop objects on a web page like you could on a desktop application. Now you can, so the line between the desktop and the web is slowly fading. Google's renewed interest in the race to make web applications more responsive (as evidenced in part by the release of their own Google Chrome web browser (<http://www.google.com/chrome>), now in its 6th version, suggests that over time, web applications will become even faster and more responsive.

Redtail CRM from Redtail Technology is one of the more highly evolved online applications on the market today. Redtail offers the ability to store client specific information, action tracking, workflow management, multiuser calendaring, marketing tools, including seminar managing, and much more. Like all online CRM applications, it relieves the user of the need to worry about managing hardware, software, backups, disaster recovery, etc.

Redtail is in the process of rolling out their most ambitious upgrade ever. The new version (code named Project Leapfrog) entails a total re-write of the underlying system architecture. The new architecture makes use of many Web 2.0 technologies that were not available when they original program was written. The result is a faster, more intuitive and more responsive application. Almost every aspect of the program, including the dashboard, the navigation, the workflows, the filters, the search functionality and the reporting have all been improved and enhanced.

Redtail also offers two additional products that integrate almost seamlessly with Redtail CRM. One, Redtail Imaging, is an online document management system. The other, Redtail Email Archive and Retention provides financial planners with a convenient way to retain retrieve and report on email correspondence.

Upswing, another online CRM system, offers most of the key functionality that advisers are looking for, including the ability to track actions (tasks), track client information, and generate reports. It also has some workflow template capabilities (called Action Templates) although they are not as comprehensive as that of some desktop/server based competitors.

As we can see in Figure 7, Upswing's screens are very clean and uncluttered. This results in a program that, according to Upswing, is very easy to learn and use. An added benefit is that most tasks within the application can be completed with few keystrokes.

In addition, Upswing features online file management, plus the ability to track projects and sales opportunities. Its primary appeal, however, is its intuitive interface.

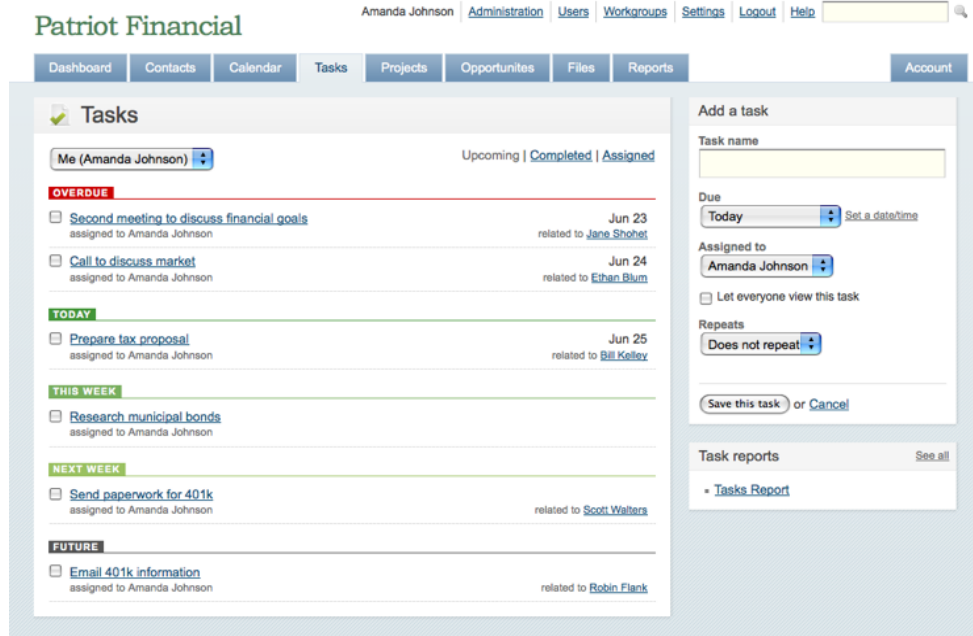


Figure 7

The Lines Are Blurring

Although we continue to believe that our segmentation for CRM software into the four quadrants illustrated in Figure 1 of this section remains relevant, it is worth noting that the distinctions among the online and offline software is blurring. For example, ProTracker Software recently introduced ProTracker Cloud. Through a partnership with IVDEsk, this offering provides remote hosted services for ProTracker Advantage. This allows the PFP firm to outsource the installation and maintenance of the remote server, installation and maintenance of the software, and daily backups of the database and client files for a monthly fee. Although this type of set-up operates differently from an ASP, since each firm has their own hosted instance of the software on a server that they lease, the net effect for the end user is similar: The PFP has access to a CRM application over an Internet connection.

Training and Support-The Final Ingredients

No matter how well you do selecting an appropriate product for your firm, your investment will be wasted unless all of your staff can use it effectively. The only way this is going to happen is with training. Training is not a onetime event; it is an ongoing process. When employees start using a new CRM system, they will initially want to master the essentials they need to get their jobs done, but over time, in order for the firm to reap the maximum benefit from the CRM system, everyone will need to raise their level of competency.

There are many ways that employees can learn. These include live classes, one on one training, books, webinars, online videos, etc. Before you finalize your CRM purchase, it is a good idea to thoroughly review all training options, paying particular attention to their quality and cost.

It is also essential to interview clients of the CRM firm to receive feedback on the level of support. If you are going to be running essential aspects of your business through a CRM system, it had better be highly reliable; and if there is a problem you will require a rapid response from the vendor. This last point is even more essential when dealing with an application service provider. If for some reason the ASP goes down, your CRM will go down too.

Selecting a System that is Right for You

When shopping for a CRM system, the first thing you need to do is evaluate your firm's processes. You also need to consider any changes you plan to implement in the future. In the 2008 Moss Adams Financial Performance Study of Advisory Firms (p. 19), six characteristics were identified with building value. One factor directly related to five of those six characteristics was standardized processes. Once you've standardized your processes, CRM software can be used to automate, implement and track those processes.

If you serve ultra high net worth individuals, and if you have, or would like to create and track, detailed sophisticated workflows, you will need a more powerful, comprehensive CRM product. If you have a more modest practice and more modest tracking goals, a less powerful system is probably better because they are easier to learn and use. They are often less costly to purchase and maintain as well.

Online applications can work for firms of all sizes, but they are particularly appealing for firms that are still small and do not have the mass to justify a full time IT staff or a large IT infrastructure. Online systems also appeal to those firms with a highly mobile workforce, as well as those that have multiple offices that are dispersed geographically.

In the debate over general software vs. industry specific, we usually favor the latter based upon the notion that PFPs are not in the software business and that they should not try to re-invent the wheel unless absolutely necessary. So, if you can purchase a finished product that can do almost everything you want it to, why would you try to customize something else, or worse yet, build your own system from the bottom up? We've yet to encounter a firm that has not underestimated the time and cost involved in doing so.

Since CRM software can play a critical role in your firm's success, the selection process should not be taken lightly. If you follow the guidelines we've provided, and you do your own due diligence, it is likely that you will receive an excellent return on your CRM investment.

Portfolio Management and Accounting Software

Portfolio management and performance reporting systems play a major role in most PFP practices; many would argue that they play too large a role. Why? Because PFP is a long-term, ongoing process that has little if any relationship to short term investment performance. Although most knowledgeable PFPs constantly preach this fact to clients, they often undermine the message by sending out quarterly performance reports and conducting quarterly client meetings that highlight investment performance. If you tell your clients not to focus on performance, but you constantly report to them on performance, what do you think clients will focus on? An increasing number of advisers believe that when it comes to investment reporting, less can be more. It's something to think about...

Whatever your thoughts on performance reporting, it is an important part of a PFP practice from an operations standpoint. There are two reasons for this. The first is that many firms struggle to implement processes that optimize the portfolio management and reporting workflow. In other words, it is often an area of inefficiency in the PFP firm. The second reason is that it is often an area of vulnerability, operationally speaking.

At many firms, there is only one employee who has total command of the portfolio management system (PMS) system. If that person falls ill or quits, the PFP firm immediately faces a crisis. Usually, there is a back-up person who has some familiarity with the system on call, but when the full load falls on that person's shoulders, problems tend to develop.

Ironically, though CRM software is arguably the single most important application used in the typical advisory firm, and portfolio management software can be an area of vulnerability, it is portfolio management software that advisers tend to become most attached to. Tell advisers that they have to change their financial planning application and they'll gripe, but they'll get over it. Forcing an adviser to change a CRM application may cause a bit more discomfort, but with the exception of the few firms that are true power users of industry specific programs (like Junxure, Redtail and ProTracker), they will cope with it and move on. Tell an adviser that they will have to change their PMS, however, and they are likely to break into a sweat, if not an outright panic (OK, maybe we are exaggerating a little bit, but not much!).

The point is, if you are a new firm selecting PMS software, you want to do everything you can to make an appropriate selection the first time. Perform ample due diligence and get expert advice if necessary. Should you make a mistake, it will likely be a painful and costly one.

If you currently have a PMS system, and it does not meet your needs, you have a decision to make. You can put off the inevitable, and deal with a potentially bigger and more costly conversion down the road, or you can bite the bullet now, do a better job of vetting vendors this time, and enjoy the benefits of a better system sooner, rather than later.

Why are advisers so paranoid about their portfolio management software and the data contained therein? There are a number of reasons; some of them legitimate, some of them questionable. One concern often raised by advisers who are contemplating a change in portfolio software vendors is the

integrity of their data. What they really mean is they are afraid that if they take their client data from their existing program, move it to another program, run performance reports in the existing system, and then compare them to comparable reports in the new system, they will find that the two sets of performance numbers do not match.

This is a legitimate concern but it may, or may not be related to the “integrity of the data.” Let’s deal with the integrity issue first: The longer you’ve been in business, and the more extensive your portfolio data set, the more likely it is that there are data integrity issues. Let’s face it; if you have data for client portfolios going back ten or more years, you’ve booked a lot of transactions. How many times over that period has a mutual fund company mistakenly transmitted incorrect distribution information over that period, only to correct it later? How many times has a security been mispriced on a given day, only to be corrected at a later date? How many stock splits, stock dividend, corporate actions and other assorted events conspired to cause transaction errors in your data? The answer is quite a few. As a result, almost every advisory firm with a large data set has at least a few errors in it, according to a number of experts who examine and correct these databases for a living. The point is that these errors exist whether you’re willing to admit them or not. One could argue that upgrading your PMS is a positive step because it affords you the opportunity to audit the integrity of your database; something you should probably do whether or not you intend to change portfolio management systems.

Another related issue that can affect the performance numbers is the method in which they are calculated. Without going into a lot of boring details, years ago performance numbers were often calculated differently than they are today. For example today, the returns might be tabulated on a daily basis, whereas years ago, performance was probably calculated month to month. This was at least partially due to the fact that desktop computers of earlier eras were not nearly as powerful as they are today.

In addition, in order to save what at that time was expensive disk space, some systems retained price files to the end of a period (like month end or quarter end) and then purged what were considered non-essential data in order to save space. The result was that you could calculate data for fixed periods like calendar years, but not ad hoc periods like Dec. 12, 1999 to Dec. 11, 2007. Even if you purchase a new program, and that program is capable of doing more sophisticated calculations, you will not be able to perform them unless you obtain the necessary price files for the time periods required.

The most important point with regards to those who are currently using any PMS is that you should understand what data resides in your current database and how calculations are being performed. You can then compare and contrast this with your new potential vendor’s methodology to determine whether or not they are a good fit for you.

The other issue that really worries advisers who are contemplating a PMS vendor change is data conversions. Whatever portfolio data you currently have is stored in some sort of database. Older PMS programs often used MS Access, FoxPro or proprietary databases. For the current user, all of these databases can present potential problems. Compared to more modern databases they can be slower, they can have capacity issues, they can be easier to corrupt, and they can, as a group, offer less robust

reporting capabilities. This last issue in particular is often a sore point with advisory firms. They know that they have the information stored within a database to generate the reports they want, but they cannot do it on their own. Customizing the report they desire often takes the intervention of a vendor, as well as the payment of substantial additional fees.

Almost all modern day PMS products store data on a SQL database. SQL databases are superior to earlier databases in almost every way, but the challenge can be moving your existing data off of your old database and into a new one. If you've used a single vendor for many years, and that vendor has already upgraded from an older database to an SQL database, the odds are that your conversion will be far less challenging because as a rule, moving from one SQL database to another is relatively easy.

If your data currently reside on an older database, it is almost always possible to extract the necessary data and import it into a new system; however the cost can vary dramatically depending on a number of factors. The best course of action with regard to conversions is first to identify one or two potential replacements for your current system. You can then discuss your options with potential suitors. You may find that the PMS vendor you prefer has already developed software that at least partially automates the extraction process from your current product to theirs. If that is the case, the price of the conversion is likely to be low. If the vendor cannot supply such a facility, he may be able to refer you to a third party that can do the job for a reasonable price. If no facility exists to extract and move the data between systems automatically, either the vendor, or a third party will have to create such a facility. In such a case, the conversion price will likely be substantially higher.

Desktop/Server Based Solutions vs. Web Based ASP Solutions

In the realm of PMS solutions, the gap between an in-house, desktop/server solution and a web-based solution tends to be greater than it is with CRM or financial planning applications. That's because in the PMS world, application service provider (ASP) often offer additional service; either as part of the base package, or for an additional cost. For example, almost all online vendors will perform "daily downloads". Whether these are in fact "daily" or more frequent, and whether the data comes as a "download" or a feed may be irrelevant. What is important is that the vendor usually takes responsibility for electronically gathering the data and posting it to your PMS system, so, in almost all cases, you will be outsourcing a function that is probably currently being performed within your office if you are using desktop/server software.

Many ASP's provide some sort of online client access. This could be as simple as allowing the adviser to post static portfolio reports that clients can access online, or it could be more sophisticated, such as allowing advisers the ability to permission clients to run their own portfolio reports within parameters specified by the adviser. Some may even go further, allowing advisers and/or clients to post and store other types of files, such as estate planning documents and health care information within the online vaults.

The value of online reporting capabilities should not be underestimated. At most firms, the preparation, printing and mailing of performance reports is a costly, time consuming process. By offering online reports, firms can reap a substantial cost savings, while offering clients better service by delivering

reports faster. In addition, online reporting facilities, when properly configured, offer superior security to those delivered by mail (According the USPS, most identity theft involved the use of the mail).

Before we move on, it is worth noting that you don't have to use an online reporting solution to offer online reporting capabilities and/or online lockboxes. To site just one example, Junxure ClientView (http://www.junxure.com/main/solut_cv_main.asp) is a turnkey online reporting system that is compatible with PortfolioCenter and Principia CAMS.

Now that we've provided ample background, we're ready to for an overview of some potential PMS solutions. Although it is impossible to cover every product on the market, the following should serve as a good starting point for your own due diligence.

