The 2011 Forensic and Valuation Services (FVS) Trend Survey
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The economic crisis in the United States and abroad has had an impact on financial markets, industries and businesses around the world. The repercussions have caused changes in the way businesses are operated and services are financed and delivered. In 2011, the AICPA Forensic and Valuation Services (FVS) Section conducted a survey of CPA forensic and business valuation professionals to evaluate trends within this particular practice area and the litigation and regulatory environment as a whole.

Forensic accounting services generally involve the application of specialized knowledge and investigative skills possessed by CPAs to collect, analyze and evaluate evidential matter and to interpret and communicate findings in the courtroom, boardroom or other legal/administrative venue. Professionals specializing in forensic accounting provide services to their clients, who are often attorneys and businesses across an array of industries.

The CPA forensic accounting professionals who participated in the 2011 AICPA Forensic and Valuation Services (FVS) Trend Survey were clearly seeing greater demand for services. About half of those who participated in the study said they devoted more time to forensic work during the past year, with an impressive average increase of 20%. With that in mind, it was not surprising to see that roughly one-quarter have added more professionals to their practices. Overall, the vast majority expect greater demand for forensic services in the next two to five years, as well as an uptick in litigation and regulatory enforcement during the same period.

Regarding professional requirements, when asked what credentials respondents require those providing forensic accounting services to possess, a CPA was the most frequently required credential. In fact, it generally was required twice as often as any other credential. The CPA, coupled with the Certified in Financial Forensics (CFF®) credential, was the second most widely required credential in the areas of fraud prevention, detection and response, financial statement misrepresentation, economic damages calculations, bankruptcy, insolvency and reorganization, and computer forensic analysis. Additionally, the CPA coupled with the Accredited in Business Valuation (ABV®) credential was the second most widely required credential in the areas of valuation and family law.
Regarding respondents’ specific practice areas:

- 83% anticipated greater demand for computer forensic investigations in the next two to five years, with the mean anticipated increase at 20%. More than half said they would hire more people in this area.

- 53% expected more pre-packaged bankruptcies in the next two to five years.

- Among economic damages engagements, the highest number of respondents expected greater demand involving breaches of contract, business torts and intellectual property.

- About 85% saw an equal or greater number of divorce cases handled in the past year.

- Regarding engagements involving financial statement misrepresentation, CPAs thought the most prevalent issues in the near future would be revenue recognition and valuation of assets carried at fair value.

- Slightly more than half expected greater demand for outside consultants versus in-house personnel in the next two to five years from companies attempting to prevent or detect fraud.

- For valuation professionals, the areas with greatest jumps in demand within the past year included shareholder/partner disputes, contractual disputes, family law, and gift and estate issues. In the next two to five years, they expect to continue to see increased demand for shareholder/partner disputes, contractual disputes and family law as well as increased demand in bankruptcy, insolvency and reorganization.

The AICPA FVS Section also commissioned a study of professionals in business and industry (B&I) to gather their feedback on working with forensic accounting professionals. The survey results provide valuable information for CPAs on the trends affecting their clients, how they are responding to them and which services they may need from outside experts.

CFOs and controllers made up the majority of respondents to this survey, with most employed at U.S. privately held companies. More than half of respondents used outside valuation experts and most found them through referrals from their external auditors.

The respondents from business and industry said they used a number of approaches to prevent fraud, including general internal controls, screening new employees, division of responsibilities, appropriate oversight, physical controls and computer-based controls. When detecting fraud, they most often used general internal controls, appropriate oversight, physical controls and computer-based controls.

Most commonly reported frauds included false payment requests, check and credit card fraud and employee theft. Most occurred in operations, accounts payable, sales, as well as marketing, among others.

Most of the economic damages cases in which the participants from business and industry were involved focused on breach of contract and employment. Once again, most companies that used an outside expert relied on a referral from an external auditor. Their top choices were CPAs, followed by CPA/CFFs and CPA/ABVs when they considered additional designations.

Most financial statement representations cases involved overstatements of accounts receivable, inventory, securities or other assets. In shareholder disputes, most cases involved either an allegation that the minority was terminated as an employee or an allegation that the minority’s salary was changed.
The AICPA FVS Section conducted a survey of CPA forensic and business valuation professionals to evaluate trends within this particular practice area and the litigation and regulatory environment as a whole as well as conducted a survey of professionals in business and industry to gather their feedback on trends within their organizations.