Desktop/Server Solutions

One of the most popular, if not the most popular desktop/sever PMS solution among independent RIA firms is **PortfolioCenter**, from Schwab Performance Technologies (SPT), a subsidiary of The Charles Schwab Corporation (<http://www.schwabpt.com/products/portfoliocenter/>). Founded in 1985, SPT now supplies portfolio management and accounting solutions to over 3,000 independent financial adviser and wealth management firms. PortfolioCenter is built upon a Microsoft SQL database. It is a full featured product offering portfolio data management, performance measurement and reporting, granular security, and billing. It includes a backup utility that facilitates daily backups of critical portfolio data. Compared to other products in this class, PortfolioCenter is relatively easy to use. Based upon the features offered, pricing is highly competitive. Those firms doing business with Schwab can avail themselves of preferred pricing.

Since many RIAs doing business with Schwab use PortfolioCenter, the parent company has a vested interest in the continued success of PortfolioCenter, so in the foreseeable future, SPT should have ample resources to support the product.

For some, one of PortfolioCenter's greatest competitive advantages, the relationship with Schwab, is viewed as a weakness. These advisers fear that if they do not currently use Schwab as their custodian or if they do use Schwab but choose to move in the future, that it could adversely affect their relationship with SPT. Although some would argue this is a legitimate concern, PortfolioCenter remains a popular choice and a good overall value.

Advent Axys (http://www.advent.com/solutions/independent_advisors/axys) has a long history of reliability. Some would argue that Axys is one of the more sophisticated, comprehensive solutions available to RIAs, but it does have some drawbacks. Axys uses a proprietary database, which means that the adviser is heavily reliant on Advent for any custom configuration and reporting needs. It also means that if you eventually decide to move to another provider, conversion costs will be substantial. While the base price of the product is within the means of most firms, add-ons, maintenance contracts and customization can substantially raise the total cost of ownership.

Principia CAMS (<http://www.fcsi.com/>), formerly known as dbCAMS, is another desktop PMS product with a long history of use by the adviser community. Historically, pricing has been attractive. However until the transition to ownership by Morningstar, dbCAMS had a reputation of being slow to respond to new technologies. For example, they were slow in moving from DOS to Windows, and they probably stayed with FoxPro as their database for too long. Now that Principia CAMS is owned by Morningstar, it appears that the developers have the resources at their disposal to better maintain and upgrade the product in the future. In the longer term, however, one has to question whether Morningstar will continue to support a desktop/server based solutions while also supporting their web-based product.

PowerAdvisor, from Cornerstone Revolutions (<http://www.poweradvisor.tools.com/>) is still relatively new. The product looked very promising upon its initial release, but a great deal of employee turnover and servicing issues set the product back for a period of time. More recently, it seems like the firm, and the product, are back on track. PowerAdvisor has a smaller user base than the other products mentioned so far, but it does sport an impressive feature set, and the pricing is attractive.

PortfolioDirector (<http://www.portfoliodirector.com/index.aspx>) is another relatively new product. The architect of the software, Bob Yacobucci was able to keep costs very low by developing the product on a Java platform and by relying on an open source version of SQL. PortfolioDirector is not quite as comprehensive as some of the market leaders, but its architecture is sound, so it can build on a solid foundation for future enhancements. PortfolioDirector is now owned by Scottrade. It appears that the investment adviser division at Scottrade is committed to providing the resources necessary to maintain and improve PortfolioDirector in the future.

Outsourcing Some of the PMS Work

Advisers may wish to outsource the downloading and reconciliation of data, while maintaining the PMS software internally. There are a number of third parties willing to provide this service for one or more leading PMS applications. A few of the better known providers are Back Office Support Services (BOSS) (www.thebackoffice.biz), B-Ready Outsourcing Solutions (<http://www.b-readysolutions.com/>), Krisan's Back Office (<http://www.krisan.com/>), and Outsource This (<http://www.outsourcethisonline.com/>)

Web Based Providers

Advent Portfolio Exchange (APX) (http://www.advent.com/solutions/asset_managers/apx_platform) is a SQL based portfolio management and reporting solution that can be integrated with other Advent products and services to offer comprehensive wealth management solutions that includes CRM, trade order management, report automation, compliance, analytics, a single source for custodial data feeds, and much more. Fidelity's Wealth Central platform, which launched in December of 2008 uses a customized, online version of APX as its reporting component.

Until recently, **Albridge Solutions** (<http://www.albridge.com/>), an affiliate of Pershing, was known mainly as a provider of portfolio management and reporting solutions to larger institutions and broker/dealers, but they now offer portfolio management and reporting services, as well as data aggregation services to independent RIA firms as well. In addition, the firm offers enterprise data

management and virtual networking services (a platform that connects all your essential technologies with single sign-on access).

AssetBook (<http://www.assetbook.com/newsite/>) is another relatively new product with a small but loyal following. The product is intuitive, and pricing is very attractive for the feature set being offered. As part of the base price, AssetBook offers a client portal that can store and display not only performance reports, but other types of client related documents as well.

Black Diamond Performance Reporting (<http://www.blackdiamondreporting.com/>) is one of the more refined online PMS products available today. It offers an extensive feature set that includes daily downloads and reconciliation, flexible reporting options, batch and ad hoc report generation, cost basis tracking composite reporting, and client billing. Black Diamond offers a high degree of customization, while remaining intuitive and user friendly. In addition Black Diamond offers a well designed client portal. Since its launch in 2003, Black Diamond has gained wide acceptance throughout the adviser community.

In June 2010 Black Diamond launched its BlueSky initiative. This new web-based platform emphasizes configurability, workflow, scalability and extensibility. BlueSky empowers each user to tailor the dynamic web interface to their unique needs and provides the flexibility for Black Diamond to efficiently deploy new content and functionality now, and in the future.

BridgePortfolio (<http://www.bridgeportfolio.com/company/>) is a firm that offers a number of services, one being portfolio management and reporting. This includes daily downloads and reconciliation, custom reports and ad hoc reports. The firm offers automated billing services as well. In addition, it offers custom reporting options, including the ability to upload reports to a client accessible website.

Abakos, Inc. recently released **FinFolio Workstation 2010** (<http://www.finfo.io.com/Home/tabid/36/Default.aspx>). The firm's CEO is Matt Abar, the creator and former CEO of TechFi. The firm's CTO is Mike Benson. Prior to co-founding FinFolio, Mike supervised the technology division for SS&C's managed account platform. Before that, Mike directed the technology department at TechFi. Subsequently, Mike helped Advent design their new Portfolio Exchange (APX) product. According to the firm's website "The FinFolio technology platform is being designed for large scale investment advisers and money managers. It will compete with Advent Axys/APX, Schwab PortfolioCenter, and Albridge." FinFolio features will include all standard PMS features, plus some innovative ones like error checking, the ability to choose from a number of different databases, and performance attribution.

FinFolio Workstation 2010 can be run as desktop software or through a web browser. It can be hosted internally by your firm, or you can outsource the hosting of the software to one of FinFolio's outsourcing partners.

Morningstar offers an online PMS system as part of its **Morningstar Office platform**, formerly known as Morningstar Advisor Workstation Office Edition (<http://corporate.morningstar.com/US/asp/subject.aspx?xmlfile=95.xml>). Perhaps the most intriguing

feature of this offering is the integration it offers with other Morningstar Office components. For example, you can integrate Morningstar data and analytics into performance reports for clients. These reports are very well designed and aesthetically pleasing. In addition, those converting from other systems can hire Morningstar Back Office Services to convert data from your existing PMS to Morningstar for an additional cost. The base Morningstar Office price does not include outsourced downloads and reconciliation, but advisers who prefer to outsource these tasks can hire Morningstar Back Office Services to perform these tasks for them.

Orion Advisor Services, LLC (www.orionadvisor.com) offers an online portfolio management solution. In addition, Orion offers automated eForms with form filling capabilities, online investment policy statements, online client access, billing calculations and invoice delivery, bundled CRM tools, and a number of other features.

PortfolioDirector mentioned earlier in the desktop/server section also offers an online version of the software called **PortfolioDirector Web**. Currently, the web version does not offer a Fidelity data interface, but the desktop version does. While there is a great deal of overlap with regard to the capabilities of the two systems, there are a few differences. You can compare them here:

http://www.portfoliodirector.com/products/product_compare.aspx

Portfolio Pathway (<https://www.portfoliopathway.com>) is yet another relatively new entrant into the portfolio management and reporting space. The firm offers daily downloads and reconciliation, a document vault, as well as a robust client portal. In addition to the services outlined above, Portfolio Pathway also offers custom statements for clients so that advisers can present information to their clients the way they want to, as opposed to the way their B/D or custodian wants to. The firm offers standard interfaces with most major custodians, but they offer deeper integration with Pershing's NetX360 which allows them to offer additional services through Pershing. The firm offers a few different pricing models. The three standard ones are based on assets under management (AUM), number of accounts, or a hybrid model based on AUM and number of accounts. Portfolio Pathway is also working on a new entry level pricing plan for new firms, small firms and breakaway brokers. They anticipate that they will be able to offer the entry level package at approximately \$300 per month. For existing firms looking to convert from their current system, Portfolio Pathways offers a reasonably priced conversion service.

PortfolioServices (<http://www.schwabpt.com/products/portfolioservices/>), from SPT was formerly known as Etelligent before it was acquired by Schwab. PortfolioServices is essentially a hosted version of PortfolioCenter which allow s the adviser to outsource the downloading of data, reconciliations maintenance of the software, backups and disaster recovery plan to SPT. PortfolioSevices is not the only option for those who want an outsourced PortfolioCenter solution. Independent third parties such as **B-Ready Outsourcing Solutions** (www.b-readysolutions.com) also offer a hosted PortfolioCenter solution.

Keeping Your Options Open

Although the majority of independent RIA firms are still using desktop/server solutions, new firms, breakaway brokers and existing firms who are changing their portfolio management software providers

are moving to web-based solutions in increasing numbers. We expect this trend to continue, if not to accelerate in the future. There is no reason for those who currently use desktop/server solutions to abandon them if they are happy with them, however, they should not rule out the possibility of migrating to an online or outsourced solution later. If you want start off online/outsourcing, but you have some reservations about doing so, you may want to leave the door open to an in-house move later. If you fall into this category, look for a system like FinFolio, PortfolioCenter, or PortfolioDirector that offers both delivery options.

A Few Words About Cost Basis

As a member of the AICPA and the PFP Division, you are no doubt aware that the cost basis provisions of The Emergency Economic Stabilization Act of 2008 will begin to phase in beginning on January 1, 2011. The act imposes new tax reporting requirements on brokers, custodians, transfer agents and other reporting entities. These entities will be responsible for reporting the adjusted cost basis for securities sold to the IRS, and to their clients on Form 1099-B. Reporting entities will be subject to penalties for noncompliance and errors. As the IRS begins to receive this new data, one can assume that the capital gain and loss reporting by clients will come under increased scrutiny.

The capital gains provision of the Act phases in over three years. Equities acquired on or after January 1, 2011 will be subject to the Act, mutual funds, dividend reinvestment plans (DRIPs) and ETF's acquired on or after January 1, 2012 will fall under the Act; the Act will apply to other securities, including options and fixed income securities acquired on or after January 1, 2013.

We believe that the new cost basis provisions will create both pitfalls and opportunities PFPs. On the one hand, the new reporting by brokers is sure to confuse many clients. On the other hand, the provisions will provide an opportunity for PFPs to differentiate themselves by offering superior communications and guidance. For the purpose of this report, however, our primary concern regarding the new cost basis regulations is their effect on your workflows and your technology. One application that will be influenced by the new regulations is your portfolio management software.

The Emergency Economic Stabilization Act of 2008 requires that brokers/custodians calculate gains and losses by using a first in, first out (FIFO) method as the default method for securities sold that are not eligible for the average cost method. The Act permits brokers/custodians to apply the average cost method as the default for mutual funds, however even if the average cost method is chosen as the default, lots are to be sold in a first in, first out method.

Of course advisers and their clients can choose to identify the specific lots that are to be sold. They can do so at the time the trade is placed, or they can do so by standing order (for example, leave a standing order to sell the highest cost lots first for a specified client, or for all clients). One thing is clear: the specified lot selection must be made before the trade settles. It cannot be changed after settlement.

There are additional rules for transfers of assets from one broker/custodian to another, gifted shares, inherited shares and the tracking of wash sales that will further complicate record keeping.

The Act will create a number of technological issues. For example, custodians now provide daily data feeds to RIAs (usually referred to as daily downloads) that contain information on trades, prices, and tax lots, but the downloads do not provide all of the information required by the Act. All major custodians are at work upgrading their data feeds to provide the necessary information, but the odds are that they will not present the data in a uniform manner. This means that those RIAs with multiple custodians will be dealing with multiple data feeds (as they are now) of varying quality. It is an open question as to how well the various vendors of portfolio management and accounting software will adapt to these new feeds.

A more pressing question is: How will you reconcile the existing cost basis data in your portfolio management software with that of the custodian. Clearly, there will be occasions where the data does not match. How easy (or difficult) will it be to make adjustments to cost basis in your portfolio management software? Will it include some automated process for reconciling and synchronizing with your custodian's cost basis records?

Presumably, your portfolio management software will be able to track all legally available cost basis methods, but what about the custodians? Will they offer all of the methods as defaults? Or will you have to make those changes individually (and manually). We suspect that initially at least, reconciliation of cost basis between the RIA and the custodian will be problematic, at least with some custodians. When you sell shares, will you be able to specify the lots in your digital trade orders and communicate the information in a batch to the custodian? Again, we think many systems and custodians will be ready to go on January 1st, but some may not be.

Although all of the custodians and portfolio management software vendors have assured us that cost basis regulation related issues are their top priority, there will be issues. Unfortunately, it is impossible at this point to say for certain which custodians or vendors will excel and which won't.

Our advice is to talk to your custodians and vendors, evaluate their level of readiness, and prepare to alter your workflows as necessary to deal with the added back office/compliance burden. Prudent planning dictates that you anticipate that problems will occur and be prepared to respond.

In addition, best practices dictate that you communicate with your clients about the pending changes. By being proactive, you can minimize the impact of conflicting cost basis data they may provide. You can also use the opportunity to educate your clients about the tax sensitive investment management you provide and the benefits that accrue to them as a result of this extra work you do.

In Summary

Selecting the right portfolio management solution for your firm requires thorough examination of your investment process, your workflows, and your reporting preferences, to name just a few factors. In light of the pending cost basis regulations, there are additional considerations that PFPs should take into account. One is that if you already have a provider, you may want to wait until after the new cost basis regulations go into effect before making a change. That will allow you to gauge how the various providers are dealing with the regulations in general, and the data feeds from your custodians in

particular. If you are new to the business and making your first portfolio management software purchase, you'll want to perform some very thorough due diligence to ensure that your provider excels at dealing with issues relating to cost basis.

While some of the factors that will influence your final decision are quantitative, many are qualitative. Please keep in mind that changing PMS solutions is often traumatic for PFPs, so it pays to perform an extremely thorough examination of your options before arriving at a final decision.

Financial Planning Software

If you currently offer personal financial planning services, or if you will be doing so in the future, it is essential that you practice your craft with the aid of one or more professional financial planning programs developed by a reputable commercial software vendor. The preceding statement may appear to be obvious to some, but there are still a group of advisers that believe in using proprietary software or self-authored spreadsheets to perform personal financial planning. As a general rule, “building your own” is a bad idea.

There are numerous reasons that relying on a commercially established product is preferable. The primary one is that you work for a personal financial planning firm, not a software firm. Successful planning firms are those that devote the greatest proportion of their time on client related tasks. If you or your staff are building and maintaining software, you are sacrificing hours that could be better spent working on behalf of existing clients or attracting new ones.

As a practical matter, developing and maintaining a software program is a full time job. You need to be aware of how competing products are evolving, you need to keep abreast of all changes in laws and tax rates, and you must be able to rapidly integrate changes into the software. All of this upkeep is expensive. By contract, the better financial planning applications are a relative bargain, with prices of roughly \$1,000 to \$2,000 for single users and volume discounts available for multiuser firms.

For the modern financial services practice, the integration of key applications has never been more important. Integration allows for the sharing of data across applications. For an individual firm using spreadsheets or proprietary programs, the opportunities to integrate are both limited and costly. The better financial planning software developers, on the other hand, have scale. This gives them an advantage that individuals don't have when it comes to integrating with products from other vendors. In addition, scale provides firms with constant feedback, so new ideas from a wide range of sources can be incorporated into future versions.

Finally, from a liability standpoint, there may be strength in numbers. If you use a widely accepted application based on a widely accepted methodology, some would argue that you are less likely to be challenged than if you use a proprietary system based on a methodology unique to your firm. There may be exceptions to the rule, but they are few.

Some would suggest that a large firm with sufficient scale should build their own in order to implement certain customizations; however some software providers have the ability to offer a high degree of customization to institutional clients. Some would maintain that unique needs or a new improved methodology justify a build your own approach. This may be true in a limited number of cases; however one should carefully weigh the expected additional functionality against all of the initial and ongoing costs to maintain such an endeavor. Assuming you accept the need for a professionally developed and maintained financial planning program, we can now begin a discussion of the selection process.

Categorizing Financial Planning Applications

As was the case with CRM software, in order to facilitate the discussion, it is useful to subdivide financial planning software by the delivery method (desktop/server vs. online or ASP). The other differentiator among these applications is, broadly speaking, their planning approach. Some programs use a goals based approach to financial planning, others use a cash flow based approach. Historically, cash flow based planning was generally considered more sophisticated, more detailed and hence more accurate. As we shall see, that is no longer necessarily the case.

We'd be remiss if we did not point out that these categories are not absolutes. Over time, applications have evolved in ways that sometimes blur the distinctions between one category and another. For example, some programs now incorporate some degree of both goals based and cash flow based analysis. By the same token, some applications can be deployed as either a desktop/server solution or an online solution. In spite of our ability to definitively categorize some financial planning applications, the framework we have laid out in Figure 1 below is still helpful in narrowing one's choices and making an appropriate decision.

Goal Based Desktop/Server Based	Cash Flow Based Desktop/Server Based
Goal Based Web Based /Application Service Provider	Cash Flow Based Web Based/Application Service Provider

Figure 1

There are, surprisingly, wide arrays of financial planning software applications to choose from. According to the 2010 Financial Planning Magazine Technology Survey, however, in the case of financial planning software, usage was highly skewed to a few providers. In this case, four providers,

MoneyGuidePro, EISI, eMoney and MoneyTree accounted for about 74% of the market among respondents. MoneyGuidePro was the single most popular program with 26% of respondents using it. EISI, eMoney and MoneyTree all has a substantial following as well. That's not to say that there aren't other financial planning programs worthy of your consideration, but it does indicate that these providers may be doing something right, so we'll spend the bulk of our time discussing them.

EISI- The Financial Planning Software Conglomerate

From a humble beginning in Manitoba, Canada back in 1995, EISI (www.eisi.com) has grown to become the largest supplier of financial planning software in North America. The firm currently employs a little less than three hundred people, all focused on the development, sales and support of financial planning software. Their products can be found in solo practitioner PFP practices, as well as in some of the largest financial service firms on the continent.

EISI distributes two product lines: Profiles and NaviPlan. All of the EISI products originated as desktop software, and now they are all available in both desktop and web based versions. On the Profiles side, there are two products: Profiles Forecaster and Profiles Professional. Profiles Forecaster is a basic, entry level product that is not geared to the high net worth segment, so we will not discuss it here. Profiles Professional, which originally was thought of primarily as a goals based program, has now evolved into a more flexible tool that gives planners the choice of creating either a goals based plan or a cash flow driven plan. When you start a new plan in Profiles Professional, you can choose from three planning modes: Express, Comprehensive, and Detailed Cash Flow, with the latter being the most comprehensive and hence the most time consuming. There's also a preview mode, but this does not entail true planning.

Since EISI acquired Profiles a number of years ago, the program has gone through a series of upgrades that have resulted in a much stronger application overall. In particular, retirement income planning capabilities have been enhanced. A few quirks remain, however. Unlike most competing products, Profiles Professional does not include a Monte Carlo analysis capability, although this capability can be purchased as an add-on for a modest fee. The application includes a basic estate planning module. It can be expanded with the addition of the advanced estate planning module. The other option is the Ibbotson Asset Classifier, which automatically classifies a client's holdings by asset class. If you work with Albridge, EISI offers an integration that allows you to bring client holdings and market values over from Albridge and use those values to populate the appropriate fields in Profiles Professional.

Newer options for Profiles Professional include a graphically pleasing and client-friendly presentation module. This option offers presentations focused on key planning issues such as retirement, survivor needs, education funding and cash-flow planning. It essentially takes to calculations generated by Profiles Professional and displays them in a slideshow that is easier for clients to understand.

The other newer and noteworthy option for Profiles Professional is the Retirement Consumer Facing Application (CFA). The Profiles CFA is a lead generation tool. It allows prospects to come to your website and run a self-directed retirement assessment. When a prospect runs the assessment tool, you receive their basis contact and financial information electronically. Since the CFA tool and Profiles Professional

run off of the same calculation engine, and since they both receive the same data, any plans created in Profiles will be consistent with the initial assessments.

NaviPlan remains EISI's flagship product. NaviPlan used to offer two versions as well (Standard and Extended). Now, EISI offers NaviPlan Select, which combines the best of both the older Standard and Extended products. Like Profiles Professional, NaviPlan Select offers graduated levels of planning so that the adviser can provide as much or as little detail is needed for a particular case. The nice thing about the new architecture is that you can scale up as needed; that is, you can start with a less detailed plan and graduate to a more detailed, complex level of planning as the client requires it without moving from one product to another.

Among the many NaviPlan Select features are the asset allocation modules which can use up to 30 user defined asset classes (the Ibbotson asset allocation module can be added for an additional cost), the ability to plan with average tax or detailed tax inputs, a scenario manager, retirement accumulation and distribution planning, survivor income, disability planning, long term care planning, planning for business entities, stock options modeling, planning for non-traditional couples, and much more.

NaviPlan Select offers a financial needs assessment and an asset allocation assessment. There are not planning tools, but they can be useful in building your PFP practice. They offer an excellent way of providing prospects with a quick illustration of what may be wrong with their current situation while at the same time positioning you and your firm as the ones who can address their financial issues. Any data collected as part of the assessment process can be saved. If the prospect becomes a client, the assessment can be "promoted" to a plan, so the data already collected can be used as a starting point for the financial plan.

NaviPlan Select also includes a "planning assistant" that can help identify both problems with the plan as well as additional planning opportunities. Like Profiles, NaviPlan offers the option of using the Ibbotson Asset Classifier for a modest fee. There is the option of adding the Ibbotson mean variance optimizer with this package.

The web based version of NaviPlan Select offers a number of key advantages. Data storage is ISO 27001 certified. Larger firms can generate management reports reflecting activity firm wide. Larger firms can configure other options including collaboration among licensed users, custom workflow controls and the ability to check plan in and out of the system so they can be worked on offline.

As a member of the Your Silver Bullet organization (www.yoursilverbullet.net), EISI is committed to integrating its products with those of other industry related applications.

Those who want the maximum flexibility to efficiently handle all types of financial planning situations from basic to highly complex should consider licensing both NaviPlan Select. As we stated at the outset, EISI make all of their products available in both desktop/server and web versions, so they cover all four "style boxes" in Figure1.

MoneyGuidePro-Web Based/Goal Based

Unlike EISI, with its full line of financial planning products, PIETech, Inc., the developers of MoneyGuidePro (www.moneyguidepro.com) only produce a single financial planning application, but what they do, they do well. MoneyGuidePro (MGP) is a goal based, web based financial planning application (lower left style box) is in many ways revolutionary.

In developing MGP, the firm's President, Bob Curtis, started with the premise that financial planning programs at the time, including his own, were too complicated and too labor intensive. He set out to build a new application that was not only an effective planning tool, but one that was cost effective to operate. In addition, he wanted his application that was easy for the client to understand, and one that would motivate them to take the necessary action. Based on early feedback from users, he has largely succeeded.

By requiring only the data necessary to perform the desired tasks, and by making liberal use of wizards, MGP allows advisers to create somewhat abbreviated, yet fully functional financial plans in as little as thirty minutes.

Another major enhancement relates to the way MGP plans for goals. Prior to the arrival of the original MGP, almost all goals based programs solved for goals chronologically, instead of in order of importance. So, if a client had three goals, to take a trip around the world at age 50, to throw a big wedding for their daughter at age 55, and to retire at age 65, the program would spend the money for the first two goals first, and then tell the client that they would not have enough money to retire. The original MGP allowed advisers to fund the most important goal first and other programs soon followed. The most recent version of MGP takes this prioritizing process to a whole new level, with a much more sophisticated ranking system called SMART Client Preferences. In addition to prioritizing goals, this system allows advisers to assign dollar ranges, as opposed to an absolute dollar amount, to each goal. Then, based upon the inputs, a MGP feature called SuperSolve acts in a fashion similar to that of a portfolio optimizer, solving for the best solution given the constraints put on it. If no solution can be found, advisers can easily manipulate dollar amounts assigned to goals, the time frames and the savings rates in order to arrive at a plan that the client is comfortable with.

As a planning tool, MGP does a lot of things right. It uses well thought out default rates, but it gives the experienced planner the ability to change them; it makes excellent use of wizards to speed data entry; it offers a sophisticated goal ranking system; it automatically can solve for acceptable solutions, offers the ability to create alternative "What-if" scenarios easily, and it offers excellent client presentation tools. In addition, the application can now, by default, run alternate scenarios that advisers used to have to run manually such as running the plan using "average" returns vs. "bad timing returns".

Like EISI, MGP has recently spent considerable energy upgrading their client education and presentation tools. SMART presentations allows advisers to take complex aspects of a financial plan such as the impact of the timing of returns, the interaction of factors in a financial plan, and other similar topics, and it makes them available in a client friendly presentation that advisers can customize to their liking.

Since it is exclusively an online application, MGP offers the ability to collaborate online with clients, as well as with other advisers. As a charter member of the Your Silver Bullet organization (www.yoursilverbullet.net), PIETech has spent considerable energy fostering integration between MoneyGuidePro and other industry applications. Integration partners include Albridge, AppCrown, Black Diamond, Cash Edge, EBIX CRM, FinaMetrica, Grendel, Interactive Advisory Software, IPS Pro, Junxure, Morningstar, NetX360, Orion, Precise FPProtracker, Redtail and Tamarac.

If you are looking for a year to year tax planning tool, or if you need to do year to year cash flow projections, this is not the application for you, however if you are looking to an easy to use, sophisticated goal based planning tool, MoneyGuidePro deserves serious consideration.

MoneyTree Software

Like EISI, MoneyTree started out exclusively as a vendor of desktop based software, but you can now purchase a version of their TOTAL Planning Suite that can be hosted on a web server or an internal server. The TOTAL Planning Suite consists of three components: Easy Money, a comprehensive goal based planner; Golden Years, a comprehensive, cash flow driven retirement analysis application, and Strategic Solutions, a set of small, specialized modules designed to address a specific need such as single vs. joint pension distributions, RMD projections, or 72t distributions. Over the last several years, the firm significantly upgraded their interface, improving usability. They also built in much more flexibility, including the ability to plan for loans in the future, and the ability to further customize client reports.

If there's one thing that distinguishes MoneyTree, it is a noticeable lack of pizzazz. They are rarely first to market with a new breakthrough, and they are rarely daring in the design of their interface. They are, however, constant, steady and reliable. Over the last few years, MoneyTree has completely overhauled their product line. The result has been better integration between the modules, faster inputs, improved "what-if" illustrations, and better reports. As one of only three financial planning software developer members of Your Silver Bullet, MoneyTree is committed to integration with other industry software vendors. Although we think of MoneyTree TOTAL primarily as a desktop/server based application (this falling into the top two style boxes), the software can be configured to run on the web, so you could potentially use it in whatever style suits you.

ESPlannerPlus-Something Completely Different

ESPlannerPlus (www.esplanner.com) takes a totally different approach to financial planning. Rather than setting savings target and spending targets at retirement, the program attempts to identify a client's highest sustainable living standard over the client's total lifespan, as well as the savings and insurance needed to maintain that standard. The program was developed by a professor Laurence J. Kotlikoff, Professor of Economics at Boston University (<http://people.bu.edu/kotlikoff/>). The program uses a technique known as consumption smoothing to work its magic. The theory is that clients can afford to borrow in order to finance consumption when they are earning less (or spending more for expenses like college costs) and save more when they can afford to, while keeping consumption constant in real terms.

This approach, while interesting, has only garnered very limited support within the industry. There are a number of reasons for this, but I'll supply just two. One is behavioral finance related. This approach assumes that clients will have the discipline required to see this sort of plan through. In reality, this technique requires even more discipline than traditional approaches. The second is more of a practical matter. It assumes that clients will always have access to the liquidity that they need at reasonable interest rates. As the recent past has demonstrated once again, during times of economic stress, many folks are priced out of the loan market.

In spite of some differences with its philosophical underpinnings many believe the program to be an excellent modeling tool. If you are dissatisfied with some of the more traditional commercial financial planning tools on the market, ESPlannerPlus is definitely worth a look. ESPlannerPlus is designed to run as desktop software, and it does not really fit neatly into a goals based or cash flow based categorization due to its unique planning approach.

Other Financial Planning Tools

While it is impossible to discuss every financial planning program on the market, there are a few others that should appeal to the CPA financial planner. The spreadsheet based WealthTec Suite (www.wealthtec.com) is one of the most sophisticated planning tools on the market. It can compare and contrast sophisticated estate planning strategies, run highly detailed cash flow and net worth projections, perform sophisticated Roth Conversion analysis, and it includes a series of comprehensive family wealth planning presentations. WealthTec applications require a high degree of planning expertise, but in expert hands, WealthTec can produce superb results.

Integrate 2000 (www.integrate2000.com) is another spreadsheet based planning application that has a relatively small but loyal following among planners. Since it is spreadsheet based it is extremely flexible (provided you have the requisite MS Excel knowledge) and its analytic capabilities are suited to solving both basic as well as highly complex financial planning challenges.

FinanceLogix (www.financelogix.com) is a web based application that has improved substantially over the last several years. It includes modules for asset allocation, retirement planning, insurance planning, education, estate planning what-if analysis, and more. FinanceLogix is known for its interactive software design and excellent graphics. Other features of note are a shared calendar, client vault, an adviser portal for managing clients, customizable client portals and an alerts system. Data aggregation is available for an additional fee.

AdviceAmerica (www.adviceamerica.com), which is now part of FISERV, is another firm offering web based planning tools. Their offerings include an Investment Analysis edition, a Retirement Income edition, and a Comprehensive Financial Planning Edition. The firm has focused primarily on the enterprise market in the past, but they appear to be more interested in serving individual PFP firms going forward. Their strengths include client access, scenario comparisons, and strong online graphics.

eMoney (www.emoneyadvisor.com) is not, strictly speaking a financial planning product although it does include financial planning as one of its components. eMoney 360 Pro, the version targeting fee-

only advisers to the HNW segment includes the ability to create financial planning scenarios and retirement income illustrations, but it includes other tools as well. For example, eMoney also includes client facing websites, client vaults, automated data entry through account aggregation, opportunity reports (cross-selling opportunities) and more.

Figlo (www.figlo.com) Although new to North America, Figlo has been a provider of software to financial institutions in Europe for over 15 years. While the firm is still building out its web based platform for the US market, it is worth noting for a number of reasons. First, the platform is multi-national. You can switch domiciles, languages and currencies on the fly. While many financial planning applications have made great strides in their user interfaces over the last several years, Figlo stands apart as the most graphically-pleasing, client-friendly interface we've seen to date. Another thing that sets Figlo apart is that it is a virtual firm. Now, its entire infrastructure is hosted by Microsoft's Azure cloud platform. This should ensure high scalability and reliability for Figlo customers.

In Summary

There are a number of excellent financial planning applications on the market, and it is highly likely that one or more will meet your needs. It is impossible to cover every one at this time, but you now should have sufficient knowledge to start your firm's due diligence process. Although we've profiled in some detail a good cross section of financial planning products, please be aware that there are other applications worth investigating.

We think that your comfort with an application's overall planning approach and method of calculation should be your primary concern, but assuming that numerous programs pass the initial cut, strong consideration should be given to other factors such as ease of use, integration, method of delivery and reporting capabilities. Each CPA financial planner will assign a different weight to each of these factors, so each adviser is likely to arrive at a different "ideal" program" for their practice.

As long as you set realistic expectations, you should be able to find a financial planning application that allows you to serve your clients both effectively and efficiently.

Document Management

The concept of the “paperless office” has been with us for well over three decades now. Many credit Business Week magazine with first popularizing the notion of a paperless office. In a 1975 article entitled “The Office of the Future” the magazine predicted that offices would soon be entirely paperless due to the impact of computers.

It would seem that the Business Week story was only partially correct. On the one hand, the use of digital documents has exploded, particularly over the last five years. On the other hand, the production of paper documents is still prevalent. Some estimate that US companies still print approximately 1.5 trillion pages per year. Clearly, there is a cost to printing, handling, distributing, storing and managing all this paper. Depending on the nature of the printing, distribution, storage and retrieval needs, over the lifecycle of a document, the total cost of management can range from a few dollars to twenty dollar or more per document. With the renewed emphasis on cost controls within our industry, there has never been a better time to re-examine your document management systems and processes.

PFPs and Document Management

Since document management systems have been available to financial professionals for years, some might assume that everyone has a fundamental understanding of what they are and how they operate, but the data suggests otherwise. In the December 2008 *Financial Planning Magazine Software Survey*, respondents were asked to name what document management system they used. The top response, at 31%, was Adobe Acrobat. That is somewhat troubling since Adobe Acrobat is not a document management system!

The second most popular response to the question “What document management system do you use?” at 29%, was “none”. A full analysis of the figures revealed that approximately 80% of respondents were not using an adequate document management system.

The picture is somewhat more encouraging now, but only incrementally so. In the December 2010 Technology Survey, 24% of respondents still said that they use Adobe Acrobat as their document management system. 30% said they don’t use a document management system at all.

There are two fundamental problems facing PFP professionals today with regard to document management. The first is that they do not fully understand what a document management system is. The second is that, due to lack of understanding, or for perhaps some other reason, the vast majority of PFPs are not using an adequate document management system. We hope to address both of these issues in the remainder of this report.

The objective of this primer is first, to explain briefly what a document management system is. Next, we’ll make the business case for a document management system; explaining why such a system is essential to the modern day PFP practice. Then, we’ll examine the components that comprise a document management system (DMS), along with some general purchasing advice.

What is a Document Management System?

There are varying opinions on exactly what constitutes a document management system, but there is some consensus on what the minimum requirements of such a system are. At a minimum, a DMS should include the following capabilities: a filing system, a retrieval system and storage capabilities. Most would agree that a document management system designed specifically for PFPs should also possess the following capabilities: digital document creation (scanning a paper document to create a digital file), annotation tools, archiving (making sure the documents will be readable in the future), retention policies, workflow, security (preventing unauthorized access), and disaster recovery. In addition, systems should have a method of validating the integrity of the document; that is, a method of insuring that a digital document has not been tampered with or altered. Some also believe that optical character recognition (OCR) which makes an image file searchable by converting the image to text, is essential; others argue that it is optional.

The Business Case for a Document Management System

The business case for digital document management technologies is compelling. Despite the recent turmoil in the financial markets and the economy, the size and scope of many PFP practices has grown substantially over the last decade. Due to the nature of the work that PFPs do, the industry has always been highly regulated, and in the wake of the Madoff scandal and other financial misdeeds by a few rotten apples within the financial sector, the odds are that regulatory requirements will increase in the coming years. In addition, recent events have heightened the awareness on the part of clients that they need to be diligent in examining the information provided by their financial advisers. As a result, the already substantial amount of documentation created by and stored by PFPs is likely to increase further in the future. If not managed efficiently and cost-effectively, document related tasks can seriously impede the overall financial performance of an enterprise.

The cost savings attributable to a document management system are derived from a number of sources. An obvious one is lower rental costs. Since digital documents require little space, the need to maintain in-house file cabinets and offsite paper archive is reduced or eliminated. Printing costs are greatly reduced, as are postage and delivery costs.

Filing and retrieval costs are also minimized. In the case of paper files, employees must often walk from their workspace to a file room to file or retrieve a document. Each time they do so, precious time is wasted. In addition, each time they walk through the office, there is an opportunity for the employee to engage others in conversation, which creates a multiplier effect so that the act of a single person walking to the file room can in fact distract multiple employees from the tasks at hand.

By contrast, filing and retrieving digital documents requires a few keystrokes. In addition, retrieving a misfiled paper document can be a nightmare. The likelihood of a digital document being misfiled is much lower because safeguards can be built into the system to minimize errors. When digital documents are misfiled, the robust search tools included with most document management systems can usually help the operator find what they are looking for.

The benefits of leveraging technology to improve document management go way beyond simply cutting costs. The right document management system can help streamline workflows, and it can improve efficiencies related to compliance tasks. Improvements in efficiency often result in higher employee satisfaction, which in turn leads to higher productivity. In addition, digital document management can lead to improved customer service. With better access to data, employees can answer client queries more rapidly. Digital tax forms, statements and other reports can be generated almost instantaneously, on request, and transported to the client digitally in a matter of minutes when necessary. Better customer service results in higher customer satisfaction, which in turn results in higher retention rates.

Furthermore, digital documents can be stored more securely than paper ones can. With a digital storage system, you can control, down to the individual document, who can view, edit, copy or delete a file. That's difficult to do with a room full of paper documents. Digital documents offer additional security when being transported. Paper files in a briefcase can be stolen, as can mailings that contain sensitive client information. Digital files, on the other hand, can be easily encrypted, so that they will remain secure even if they are lost or stolen.

Digital systems are superior to paper ones when it comes to safeguarding documents from physical threats, and they offer superior disaster recovery capabilities. If a smoke alarm triggers the sprinklers, paper may be destroyed, but digital files typically have multiple backups. These backups are also more conducive to a disaster recovery situation than paper files are.

From a long term perspective, a digital DMS can increase the valuation of a business because an efficient, profitable business with a lower cost structure will sell at a higher multiple than a paper-centric business.

So what is the total, identifiable ROI attributable to installing and operating a digital document management system? Estimates vary widely. This is not surprising due to the varying nature of financial service practices and the variability of rents, labor and other cost across various regions of the country, but most experts agree that the savings can be substantial. For example, one study sponsored by Laserfiche entitled "ROI for RIA's" found that a document management system can result in an *annual* savings of between \$40,000 and \$300,000 for financial service firms and an increase in business valuation from \$200,000 to \$3,000,000. Even if you discount the estimates in the study by 50%, the business case for a document management system is still compelling.

An Introduction to DMS Components

Broadly speaking, a DMS is comprised of hardware (scanners, servers, optical drives, etc.) and software (the DMS software and other related products). In addition, most purchasers of document management systems will need to familiarize themselves with issues such as file formats, drivers, and optical character recognition (OCR). All of this may sound complicated to the uninitiated, but as we shall see, the basics are fairly simple to understand.

Scanners

The scanner selection process usually follows the selection of your document management software package, but since most people associate scanners with document management, we'll start here.

Digital document management systems store *digital* files. If one has a paper document, and they want to store it in a digital DMS, the first step involves converting the paper document to digital format. This is done by scanning a document, thereby capturing and saving a digital image of the document. Once the digital image is captured, it can be indexed and stored within the document management system.

The Role of Drivers

In order to lay the foundation for our scanner discussion, we first need to introduce a few concepts. The first is the *driver*. A driver is the software that allows a piece of hardware, such as a scanner, to “talk” to your software package. For scanners, there are three frequently used driver standards. One of the oldest, and most prevalent, is the TWAIN driver. TWAIN drivers are royalty-free. This being the case, they are very popular since hardware manufacturers and software providers can keep the cost of their products down by using them. Almost all inexpensive scanners and software that is non-proprietary will use TWAIN drivers in order to keep costs down. ISIS drivers are considered more sophisticated by many. They generally have advanced capabilities that TWAIN drivers do not; however, since ISIS drivers can be costly, they are most often used for more expensive business scanners and more expensive software application. WIA is a Microsoft format that is often offered as an option by scanner manufacturers, but one that you are less likely to use as a practical matter.

Readers don't need to know much about drivers, but there are a few important things to remember. First, it is essential that your hardware and software both be compatible with the same drivers. So, if you have a scanner that can only use a TWAIN driver, you had better make sure that your software is TWAIN compliant. By the same token, if your hardware uses a proprietary driver, it will likely only work with the software provided by the manufacturer. Second, all things being equal, ISIS drivers are likely to provide superior performance over TWAIN drivers, so unless otherwise advised by the manufacturer, when given a choice between TWAIN and ISIS, choose ISIS.

The Role of OCR

It is also helpful for the reader to have a basic understanding of optical character recognition (OCR). Typically, when a document is scanned, by default it is converted into an image file; that is, a picture. If you have an image of a document, it cannot be edited, nor can it be searched for words contained in the document. OCR software converts the image file to a text file so that the computer can “read” the document. Once this occurs, the document can be edited, and the words within the document can be indexed and searched. We're simplifying here for the sake of expediency, but that's the gist of it.

Some people believe that it is preferable to perform OCR on all documents and then index all of the words contained within those documents so they can be searched later. This may or may not be the case, depending on the nature of the document and one's retrieval needs. For certain archives, a few

keywords, which can be applied within a DMS, may be all that is necessary to retrieve what you need. Your vendor can offer guidance on the best system for you.

File Format Considerations

File formats are another topic that can confuse potential DMS users. Most good DMS systems can store files in their native format. So, if you create a document as a MS Word document, you may prefer to store it that way. No problem there, provided you have the proper security and audit features in place.

But what if you are scanning a paper document? What file format should you store the document to? By far, the two most popular formats are TIFF and PDF. Some DMS vendors have been known to recommend one format over the other based upon its compatibility with their particular product rather than the file format's relative merits. For now, suffice it to say that both of these file formats are widely used, and both can be used in a manner that is compliant with all Federal and state regulations. The decision as to which format is best for you is beyond the scope of this article; however a very good primer on the topic is available here:

<http://www.fa-mag.com/component/content/article/4268.html?issue=110&magazineID=1&Itemid=73>

Types of Scanners

Scanners today are offered in a dizzying array of styles. Scanners range in price from under \$100, to many thousands of dollars based upon size, speed, and other capabilities. To facilitate the discussion of scanners, the [Technology Tools for Today Newsletter](#) generally subdivides scanners into one of five categories: consumer, prosumer, workgroup, departmental and network scanners. One feature that the newsletter favors for scanners in all categories is a straight paper path. This simply means that as the paper passes through the scanner, it does not make any turns. It passes from one end of the scanner to the other in a straight line. This feature is extremely important for three reasons: it reduces the wear and tear on the scanner itself; it is least likely to damage the original document (this is especially important when dealing with older, more fragile paper); and it minimizes paper jams.

Consumer scanners are generally the least expensive and least capable scanners. They include basic flatbed scanners as well as slower sheet fed scanners. Due to their many limitations, they are inappropriate for use by even the smallest financial service business.

Prosumer scanners are a relatively new phenomenon. They bridge the gap between the high end of the consumer market and the low end of the professional market. One advantage of prosumer scanners is price: they sell for less than workgroup scanners. Another advantage is that they are often capable of scanning at speeds equal to those that entry level workgroup scanners achieved a few short years ago. Most can scan in color or black & white; duplex (scan both sides of a page with a single pass) or simplex (scan one side of the page only). Some now offer advanced features like automatic blank page removal and auto deskewing. Since they are created with the consumer in mind, prosumer scanners are among the easiest to install and operate.

Among the disadvantages of prosumer scanners are speed and duty cycle. While prosumer scanners are relatively fast, workgroup scanners are faster. If your scanning needs are limited prosumer speeds may be sufficient, but if you scan a heavy volume of paper on a regular basis, the speed of a workgroup scanner will justify the higher price. Duty cycles also matter. Prosumer scanners are designed to scan a maximum of a few hundred pages per day; workgroup duty cycles are usually measured in thousands of pages per day. Even if you do not scan thousands of pages per day, you may appreciate the additional reliability and durability that a workgroup scanner offers.

Another consideration when purchasing a prosumer scanner is its ability to communicate with third party software. If the scanner uses an industry standard TWAIN or ISIS driver, it will be able to communicate seamlessly with third party software packages. If it uses a proprietary driver, it may have limited or no connectivity with third party software.

An excellent example of a prosumer scanner is the Fujitsu ScanSnap S1500 (as well as the S1500M for Apple's Mac operating system). It is an easy to use, duplex, color scanner with a straight paper path with a street price of just under \$400.00.



The top flap folds up, as illustrated in the photo, to support documents waiting to be scanned. This cover has been engineered with a dampening mechanism to avoid slams that might damage the scanner when closing. The auto document feeder capacity of the S1500 is 50 sheets. The bottom flap folds down to catch the documents as they pass through the scanner. In keeping with its simple design, the S1500 sports a single scan button, which also serves as a power indicator.

Scanning capabilities are excellent for a device of this type. The scanner is capable of speeds up to twenty pages per minute, and it includes advanced features such as auto deskewing (straightens crooked scans automatically), auto removal of blank pages if desired, and optical character recognition. In fact, this scanner can even determine when a user has inserted a page upside down. When this happens, the scanner will automatically rotate it to the proper position.

The ScanSnap achieves its excellent performance and ease of use at least partially by its reliance on its proprietary software. This is one of the tradeoffs consumers make when they purchase the ScanSnap. Proprietary software allows Fujitsu to optimize the scanner's capabilities while keeping costs low. On the other hand, this means that the ScanSnap will not be able to communicate with many third party software packages other than those that ship with the ScanSnap; but the ScanSnap package does include some noteworthy third party applications.

CardMinder software can scan, "read" (OCR) and index business cards. ABBYY FineReader for ScanSnap provides the OCR engine that enables the software to convert scanned documents into editable files. This is the program necessary to convert scanned documents to MS Word, Excel or PowerPoint files. It is also the program that allows you to extract text from a scanned document and place it in another file. In addition, you get a full version of Adobe Acrobat (a \$229 value) and a module that allows you to scan directly to a SharePoint server.

Scanners such as the Fujitsu fi-6130, the Kodak i40, the Kodak i1220, and the Xerox ScanMate 262i are representative of today's workgroup scanners. These scanners generally are compliant with TWAIN, ISIS and WIA drivers, and they all tend to perform optimally with ISIS drivers.

Good workgroup scanners such as those mentioned here all feature an automatic document feeder with a sheet capacity of 50 pages or more, a daily duty cycle of over 1,000 pages per day, speeds of about 25-35 pages per minute or more, duplex scanning, color scanning, advanced scanning features, and the ability to provide higher quality scans. Most of these scanners are also capable of scanning embossed cards, such as employee ID cards, driver's licenses, and health insurance IDs. This capability is in increasing demand from financial professionals, either to comply with "know your customer" rules, or simply to maintain more complete client records for servicing purposes.

Like the prosumer scanner profiled above, workgroup scanners often include additional software from the manufacturer or third parties that help buyers get the most from their scanners. Many manufacturers include full or trial versions of scanning enhancement software to help optimize images, particularly difficult scans. Some offer utilities aimed at ease of use. Some offer OCR software.

Workgroup scanners generally costs in the \$700-\$900 range or more, but they can often be more economical than a prosumer scanner in cases where one or more people are scanning in excess of 200 pages on a daily basis. That's because workgroup scanners are faster, more durable, and, as a rule are capable of superior scans. The most popular workgroup scanner among financial professionals is the Fujitsu fi-6130. This is largely due to its stellar reputation for reliability.

Departmental scanners are a step up from workgroup scanners. These scanners are not only faster and more durable than workgroup scanners; they also often offer more flexible paper handling. Prosumer and workgroup scanners are usually limited to scanning legal, letter, and smaller documents in their automatic document feeder (ADF). Some departmental scanners can handle computer 11" X 17" computer printouts and other large format paper sizes.

These days, an entry level departmental scanner will probably scan at a rate of 40 pages per minute or more. Prices range from about \$1,200 to several thousand dollars, depending on the capabilities you need. A typical duty cycle for a departmental scanner might be in the 5,000 pages per day.

The Fujitsu fi-6140 and the Kodak i1310 are representative of entry level departmental scanners that can scan legal and letter size documents at 60 pages per minute. The Kodak i60 and the Fujitsu fi-5530C2 scan documents at 40 and 50 pages per minute respectively, but they can handle 11 X 17 paper as well. Production scanner, the fastest of the scanners on the market today can scan at speeds of up to 120 pages per minute, but their price and performance put them beyond the reach of all but the largest firms.

For firms that really want to maximize their workflow capabilities and who want to offer the maximum amount of flexibility when handling data, network scanners may be appropriate. These devices, with a single scan, allow users to send scans to email, fax, a network drive, a flash drive, and/or a printer. Some allow text or voice notes to be attached to a document. These devices tend to offer a high degree of user security which allows administrators to control who has access to scan, as well as who has access to the output. Networked scanners are generally stand alone devices with their own microchip. This means that they do not need to be connected to a computer to operate. Everything they need to do their job is built in. Some examples of network scanners include the Fujitsu fi-6000NS, the Fujitsu fi-6010NS, the Kodak Scan Station 100 Plus, and the Kodak Scan Station 500. Scanners within this category generally scan at 25 pages per minute or more. Prices start at about \$1,800.

Document Management Software (DMS)

As is the case with scanning hardware, there are a wide variety of scanning software products to choose from. Prices can range from less than \$500 for a competent entry level system (for a solo user setup) to tens of thousands of dollars for a robust system supporting a large user base. Before we discuss features and highlight a few representative products, let's revisit what does and what does not constitute a document management system. A PFP who simply scans documents to the Adobe PDF file format and stores them on a hard drive using the Windows directory system to file and retrieve files is not using a true document management system. By the same token, someone using PaperPort or another product

that makes use of the Windows directory structure to file and retrieve documents may not be using a true DMS.

For the purposes of a PFP practitioner, a DMS should resemble a sort of digital library. Every time you check a document into the library, or every time you check something out, the document should receive an identifier from the library software, which the software tracks itself, independently of the computer operating system. Ideally, for security and compliance purposes, you will want the software to record who checks a document in and when. You may also want to log any time someone accesses, edits, deletes, copies or otherwise interacts with a document. In addition, your firm will probably want to control who can and can't access files at the cabinet, folder, and/or individual document level.

Like most types of professional software available to practitioners today, document management systems can be purchased and installed locally on a server, or, in the case of a solo practitioner, perhaps on an individual PC. Online, or Software as a Service (SaaS) document management systems are an alternative for those PFP's who do not want to host their own document management server.

A number of firms specialize in serving the needs of financial service professionals. The advantage of dealing with such a firm is that they are familiar with the filing and compliance needs of PFP firms, so they can offer help configuring your system based on their experience helping others within the industry. Firms that have extensive experience helping financial service professionals include [CEO Image Systems](#), [Cabinet NG](#), [Laserfiche](#), and [Trumpet, Inc.](#) SaaS providers include [Cabinet NG](#), [Docupace](#), [NetDocuments](#), and [Redtail](#). Many independent B/D's and custodians such as [Pershing's iNautix](#) unit also offer document management solutions. In addition, some large firms such as [Xerox](#) are well equipped to meet the needs of financial service professionals.

We've already discussed the act of scanning a paper document to produce a digital file. Digital files may also be created through the use of computer programs. For example, you might create a document in MS word and store it in your DMS, or you might create a document in MS Word, convert it to a PDF file, and then save it in your DMS. However you create your digital document, you may have a need to annotate it. Most software packages today offer some annotation tools. Typical annotation tools include things like a virtual highlighter, virtual sticky notes, text tools, and virtual stamps or watermarks.

Some annotation tools alter the underlying document. If your annotation tool does alter the original, and you are required to retain the underlying document, you should first create a copy and then annotate the copy, thereby preserving the original. The preferred method of annotation is an overlay, which maintains the integrity of the underlying document. Most professional programs use the latter method of annotation.

The DMS filing system should include its own database, as opposed to relying solely on the Windows operating system and file structure. SQL databases are the most popular today, although MS Access and others are still sometimes used for systems targeting a limited number of users.

Filing interfaces vary, but a virtual system that mirrors a firm's physical one is the easiest to master. So, for example, you might have a virtual storage room that contained numerous virtual file cabinets. Each

cabinet will have two or more drawers. Folders will reside within the drawers. Sub folders and files will reside within the folders.

A good filing system is essential. Most document management systems offer filing and retrieval based upon indices. Think of the old style card catalogs in libraries. On the card, there were indices for title, author, subject, etc. Indices in a document management system work the same way, but they are even more flexible because the administrator can create different indices for different cabinets, drawers, or folders. So, you can have one set of indices for your accounts payable, a different set of indices for your financial planning clients, and yet another set of indices for your investment management clients. Almost all systems allow administrators to create drop down lists in index fields to speed the indexing process. Some document management applications allow you to automate the filing process through the use of filing templates or bar codes.

All document management systems offer at least one search and retrieval method; some offer multiple methods. If you've filed documents using indices, you can search for them using one or more index. For example, if you need a document filed in July 2009, you can search for all documents filed during that month, but that may yield too many results. To narrow the search, you might search for all client correspondence created in July 2009, related to market commentaries (subject). Some users prefer to browse through folders manually in certain instances. Most systems allow them to do so.

If you've performed OCR or otherwise embedded metadata within documents, you can search that metadata. This will deliver a display of every document stored in the system containing the keyword(s) you designate. The problem with this approach is that many common keywords return too many hits. For example, a recent Google to search on the word "accounting" turned up over 160 million results. The results won't be quite so extreme within your firm, but the principle remains the same.

All decent systems today offer some level of security. They tend to differ on the granularity of the security. For example, some systems will simply allow user access to be controlled at the program level. They either can access everything or nothing. Others grant all or nothing access to individual filing cabinets. Yet others allow administrators to control what documents within a cabinet individual users can see, as well as what they can or cannot do with the document (view, edit, copy, print, delete). The same can be said for logs and audit trails. Some provide a complete, detailed picture; some only log when a user has logged on and perhaps what files have been accessed.

Finally, a number of systems allow the PFP to create private document vaults/folders to their clients that their clients can then access over the Internet. Online lockboxes give PFPs the ability to securely communicate with clients securely. You can post tax information, performance reports, forms, and other documents online in a secure environment. Some advisers post copies of clients' passports, health care proxies, health insurance cards and the like online so that clients can access them in the event of an emergency while travelling.

Most online systems offer online client folders at little if any additional cost. Since all folders are already configured for online access; it is really just a matter of permissions, authentication and storage (which your firm will be billed for). For server software that you host, prices vary. A few firms, such as Cabinet

NG, build the functionality into their offering. More typically, firms charge an extra fee this capability. Sometimes the fee is for a flat fee, and sometimes there is a fee per client lockbox.

A Sampling of Document Management Systems

Let's briefly examine a few representative document management systems to give you an idea of what is available at a given price point.

For a solo practitioner, one affordable option is [CEO Executive Assistant](#). The software sells for as little as \$308 for a single user. For that low price, you get a lot of high end features including compatibility with both TWAIN and ISIS drivers, robust annotation tools, filing templates, and custom searches by indices. In addition, you get decent granular security settings and entry level audit trail features. For small businesses that want more, [CEO's Image Executive](#), with prices starting at \$500 for a single user, includes more robust security and audit features, OCR and full text search capabilities, and optional web access/client lockboxes. Both CEO Image Systems and [Laserfiche](#), another leading provider of DMS to financial professionals offers similar systems that start at \$1,500-\$2,000 for a three user setup.

The prices of online systems vary based upon your storage and the additional services you require. At [NetDocuments](#), a basic account for up to two users costs \$40 per month (\$20 per user) and it includes 10 GB of shared storage plus 1 GB per subscribed user. For \$18 more per user per month, the professional plus plan includes 10 GB per month of shared storage and additional 2 GB per named user, advanced security options, email management services and some external accounts (these can be used as client lockboxes). This service includes many extra features such as alerts that advisers will find useful. A NetDocuments Marketplace offers access to third party integrations as well as some free NetDocuments utilities such as the Mass Import Utility, the Folder Import Tool and the Sample Client & Matter Profile Table

[Docupace](#) and [Redtail](#) are two other firms that offer online document management solutions to financial service professionals at competitive prices. [Redtail Imaging](#) starts at \$49 per month for 10 GB of storage. The entry level version of Xerox DocuShare, which is called [DocuShare Express](#), starts at as little as \$1,800 for a 10 user installation, however, the more sophisticated CPX version that includes advanced workflow capabilities, enhanced security, and other high end features costs substantially more.

Finally, there are resellers who install and service document management systems. Some of these firms offer their own additional propriety software that can enhance the performance of the DMS you purchase. [Trumpet, Inc.](#) is one example of such a reseller. Trumpet installs and configures [Worldox](#), a capable DMS specifically for the needs of individual financial practices. They can optimize your system to conform to your firm's workflows, and they offer additional products that can further enhance productivity. For example, their Virtuoso software integrates Worldox with a number of CRM packages favored by advisers including [Junxure](#), [ProTracker](#), [ACT!](#), and [E-Z Data](#).

In Conclusion

We have presented a great deal of information about document management in this paper. It is likely that some readers are overwhelmed, so let's highlight a few critical ideas.

First, digital files in the PDF format in a Windows directory do not constitute a document management system. In order to get the cost, workflow, compliance, retrieval and security benefits of a true document management system, you need to use a true document management system.

Second, all firms, from the solo practitioner on up, can find a cost effective solution to meet their needs and their budgets. An entry level hardware/software package for a solo practitioner can be had for less than \$1,000; and the payback will be substantial. The information and references within this chapter are sufficient to help the solo or small practice uncover a suitable solution. Larger firms should consider engaging an independent consultant to help them maximize their DMS investment.

Finally, if you are not yet using an acceptable document management system, installing one should be high on your list of priorities. The ROI is substantial and the payback periods are relatively short. In other words, DMS is a technology that you cannot afford to be without if you hope to stay competitive in the years ahead.

Custodial Primer

Although a successful personal financial planning (PFP) practice can be run without managing money, many PFP firms are organized to offer wealth management as part of their service. Most believe that the establishment of an independent registered investment adviser (RIA) firm is the most appropriate framework for offering wealth management services since it aligns the interests of the adviser with those of the client. If this is the model your firm practices under, or if you are contemplating establishing such a model, one of the most important decisions you will face is the selection of an appropriate custodian or custodians.

Whether you are an established firm or a new firm looking to enter the RIA field, the selection of a custodian can be a key factor in the ultimate success and profitability of your business. At their best, custodians can offer much more than simply custody of assets and trade execution. Many offer support with business processes, compliance, marketing, technology and much more.

As is often the case with adviser software, there is no one “best” custodian for all PFP firms. Some custodial firms portray themselves as generalists, while others try to specialize in a particular niche. Some, through relatively high minimum asset requirements effectively exclude start-up firms, while others do not impose a minimum at all. Some firms may be stronger in areas that matter to your firm, for example in executing trades on foreign stock exchanges. A number of firms compete on price, while others emphasize the service they offer. The point is that the custodian that is best for the PFP practitioner across town or across the country may not be the ideal one for you. The only way to determine your ideal custodian is to do your own due diligence.

In order to help you with the due diligence process, we have put together this Custodial Primer. We’ve chosen to label this article as a “primer” for a reason: we do not believe this document constitutes a due diligence process in and of itself; rather, we believe it can serve as a starting point for further research on your part. It is our hope that after reading this article, you will be able to identify a manageable number of custodians that may be appropriate for you. Once you have pinpointed your candidates, we would expect you to contact each custodian directly for further information and an in-depth demonstration of their capabilities before arriving at a final decision.

Charles Schwab

Schwab Advisor Services, a division of Charles Schwab & Co., Inc., is the leading provider of custodial services to independent RIA firms. Schwab Advisor Services currently custodies approximately \$665 billion for approximately 6,000 advisory firms. Schwab also leads its competitors with regard to satisfaction in the field of adviser technology.

In the 2010 Financial Planning Magazine Software survey, Schwab was a clear favorite among respondents. When asked to rate their overall satisfaction with the technology offering of their custodian, 49% of RIA respondents who custody assets with Schwab indicated that they were “very satisfied, up from 46% in 2009.” That’s a full 11 points better than Shareholders Service Group (SSG) the

second place finisher in the category at 38% “very satisfied. Another 39% of Schwab respondents indicated that they were somewhat satisfied. Only 8% were “somewhat dissatisfied” and only 5% were “very dissatisfied”. No other custodian or broker/dealer mentioned in the survey approached these satisfaction scores.

Perhaps one of the reasons that Schwab leads in the custodial business is that they were there first. Schwab opened their custody business for advisers in 1985. It was officially launched in 1987 as Schwab Financial Advisor Service and renamed Schwab Institutional in 1993. Just about every other competitor that entered the RIA custodial business since has modeled their offering to at least some extent on that of Schwab Institutional.

In 1991 Schwab introduced Account Access Link, the forerunner to SchwabLink, a local software application used primarily for downloading data. Over the past several years, Schwab has shifted more and more functionality to the web. Until recently, that meant SchwabInstitutional.com a web based platform that gives advisers access to Schwab’s back office. It allows advisers to perform a multitude of tasks that include account openings, transfers, cashiering, trading and data management.

Recently, Schwab rolled out the next version of their adviser workstation. Dubbed Schwab Advisor Center, this new web platform combines the functionality of both SchwabInstitutional.com and SchwabLink into a sleek, modern web interface. Among the highlights: better navigation, more data viewing options, the ability to aggregate groups of accounts online for viewing, enhanced data delivery options, the ability to submit management fees through the website, the ability to create and manage custom groups and much more. As was the case with SchwabInstitutional.com, competing custodians tend to benchmark their web platform and data sharing capabilities against those of Schwab’s.

Schwab licenses the Portfolio Rebalancer tool from Advisor Software, Inc. (ASI) which it makes available to advisers at no cost through Schwab Advisor Center. This tool allows advisers to rebalance a single account or multiple accounts from the same household to an asset allocation. In addition, the “batch account” function allows advisers to balance multiple accounts to the same model portfolio and generate the corresponding trade list.

Schwab Performance Technologies, a subsidiary of Charles Schwab Corp. is the developer of PortfolioCenter, one of the most popular portfolio management and reporting packages among independent RIA firms. Built upon Microsoft’s SQL Server database technology, PortfolioCenter offers portfolio data management, performance measurement, accounting, reporting and billing capabilities. Historically, Schwab has offered discounts to PortfolioCenter users who custody assets with Schwab.

For those who want access to the capabilities of PortfolioCenter, but who prefer to outsource the maintenance of the hardware, the software and the data, Schwab Performance Technologies offers Portfolio Services. This turnkey, outsourced, web based solution allows advisers, for a fee, to access the capabilities of PortfolioCenter while leaving all the work to Schwab Performance Technologies employees.

Yet another Schwab innovation that is now commonplace among custodians is the mutual fund marketplace. Schwab's Mutual Fund OneSource, introduced in 1992 was the first of this breed. Schwab continues to innovate to this day. Most recently, they have launched their own line of exchange traded funds (ETFs). Schwab allows their advisers who use these funds to trade them commission free, a nice perk for clients.

Perhaps the hottest technology topic at the moment among advisers is integration. All of the major custodians, and many of the smaller ones are pursuing integration initiatives at the moment, and Schwab is no exception.

In the past, "integration" has often meant nothing more than the ability to import and export data from one application to another. While this is better than manual data entry, it is far from ideal. According to Neesha Hathi, Vice President, Advisor Technology Solutions at Charles Schwab: "A lot of folks say they have integration, but in many cases it is not the sort of deep, contextual integration that we are striving to achieve." Schwab is pursuing integration on two fronts: a turnkey solution called OneView Office and a modular solution called OpenView Gateway. Both will offer deep contextual integration that will allow advisers to access data on the Schwab platform in real time from within their third party software applications.

The OneView Office solution will initially consist of a customized version of Salesforce CRM integrated with Schwab's PortfolioServices (an outsourced portfolio management and reporting solution). Schwab recently announced three CRM partners for OpenView Gateway: Salesforce, Microsoft CRM and Junxure. They plan to announce their portfolio management partners in addition to Schwab Performance technologies in the second half of 2011. Looking a little further out, Schwab plans to integrate financial planning, document management and rebalancing applications into both the OneView Office and OpenView Gateway offerings.

Technologically speaking, the only real negative of the Schwab offering is the inability of Schwab Advisor Center to support web browsers other than Microsoft's Internet Explorer and Firefox. With more and more tech savvy advisers expressing a preference for Chrome, and with Apple users relying primarily on Safari, one would hope that Schwab sees fit to provide a browser neutral website in the future.

Minimum account size for new advisers: No minimum. If under \$10 million there is a quarterly service fee.

For further information visit:

http://www.schwabadvisorcenter.com/public/advisors/considering_independence

Fidelity

Fidelity Institutional Wealth Services is a leading provider of custodial and support services to independent RIA firms. They currently service over \$495 billion in client assets on behalf of about 3,500 independent RIAs.

Although they did not score quite as well as Schwab in the 2010 Financial Planning Magazine Technology Survey, Fidelity's scores were very good. Only 8% of advisers said they were very unsatisfied with Fidelity, while 48% were somewhat satisfied and 26% were very satisfied.

For those just entering the RIA business, Fidelity offers a Roadmap Planning Tool. This online, interactive tool provides guidance on setting up an RIA firm. It provides information on operating structure, compliance, insurance, marketing, technology and more. In addition, it helps users develop a customized, interactive to-do list and timeline for setting up the firm.

Fidelity offers advisers access to Fidelity Advisor CHANNEL, a comprehensive web portal that allows them to conduct business with Fidelity. As a result of a recent upgrade, Fidelity Advisor CHANNEL now provides advisers with access to all of Fidelity's trading and information through a single user interface. This includes account openings, cashiering, transfers, trading and data management.

Fidelity offers a few unique technology tools to their advisers. The centerpiece of the Fidelity offering for RIAs is Fidelity WealthCentral. This best of breed integrated solution is comprised of a CRM application, financial planning software, account management and trading, portfolio modeling and rebalancing and portfolio management software. All of the applications that reside on the WealthCentral platform are integrated, so for the adviser, the experience is that of a single, unified workstation.

For CRM, Fidelity offers a highly customized version of Oracle's web based CRM on Demand solution. This application includes all that you would expect from a sophisticated CRM solution including the ability to track referrals, prospects and opportunities; the ability to create customized workflows; integration with email, calendars and smart phones; and custom fields for tracking vital client information. In addition, the application can pre-populate Fidelity forms and applications. A large library of customizable reports allows managers to analyze data which enables further opportunities and efficiencies.

For financial planning software, WealthCentral provides EIS's web based NaviPlan. This application, from the leading provider of financial planning software in North America, provides both goals based and cash flow based planning capabilities. Due to its deep integration with Fidelity's back office, NaviPlan enhances workflows with a single sign on and the ability to import data from Fidelity brokerage accounts. In addition, the application can automatically refresh positions, holding and market values for assets held with Fidelity whenever a financial plan is updated.

Account management and trading is managed through Advisor CHANNEL, which is integrated with WealthCentral. Portfolio modeling and rebalancing is available through tools developed by Northfield Information Services. For portfolio management, Fidelity WealthCentral offers two solutions that advisers can choose from: Advent Portfolio Exchange (APX), which is provided by Advent Back Office Services (ABOS) and the Black Diamond Blue Sky platform from Black Diamond Performance Reporting

Fidelity continues to develop and release new technological tools for advisers. They recently released an iPhone app for WealthCentral. This will soon be followed by apps for the iPad and for Android devices.

According to a Fidelity survey, 86% of RIA firms indicate that technology is either a key factor affecting the success of their business or is critical to their success. The Fidelity Benchmark Evaluator is an online tool which allows RIAs to benchmark their use and management of technology against some of the top performing firms in the industry. By entering firm-specific information in the tool, such as assets under management, size of staff, level of technology integration and IT spending data, advisers receive a detailed report designed to help them better understand the relationship between their use of technology and the financial performance of their firms. The benchmarking data is based upon a technology study performed by Moss Adams that Fidelity commissioned.

As is the case with virtually all custodians discussed here, Fidelity offers an extensive mutual fund marketplace. Fidelity's offering gives advisers access to a great many Fidelity mutual funds, as well as most other major funds. Like many of its competitors, Fidelity offers extensive practice management and technology support to its advisers.

Minimum account size for new advisers: \$15 million

For further information visit: <https://fiws.fidelity.com/advisor/portal/home>

TD AMERITRADE

TD AMERITRADE has been a leading custodian to independent RIA firms for over 10 years. They currently serve approximately 4,300 advisers. The firm does not provide a breakdown of retail assets vs. institutional assets. However TD Ameritrade has total assets of approximately \$40 billion. It is estimated that roughly a third of those assets are from RIAs. If this estimate is correct, TD Ameritrade custodies over \$13 billion in adviser assets.

In the 2010 Financial Planning Technology Survey, TD AMERITRADE ranked third in the number of very satisfied advisers (35%), while another 42% were somewhat satisfied with TD AMERITRADE's technology. Only 9% of TD Ameritrade advisers were very unsatisfied with the technology provided.

As is the case with the other major custodians, TD AMERITRADE offers a robust web based platform (VEO) that provides advisers with access to TD AMERITRADE's back office. It allows advisers to perform tasks that include account openings, transfers, cashiering, trading and data management.

Throughout 2009 & 2010 TD AMERITRADE made major enhancements to its website. The new website is more functional and much more user-friendly. It allows advisers to display information in custom views, and the set of data available for online viewing has been expanded. Trading capabilities have also been substantially improved.

Like Schwab, TD AMERITRADE licenses a portfolio rebalancing solution from Advisor Software, Inc (ASI). This tool is available at no extra charge to all advisers who have access to VEO. For advisers with sophisticated rebalancing needs, TD AMERITRADE offers, for a fee, iRebal. iRebal is an advanced, rules

based rebalancing tool that is owned by TD AMERITRADE and can be licensed for a fee. It is generally most appropriate for firms that manage in excess of \$300 million in assets.

In 2010, TD Ameritrade announced their integration initiative. Essentially, TD Ameritrade's approach is to provide an open API (application programming interface). This means that third party providers will have a standard way of accessing the TD Ameritrade platform provided they pass through TD Ameritrade's due diligence process. In early 2011 TD Ameritrade announced that they were in varying phases of discussion with 24 potential integration partners. Some have already completed the due diligence process and have developed beta versions of integrated solutions. TD Ameritrade expects to have a good variety of integrated third party solutions available to their advisers in the near future.

TD AMERITRADE takes prides in the level of practice management and technology support they provide to their advisers. One example of TD AMERITRADE commitment to their advisers is the TD AMERITRADE Institutional Roadmap consulting program. This offering is comprised of a technology component that generates a plan, along with support from a TD AMERITRADE consultant.

Roadmap simplifies the business planning process by clearly defining goals, strategies and tactics, setting timelines and assigning tasks to staff members. Advisers and their TD AMERITRADE Institutional consultants then use the Roadmap Accountability Dashboard to monitor progress and continually adapt plans and create new strategies as tasks are accomplished.

Sixty percent of independent advisers participating in the program reported a significant increase in assets and/or accounts during the first six months of implementing a plan. On average, these advisers doubled the number of new accounts or added four times as many assets as compared with the six months prior to starting the program.

For those advisers with smaller accounts to deal with, TD AMERITRADE offers Amerinvest. This advisory service allows advisers to create an online profile for each client. Based upon the profile, Amerinvest will invest the client's account in a portfolio of exchange traded funds (ETFs) that is tailored to the client's goals, time horizon and risk tolerance. The service also offers performance reporting and a rebalancing feature.

Through its Affinity Services, TD AMERITRADE makes a number of third party products available to its advisers at discounted prices. Discounts are available on CRM software, financial planning software and portfolio management software. Discounts are also available on Lenovo computers.

Like its competitors, TD AMERITRADE offers a comprehensive mutual fund marketplace for advisers. Information about mutual funds is provided by Morningstar and it is accessible online. For an additional fee, TD AMERITRADE offers a customized version of Morningstar Advisor Workstation that is integrated with VEO. This integration enables advisers to import client data and household information from TD AMERITRADE into Morningstar Advisor Workstation.

Minimum account size for new advisers: No minimum. TD AMERITRADE is willing to work with start-up firms provided they have a business plan and a desire to grow their business.

For further information visit: <http://www.tdainstitutional.com/advisor/go.html>

Pershing

Pershing is a unit of the Bank of New York Mellon Corporation, a firm with over \$25 trillion in assets under custody and administration. Pershing Advisor Solutions (PAS), the Pershing division that serves independent RIAs currently serves approximately 620 advisory firms with assets of approximately \$85 billion.

Pershing's services are not geared to smaller advisory firms. They prefer to work with advisers managing at least \$100 million in assets.

With the launch of NetX360 in mid-2009, Pershing unleashed a revolutionary new technology platform that has the potential to change the way RIA firms do business in the future. A number of other firms have been striving to offer a single integrated platform for advisers, but few, if any offer a platform as comprehensive and as customizable as that offered by Pershing.

NexX360 combines the best of the former Pershing brokerage and advisory workstations into a single integrated platform. It integrates account opening and account maintenance tools, trading tools, cashiering and trading onto a single platform. It also integrates practice management tools, research and compliance products and services.

This new platform offers advisers a great deal of flexibility. They can tailor the look of screens to suit their preferences; they can create client groups; they can set up various alerts; and they can create model portfolios. The platform offers advisers the opportunity to navigate by account or by client. Rollover functionality enhances usability.

What really sets Pershing apart from the competition is their ability to rapidly integrate multiple third party vendors into their system and deliver those applications to advisers on demand. Pershing's third party on-demand capabilities are still being built out, but the goal is to position the NetX360 platform as a sort of application marketplace for advisers. This would allow Pershing advisers to enjoy all the core functionality of the NexX360 platform, while receiving integrated third party applications on demand. For example, an adviser might decide to purchase Redtail for CRM, MoneyGuidePro for financial planning and Black Diamond for portfolio reporting. If purchased through NetX360, all applications would be integrated with the Pershing platform and all would be available through a single sign on. By choosing the NetX360 platform, many of the advisory firm's integration challenges disappear, but the adviser still has the option of selecting from a list of multiple third party vendors in each product category.

iNautix, a Pershing affiliate, offers a document management solution that tightly integrates with NetX360. In addition iNautix offers business consulting and custom technology solutions to meet the needs of larger RIA firms and enterprises. For example, iNautix offers data warehousing and business intelligence services, custom application development and comprehensive compliance monitoring solutions.

Minimum account size for new advisers: \$100 million

For further information visit: <http://www.pershing.com/ria/index.html>

Scottrade

Scottrade Advisor Services is the division of Scottrade dedicated to the needs of RIAs. This division, launched in 2005, strives to be a low cost provider of custodial and institutional trading services to the RIA community. They currently service over 850 RIA firms. Scottrade does not disclose total adviser assets at this time.

Although Scottrade Advisor Services welcomes firms of all sizes, they have been particularly successful at attracting RIA firms with under \$50 million in AUM. Scottrade attributes their success in this area to two factors. First, they believe that smaller RIA firms are underserved at many of their competitors. Second, they believe their low cost service model is particularly appealing to smaller firms.

In 2009, Scottrade revamped and enhanced its technology platform for advisers. This new platform significantly enhances advisers' trading capabilities online. It also improves client administration and the ability to view client data online in multiple formats.

More recently, Scottrade integrated the Dow Jones Adviser tool into their platform. This tool provides registered investment advisers with actionable market, investment and practice management news, commentary and analysis they need to better manage their businesses and their clients' portfolios. Dow Jones Adviser combines editorial content from The Wall Street Journal, Barron's and Dow Jones Newswires in one place with sophisticated functionality for search, screening and display across all asset classes.

The next enhancement Scottrade plans is the inclusion of an integrated financial planning tool within their platform. This enhancement is scheduled for release in mid-2011.

Low cost trading is a Scottrade hallmark. Online market and limit equity trades cost only \$7.00, no matter how many shares you trade. Many ETF trades are similarly priced. Internet options trades cost \$7.00 plus \$1.25 per contract. Mutual funds in their NTF program do not incur a charge. Other no-load fund orders executed cost only \$17.00. Advisers who institute systematic mutual fund purchase plans for their clients using non-NTF no load funds on a monthly or quarterly basis are eligible for special discounts: systematic mutual fund purchases are charged only \$2.00 per transaction.

In August of 2008, Scottrade acquired Portfolio Director, a comprehensive, low cost portfolio management and reporting application. The application is available in both desktop and web based versions. Portfolio Director allows advisers to create model portfolios, generate portfolio rebalancing reports and alerts and create performance reports on demand. Advisers working with Scottrade are eligible for discounts of up to 50% on Portfolio Director.

Currently, Portfolio Director is a standalone application, but one of Scottrade's plans to eventually integrate Portfolio Director into the Scottrade Advisor Services web platform. Once that is accomplished, the integrated version should yield substantial productivity gains for Scottrade advisers.

For those who prefer other portfolio management and reporting solutions, Scottrade is also compatible with applications offered by Advent, CapTools, Cornerstone, IAS, Morningstar and Schwab Performance Technologies.

The Scottrade platform also includes access to Scivantage Maxit, a software application that delivers accurate real time cost basis information. It allows advisers to customize tax reporting and download the output into various tax professional software packages.

Minimum account size for new advisers: None

For further information visit: <https://advisor.scottrade.com/>

SSG

Shareholders Service Group (SSG) began serving independent RIAs in 2003. The firm is dedicated exclusively to serving the needs of independent RIA firms. Currently, they serve approximately 500 RIA firms. They do not disclose AUM figures. In recent years their client base and AUM base has increased steadily.

Although they serve firms of all sizes, SSG has a reputation of being very accommodating to small and midsized firms, as well as to start up firms.

Pershing provides clearing and custody services for SSG's clients. This means that, SSG advisers have access to Pershing's NetX360 platform. Through the NetX360 interface, advisers can perform tasks that include account openings, transfers, cashiering, trading and data management. They also have access to many of the other tools available to Pershing clients including research, compliance tools, trading and on demand third party applications.

Currently, SSG strives to leverage its own technology relationships to benefit its adviser clients. For example, SSG has an enterprise relationship with Albridge. This allows SSG to offer Albridge performance reporting services to their advisers at a much lower cost than advisers would receive if they dealt directly with Albridge. SSG offers a similar enterprise relationship with Black Diamond Performance Reporting. SSG portfolio data can also be downloaded into many other popular performance reporting packages including Advent Axy's, CapTools, PowerAdvisor, PortfolioCenter, Portfolio Director and Principia CAMS.

Integration partners include MoneyGuidePro and NaviPlan for financial planning, IPS Pro for investment policy statements and Redtail for CRM. In addition, SSG offers integrations with Morningstar, fi360, National Compliance Services and Advanced Regulatory Compliance.

SSG prides itself on the level of service they provide. Since they deal with many smaller firms and start-ups, they are intimately familiar with the unique technology and operational challenges that such firms face. They attempt to leverage the knowledge that they have acquired over the years to benefit all of their adviser clients.

Minimum account size for new advisers: No minimum

For further information visit: www.Shareholdersgroup.com

Trade PMR

Trade PMR is a privately held brokerage firm headquartered in Gainesville, FL. It was founded by registered investment advisers in 1998 to serve the RIA community. Trade PMR currently serves over 850 RIAs and IARs with assets under management of approximately \$16 billion. Clearing and custodian responsibilities are handled by Sterne, Agee & Leach, Inc.

The cornerstone of Trade PMR's technology for advisers is the eCustody Advisor Workstation. This platform includes account management tools, individual account information, trading tools that allow advisers to trade to models or to perform group trades, reporting and fee processing. The platform also includes RIA Performance Reports. Trade PMR uses its own proprietary calculation and reporting engine to deliver these reports to advisers. Consolidated reports can be generated for multiple accounts; individual account reports are also available.

For CRM, Trade PMR offers Redtail CRM. This web based CRM application offers anywhere, anytime access to client data, multi-user calendaring, householding, reminders and reporting capabilities. Integration with the Trade PMR back office facilitates daily updates of client data and client positions.

Minimum account size for new advisers: No minimum account size

For further information visit: <http://www.tradepmr.com/>

Trust Company of America

Trust Company of America (TCA) is another relatively small custodian. Currently, TCA custodies approximately \$11 billion, for approximately 135 fee-only and fee-based investment advisers. There are a number of factors that set TCA apart from most competitors. One is that they are organized and regulated as a depository institution. This means that they are not regulated like a typical broker/dealer. They are an FDIC-insured institution. They are regulated by the Colorado Division of Banking, and they are subject to FDIC examinations.

The TCA Advisor platform offers a web based proprietary workstation that can be private labeled if desired. It includes extensive trading capabilities, including the ability to link client accounts to models

and trade one or thousands of accounts based upon those models. It also includes extensive back office capabilities, including the ability to open accounts and perform account maintenance tasks. In addition, TCA Advisor automatically performs RMD calculations and notifications.

TCA fully integrates the trading platform, back office, portfolio management software and rebalancing software. Since the trading platform is integrated with the other applications, trades post to the portfolio management software almost instantaneously, so the information residing in your portfolio management and rebalancing applications is always current. For an additional fee, TCA offers comprehensive fee management. If this option is chosen, TCA will track, calculate, access, invoice collect and deliver all management fees.

TCA allows advisers the opportunity to customize client statements. All statements include account summaries, asset summaries, cost basis and transaction details. Advisers can determine whether or not additional information such as pie charts, time weighted returns for requested time periods, custom messages and/or billing data is included with the report packages. TCA can also consolidate multiple accounts so that households receive a single consolidated family statement.

TCA's mutual fund trading differs from that of most other custodians. There are no transaction fees, ticket charges, or individual account level charges. When trading in a mutual fund that provides 12b1 revenue, credit is given to the client's asset based custody fee.

According to TCA's own client satisfaction survey, their advisers particularly appreciate the dedicated service rep assigned to each account. That rep becomes intimately familiar with the needs of each client and is therefore able to respond promptly to service requests.

Minimum account size for new advisers: No minimum, but best suited to firms that want to leverage their business model through the use of TCA's technology.

For further information visit: <http://www.trustamerica.com/>

LPL

LPL is a relative newcomer to the RIA custodial business. They currently serve about 100 RIA firms with assets of approximately \$7 billion. LPL is not, however, a newcomer to the financial services business. LPL and its predecessor firms have been industry leaders in the independent broker/dealer space for over 40 years. LPL Financial is the largest independent and fifth largest U.S. broker-dealer. It currently serves 12,500 advisers. Revenues in 2008 were approximately \$2.6 billion.

Financial Planning Magazine did not include the RIA portion of the business in their 2010 annual survey, however, they did survey the B/D side of the business. LPL's numbers were strong relative to their B/D competitors. 35% of respondents were very satisfied with LPL technology and another 38% were somewhat satisfied. LPL's 98% + retention rate among independent reps tends to confirm the survey's findings.

LPL offers an integrated technology solution for advisers. BranchNet is LPL's proprietary web portal. Since it is web based, advisers doing business with LPL have access to a very comprehensive portal from anywhere, as long as they have an Internet connection and a computer. The portal offers straight through processing of trade orders as well as online account openings and account maintenance.

Through BranchNet, advisers can access WealthVision, LPL's proprietary financial planning tool. WealthVision is a private labeled, customized version of the eMoney solution. BranchNet also included a fully integrated performance management and reporting tool.

BranchNet iDoc is LPL's paperless office technology. BranchNet iDocs allows advisers to upload electronic documents to the LPL servers. There is generally a small per page fee for the upload, but there are no software fees, storage fees or annual fees to use BranchNet iDocs. All documents stored on the LPL servers meet SEC Rule 17a-4(f) for file retention, so the originals will no longer need to be retained onsite.

LPL's web based Portfolio Review Tool allows financial advisers to provide asset allocation overviews to both prospects and existing clients. This tool can help advisers with their marketing efforts when dealing with prospects. It can also help bring in held away assets when dealing with existing clients.

In 2010, LPL added a rebalancing tool supplied by Advisor Software, Inc., a leading third party vendor. They also added Salesforce, a leading cloud based CRM application that integrates with BranchNet.

The BranchNet Resource Center includes product information, research, marketing tools, training and technical support access.

Due to LPL's extensive experience with independent B/D reps, the firm is well positioned to handle the needs of hybrid practices. So, if an adviser wants a provider that can support both an independent RIA model as well as some commissioned-based business on a single integrated workstation, while delivering consolidated reporting to clients, LPL is well positioned to do so.

Minimum account size for new advisers: \$10 million with a plan to grow the business; otherwise prefer firms over \$25 million

For further information visit: http://www.joinlpl.com/Channel_Pages/registered-investment-advisor.html

Cloud Computing

What Is Cloud Computing?

Just a few short years ago, the term “Cloud Computing” was confined to technology geek conventions, but by now, almost everyone has heard the term. Not everyone, however, has a full understanding of what cloud computing means. We believe that it is essential for CPA financial planners to have an appropriate level of knowledge about cloud computing. Many CPA financial planners are already beginning to make use of cloud computing resources in their personal and in their business lives.

Those who do not operate in the cloud today will likely do so in the future. The vast majority of new software being developed for financial services is cloud-based. Consumers, including your clients, are migrating to the cloud. In fact, some technologists believe that virtually all software applications we use will soon reside in the cloud. “Legacy Windows applications are dying”, says David Kramer of External IT. If they don’t move to a Software as a Service (SaaS) model (a type of cloud computing model) within 5-10 years, they will be out of business.

The evidence appears to confirm Kramer’s prediction. Apple has built a whole ecosystem around their Mac operating system, their mobile iOS, and the iCloud. Google has built a similar Google Apps/Chrome/Android system. The new Microsoft operating system, Windows 8, is more heavily integrated with the cloud, including Microsoft’s SkyDrive, than anything previously available from the firm.

To the lay person, cloud computing is often thought of as simply computer resources that exist outside of one’s physical location. This is a good starting point for an understanding of cloud computing, but it is too simplistic. In order to comprehend the potential of cloud computing, a more comprehensive definition is required.

The definition supplied by the National Institute of Standards and Technology (NIST) published on October 7, 2009 serves as a good starting point for further discussion:

“Cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g. networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction”.

The NIST definition, while better, may still leave some at a loss. To more fully understand cloud computing, let’s briefly examine cloud computing characteristics, service models and deployment models.

Characteristics of Cloud Computing

There are certain characteristics that cloud computing models share. These characteristics may vary slightly from one provider to another but as a general rule; cloud providers will possess the following characteristics:

Resource Pooling: The cloud provider's resources are pooled to serve multiple customers, or tenants. It is through this pooling that cloud providers are able to achieve economies of scale. Physical and virtual resources are assigned as needed based upon demand. Under the consumer model, the customer generally does not know exactly where their data and resources are located, however for regulated businesses such as financial services, providers will specify a location if required (country, state, or in some cases the exact data center).

On-demand: The service is usually available almost instantaneously. This differs substantially from the traditional shrink-wrapped software model. Historically, if you wanted to add a software package to your practice, you'd have to purchase the software at a store, or online, copy the software from the installation disk to your computer, and then configure it. In contrast, when you purchase a cloud software application, you pay for it, create a user name and password, and you are generally can access it immediately through your web browser. Web email providers such as Gmail and Yahoo Mail are examples for on-demand cloud services.

Self-Service: Cloud services allow CPA financial planners to provision and de-provision licenses on demand. If you want to order a cloud service, you usually do it online. You go through a process to specify exactly what you need (usually guided by a registration wizard), provide payment in the form of a credit card, and you are good to go. If you've provisioned a service for five employees, and one leaves, you can usually cancel the service to the departing employee online as well.

Elasticity: This refers to the ability to scale up or down rapidly. If you need X number of software licenses or servers today, and you need 4 X a week from now, cloud providers can meet your needs. For the typical advisory firm, this assures access to the IT resources you need, in the quantity you need them, at a measurable cost per unit, when you need them.

Broad Network Access: This refers to the ability to access data anytime, anywhere, through any type of common computing device, be it a desktop computer, a laptop, a tablet, an Internet capable TV or a smartphone.

Measured Service: Cloud services operate on a billing model similar to that of utilities. They measure the resources you use, and charge you only for what you use. Billing options vary. For example, a provider might measure individual units like an electric utility, tiers of service like a cable TV provider, or buckets of service like a cellular provider.

Interoperability: Loosely defined, this means the ability of a system to communicate with and work with other systems. Although often referred to as "open architecture", the two have different meanings. Open implies that a system is open to anyone, with no gatekeeper. There is almost always a vetting and

approval process before two systems integrate, but interoperability fosters integration once vetting has been completed.

Cloud Deployment Models

The Public Cloud: This is the model that most people think of when they envision the cloud. It is open to the general public or a broad subsection of the population. Because this deployment model can achieve great scale (think Gmail, for example), the cost per user can be very low. Since resources are shared, it is particularly important for users to understand what measures are in place to segregate and protect their data. It is worth noting that even if a public cloud storage provider is not deemed appropriate for confidential information, it may be totally appropriate for video, audio, third party research and other files of a non-confidential nature. This is particularly true of large files such as video that can be stored less expensively in the public cloud.

The Private Cloud: The private cloud is a cloud designed solely for the use of a single organization. This cloud infrastructure can be on site and site behind the organization's firewall, or it can be managed and maintained by a third party for the benefit of a single organization. Private clouds can be highly secure, but they can be expensive. In order for a private cloud to be cost effective, it would require a scale well beyond the needs of even the largest personal financial planning firm.

Hybrid Cloud: A hybrid cloud is designed for those who desire the security properties of a private cloud but don't have the scale to justify the purchase of a private cloud. Virtual Private Clouds (VPC's) are a popular type of private cloud. A VPC is like a private cloud that exists within a public cloud. It is an isolated section of a public cloud that has a high level of security applied to it. VPC's offer much of the cost advantage of the public cloud while offering a high level of security that approaches that of a private cloud.

Service Models

Software as a Service (SaaS): Software as a Service is the cloud service model that is most familiar to consumers. Under SaaS, clients "rent" a provider's application running in a cloud environment. Since these applications are web-based, usually only a web-browser is necessary to access them. The end user does not manage any of the underlying infrastructures that power the application (the network, servers, etc.). All maintenance, including upgrades, takes place behind the scenes. Examples of SaaS applications that readers may be familiar with include Black Diamond (portfolio management and accounting), MoneyGuidePro (financial planning software), Redtail (CRM), and QuickBooks Online (accounting).

Platform as a Service (PaaS): PaaS vendors provide the tools necessary for their clients to deploy, onto the provider's platform, applications created by the subscriber (or by a third party) using programming tools supported by the provider. In this case, the user has control of the underlying application, but not the hardware nor the rest of the cloud infrastructure. The Salesforce Force.com platform is one example

of a PaaS environment. Others include the Google Apps engine, Microsoft Azure and Amazon's EC2. PaaS offers a number of advantages. It allows developers to rapidly develop and deploy applications without the complexity and expense of setting up their own developmental environment. When using a major provider, the platform is stable and reliable. Many PaaS providers offer interoperability with applications such as Microsoft Outlook, as well as social media tools and mobile devices.

Infrastructure as a Service (IaaS): IaaS vendors provide computer processing, storage, networks and other computer infrastructure resources to subscribers. While it is unlikely that the typical advisory firm would use an IaaS provider directly, many advisors are already benefitting from IaaS indirectly. For example, if you use an outsourced, web-based portfolio management and accounting solution, your provider requires a base level of computing power most days, but significant additional computing power at the end of a reporting period. Rather than purchase processing power based upon maximum load, your vendor can now choose to purchase the base processing power required, and then obtain the additional processing power "on-demand" from an IaaS provider during peak reporting periods. Through the use of IaaS providers, vendors that serve the advisor community can minimize their capital outlays and maximize their efficiency, leading to better results for CPA financial planners and their clients.

Benefits of Cloud Computing

Cloud computing has the potential to deliver numerous benefits to CPA financial planners. Below, just a few of the many potential benefits are highlighted.

Economies of Scale: Since cloud providers purchase hardware and software in quantities unimaginable to the single PFP office, they can secure equipment on highly favorable terms, and pass some of the savings on to their clients. Standardization also allows cloud providers to stock replacement parts onsite, while minimizing the investment in replacement inventory. In addition, cloud providers can optimize human IT resources. They have the scale to hire specialists for every aspect of their business, and to keep them productively occupied at all times.

Location, Location, Location: Firms looking to build data centers locate their assets where the cost of land, power, and taxes are most economical. Since these firms can bring employment opportunities wherever they chose to locate, they can often secure price concessions from local governments and utilities that further lower their overall cost of operation.

Low Initial Outlay: Users "rent" what they need, when they need it. As a result, there are no upfront costs to install servers or the software that supports those servers. Cloud providers also negate the need for the real estate to house the servers, as well as the backup and disaster recover assets required to support your on premise servers.

Rapid Deployment: Because most cloud services are self-provisioned, and because no special hardware or software is required, users can often be up and running in a matter of minutes.

Minimizes Hardware and Software Maintenance Costs: When you switch to a cloud provider, you are essentially outsourcing the bulk of your hardware and software installation/upgrade/maintenance.

Anytime, Anywhere, Any Device Access: With a cloud provider, you can access your data anytime, anywhere, as long as an Internet connection is present. If you choose your providers wisely, you should be able to access your data from mobile devices such as smartphones and tablets as well. As CPA financial planners come to rely more heavily on smartphones, tablets, and other mobile devices, the ability to access data from any device without the need for special software becomes increasingly important.

True Integration: Many technology providers to CPA financial planners say that they offer “integration”, but they are not all talking about the same thing. Some providers allow you to export information from their applications into a spreadsheet, for example, and then upload it into another application. We do not believe that is what CPA financial planners desire when they say that they want integration. Automated, one way data feeds are a step up from manual export/imports, but they still leave much to be desired. Through application programming interfaces (API’s) and web services, it is possible to achieve deep integration, but the presence of an API does not in and of itself assure integration between two applications. Someone must still write computer code enabling the two applications to communicate with each other. The API and the code that links the applications will control how effective the integration between the applications will ultimately be. If done correctly, an API or similar framework can provide for deep integration; that is, virtually seamless sharing of data across applications.

Disaster Recovery- Recent natural disasters, such as Hurricane Sandy, once again demonstrated the advantages of cloud computing when disaster strikes. The smaller the firm, the less likely it is for that firm to have developed a comprehensive disaster recovery plan. During the recent disaster, many firms backed up their data, and assumed that they were prepared. They were not. If their offices were inaccessible, or destroyed, where were they going to get a new server to load their back-up onto? Many retail stores were closed, and transportation was disrupted, so the odds of purchasing new equipment, getting a professional in to configure the software, etc. within a period of days was remote. However, if a PFP firm had all of their digital assets in the cloud, they had immediate access to their data provided they had a computing device and an Internet connection.

The Cloud Movement is Well Under Way

According to the December 2012 Financial Planning Magazine Technology Survey, respondent’s top choice for CRM software was Redtail, a cloud-based solution. MoneyGuidePro, a cloud-based provider, led in the financial planning software category. Morningstar Office, a cloud-based provider, led in the portfolio management software category. In the rebalancing software category Envestnet, another cloud-based provider, led its category. Are you sensing a pattern here? Advisors are already moving to SaaS providers in significant numbers. In addition to the benefits outlined above, SaaS providers to financial professionals provide disaster recovery and business continuity support. They also provide

security, as well as the ability to outsource the maintenance of the hardware and the software. Furthermore, an overwhelming percentage of new software applications targeting CPA financial planners coming to market are web-based. The inescapable conclusion is that each year, cloud-based software is gaining market share at the expense of desktop/server software in the financial services niche.

Cloud Computing Supports Key Industry Trends

The movement towards cloud computing dovetails with a number of other trends in financial services. Here are just a few examples:

Integration- CPA financial planners want better, deeper integration. Ideally, what most CPA financial planners would like is a single workspace or user interface that gives them access to all the functionality they require to do their jobs. Although this level of integration is rare today, we predict that it will become readily available to CPA financial planners in the not too distant future. Cloud computing facilitates integration because it is easier for a custodian to create a connection with, for example, a single cloud provider like Redtail that supports tens or thousands of CRM databases as opposed to tens or thousands of CPA financial planners, each with their own CRM database.

Workflow Automation- Once you achieve a high degree of integration, you can increase automation. Today, many tasks cannot be automated because they involve multiple applications that cannot communicate effectively with each other. For example, if a portfolio triggered an alert in your portfolio management software, you would like that alert to appear in your task list within your CRM application which governs all of your to-do's, without having to open your portfolio management software. With integration, data can flow across applications, triggering tasks for you and your staff automatically.

Mobility- Advisors want access to their data wherever they are. Increasingly, this means that they are accessing their data using smartphones and tablets. In the 2012 Financial Planning Magazine survey, 50% of advisors said that they currently own a tablet that they use for business. Of those that currently own a tablet, the iPad, at 81%, is the overwhelming favorite. Approximately 80% of advisors currently use a smartphone for business purposes according to the survey with iPhones (46%) and Android phones (29%) the current favorites. The mobility movement is fueling demand among advisors for cloud-based solutions. Due to the storage limitations of mobile devices, as well as security concerns with regard to mobile devices, it is usually preferable to store data on the cloud and deliver it over the Internet on demand, as needed.

Client Access- Clients, like their advisors, are increasingly demanding instant access to the most current data through their mobile devices. Most CPA financial planners do not have the internal IT infrastructure to support the high availability of data over the Internet to many clients simultaneously. Through the deployment of a cloud solution, however, CPA financial planners can insure that all of their clients can access data 24/7 on demand whether they use a PC, a tablet, a smartphone or some other Internet capable device.

Collaboration-The cloud facilitates collaboration. Advisors can collaborate with other professionals using cloud-based documents, presentations, and whiteboards. Advisors can use these same tools to collaborate with clients.

One simple way to collaborate with clients in the cloud is through a file sharing service. With such a service, advisors can post documents, spreadsheets and presentations to a cloud-based folder that both the advisor and the client can access. The popularity of file sharing services among CPA financial planners has increased dramatically over the last several years. According to the 2012 Financial Planning Technology Survey, approximately 24% of respondents use Dropbox. Google Drive (10%) and iCloud (11%) are other popular file sharing solutions among financial planners.

In addition, advisors can use cloud-based financial planning software, reporting tools and other technologies to communicate information to clients in a user friendly, interactive environment no matter where they parties are physically located. While we do not believe that online collaboration will replace the need for face to face meetings, virtual meetings can supplement regularly scheduled office visits, providing additional value to clients and deepening the client/advisor relationship.

What's Next?

While the cloud computing movement is well underway, we are still in the early stages of a technological revolution that will change the nature of our business. Today, we have access to many professional applications including CRM, financial planning software, etc. online. We also interact with financial institutions such as custodians online. There is some level of integration between SaaS providers and custodians, but it is still a work in progress.

There are other tools CPA financial planners typically use, such as Microsoft Office, that are not yet available in the cloud, but change is afoot. Early in 2013, Microsoft will release MS Office 2013. Consumers and small businesses will be able to purchase MS Office in the traditional way, or as part of a Microsoft Office 365 subscription. Both versions will offer cloud storage (Microsoft SkyDrive) and collaboration as part of the package, but the MS Office 365 package includes some extras that the shrink-wrapped version does not. First, the 365 version will be updated constantly, so as soon as an incremental improvement takes place, it will be included in the 365 version; no need to wait for the next update. Second, with the 365 version, you will be able to run Office even if you are away from your PC via an Office on Demand virtualization session. In addition, 365 users will be provided with extra cloud storage. Furthermore, many Office 365 plans include additional services such as hosted Microsoft Exchange for email, a shared company calendar, a team collaborative site for file sharing, instant messaging, PC to PC calling, video conferencing, and a public website.

It is only a matter of time until professional tax preparation software and other essential PFP tools migrate to the cloud as well.

As CPA financial planners migrate fully to SaaS applications, they may find that they need a desktop portal to tie all of their applications together. Today, if you work in a typical Windows environment, you log on in the morning to your Windows desktop; from there, you launch your other applications, drag and drop files, etc. With SaaS applications, today you generally have to log on to each application. Often times you have to save files within each SaaS application to a place designated by the SaaS provider. Imagine if you could log on to a single virtual desktop that contained icons of hotlinks to all of your SaaS applications. Imagine that you have a virtual cloud hard drive, much like the current one on your PC, and that all of your files, no matter which SaaS application created them, could be saved to the cloud hard drive that you specify. A number of providers are offering portal desktops that provide this functionality. [External IT](#) is one example of a firm that has experience providing portal desktop technology to financial service firms. [Cloud RIA](#), currently in beta is another example of an advisor portal.

What's Your Mobile Strategy?

If you don't have a mobile strategy, watch out; some of your competitors do, and they will soon be growing their businesses at your expense! Currently, approximately one third of all search traffic comes from smartphones and tablets. Furthermore, recent studies indicate that roughly 50% of smartphone and tablet owners are using their devices to find local information. The implications are clear: Increasingly, prospects looking for a CPA financial planner will begin their search on their smartphone or tablet. If your website is not capable of projecting an image that you are proud of on mobile browsers such as Chrome (Android phones), Safari (iPhones) and Internet Explorer (Windows 8 phones), you risk losing prospects before they even make an initial contact with you.

Is there an app for your firm? There should be. A significant number of affluent clients access financial information through mobile devices. This number will increase dramatically in the coming years as younger clients, those who grew up with technology, seek out your guidance. Don't you want your firm's website to be their portal for financial information? You should; and if you want them to access your site through their smartphones and tablets, there are two things you should do right away.

First, make sure your website is mobile friendly. Many financial professionals, for example, use Flash on their websites. iPhones and iPads are not compatible with Flash. Second, you need an app for the iPhone, the iPad and Android devices. If the Windows 8 mobile platform gains traction, you'll want to be compatible with it as well.

Users of mobile devices are used to clicking on an icon to get information. They are less likely to type an address into a mobile web browser. [Orion Advisor Services](#) is one example of a firm that creates client facing apps for advisors. Those looking to create something unique on a tight budget might like [MyAppBuilder](#). With MyAppBuilder, you create the content and their team of designers does the rest. They will create your iPhone app and upload it to the App Store for as little as \$29 per month. They can create Android apps as well. AppMakr, a web-based do it yourself app creation tool allows users to build apps for free, but if you are happy with your creation you'll probably want to upgrade to the premium

service, at \$79 per app per month. It supports iPhone, Android and Windows apps. There are many other app creation programs and services that can fit any need and any budget.

CPA financial planners who do not have client facing apps may soon be at a major competitive disadvantage. An app will soon become as important as your website in attracting and retaining clients.

One final trend that is closely aligned with the cloud is that of the social enterprise. There has been a great deal of discussion in our industry about social media, but much less about the social enterprise. The social enterprise incorporates social elements in all aspects of one's business. This includes collaboration, communicating with client and prospects in the cloud, monitoring your firm's social reputation online, mining social networks to create better profiles of your prospect and clients, and leveraging social media in other ways.

One simple example of how a CPA financial planner might leverage social media is through the use of a unified address book or CRM system. Under such a system, your traditional CRM would link dynamically to your clients' and prospects' profiles on LinkedIn, Twitter, and other social networks. This sort of system offers a number of advantages. First, it serves as a Launchpad for all of your communications. Whether you chose to contact someone by phone, email, text, or social network, you can do it from a single contact page. Second, it can serve as a place to track all communications with an individual. In addition, it can provide you with updates of an individual's status. For example, when a client changes jobs, they may post to information on LinkedIn before they call you. If you receive an update of a client's employment status, you can proactively contact them to discuss issues like employment benefits, rolling over retirement assets, etc. These systems are still in their infancy in the financial service industry, but they will soon become commonplace. All of this shared information, of course, is powered by cloud computing.

Conclusion

Cloud computing is fundamentally changing the nature of our business. The cloud has already altered the way many consumers purchase and maintain their software, and some advisors have also largely migrated to the cloud. As an increasing number of CPA financial planners move their IT resources to the cloud, they will find that it allows them to outsource the maintenance of their servers, data backup responsibilities, and, to a large extent their data recovery plans. It will change the way they interact with prospects and clients. It will allow them to automate many tasks they perform today, increasing efficiency and productivity.

For many CPA financial planners, the process of moving to cloud computing will be a gradual one but make no mistake: cloud computing will play an ever increasing role in your business. For those of you who are already using cloud resources, make sure that you monitor industry news and releases from your vendors regarding advances in the field. For those of you who have yet to leverage the cloud, now is the time to start evaluating your current IT infrastructure in order to determine when and how to migrate to the cloud, if appropriate, during your next technology upgrade cycle.



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