The 2011 AICPA FVS Trend Survey – FVS Community

Who Participated?
The AICPA FVS Section commissioned a study of professionals in the FVS community to gather their feedback regarding trends within their practice area. The 737 respondents to the study were primarily employed at accounting and consulting firms. A total of 74% of the respondents were employed at firms with 100 or fewer accounting professionals, while 33% were employed at firms with five or fewer accounting professionals. Respondents were involved in a variety of areas, but valuation (21%), fraud detection, prevention and response (20%) and economic damages (19%) were the main niches.
Of the respondents, 42% spent up to 24% of their time on forensic services. A total of 47% had spent more time on forensic work during the past year with an average increase of 20%.
The AICPA FVS Trend Study – Business and Industry

The AICPA FVS Section also commissioned a study of members within business and industry to gauge their experiences with a variety of issues and determine how they work and plan to work with outside professionals.

Who Participated
CFOs were the largest group of respondents (45%), followed by controllers (21%), CEOs or presidents (12%), vice presidents (9%), other titles (4%) and small representations of CAO/CAE/CIOs (3%), directors (3%), COOs (2%) and managers (1%). The majority (69%) of the organizations they represented were U.S. privately held companies, with another 13% coming from government, education or not-for-profits, 10% from public companies and 4% from both foreign companies and other organizations. A total of 31% had revenue of $10 million to under $50 million, 27% had less than $10 million, 13% were in the $500 million to $1 billion range, 12% were between $50 million and $100 million, 11% were between $100 million and $250 million and 6% were between $250 million and $500 million. Respondents worked in a variety of industries including financial services, health care, real estate, insurance, manufacturing, construction and retail.

Working with Outside Professionals
The majority of respondents (55%) employed outside experts to provide valuation services. They most often found these experts through referrals from their external auditors (39%), although 34% used a variety of other options, including gaining referrals from other professionals in their own industry, previous relationships based on tax or other services performed by the expert’s firm or bank or trade association referrals. Most of the professionals they employed (38%) worked in business valuation firms, while a significant number (26%) worked in public accounting firms or in consulting firms (22%) and a small amount worked in investment banking firms (8%) or other (6%).

Additionally, among respondents who employed CPAs with valuation skills internally, the main position in which they were employed included accounting/controller (43%), corporate finance (25%), tax (11%), treasurer (10%), acquisitions (7%) and other (4%).
Survey Trends

The vast majority (79%) of respondents from the FVS community expect greater demand for services in the next two to five years. Not surprisingly, the belief across all sizes of organizations and all industries was that there would be an increase in litigation and regulatory enforcement within the next two to five years. Eighty percent of respondents believe this is the future trend. A resounding 83% use internal resources to support their forensic practice and 24% have increased the number of internal forensic professionals in their practices.

In the FVS community, the CPA designation was the most widely required credential for professionals involved in all service areas. In fact, it was required twice as often as any other credential. The CPA/CFF was the second most widely required followed by the CPA/ABV in the areas of valuation and family law.

For the time being, at least, outside forces have not had a significant impact on practices. A total of 67% said that regulatory and compliance changes had not had an impact on their practices. On another front, the same number said that they had not seen law firms or the ultimate client bringing forensic accounting expertise in-house.
CASE STUDY

In a recent case, the expert was challenged on his use of economic data in a dispute between two real estate developers over whether they had a partnership or whether one was a subcontractor of the other. In the report, the expert formed an opinion that even if a partnership existed, it had little or no value because of the economic downturn in the construction markets and the difficulty that existed in financing commercial real estate projects. The individual who was bringing the suit believed he was damaged in excess of $50 million. The expert used public information on construction completed and lending activity to support his conclusion.

Opposing counsel argued in his Daubert challenge that accounting education does not qualify a CPA to use and interpret economic studies. The expert was called as a witness subject to direct examination by opposing counsel and then cross examined by the attorney who retained him. The hearing started with opposing counsel arguing the Motion in Limine without the jury in the courtroom. The expert’s opinion withstood the challenge and ultimately the case was settled for a very small fraction of the damages claimed.

Daubert challenges generally begin with the filing of a Motion in Limine. A Motion in Limine is a pretrial request that certain inadmissible evidence not be referred to or offered at the trial. Typically, a party makes this motion when it believes that mere mention of the evidence during the trial would be highly prejudicial and could not be remedied by an instruction to disregard. These motions are always discussed outside the presence of the jury to shield the jury from testimony that may be disallowed and are always decided by a judge. Among respondents who have had their cases challenged, 45% of the challenges were based on methodology, 29% on qualifications, 18% on lack of evidence and 33% based on some other issue.

The largest number (49%) reported that they were aware of 10% or fewer of their cases being subject to a Daubert challenge, while another 38% said the issue did not apply to them.
Preparing for Future Developments

The top five issues that forensic professionals believe will be most challenging in the next two to five years include:

- Attracting and retaining qualified staff: 25%
- Keeping abreast of regulatory changes: 14%
- The economy: 13%
- Competition and fee pressure: 11%
- Technology: 9%

Other issues identified by respondents include the ability to grow (7%), training (5%), increasing complexity of engagements (4%), marketing (4%), fraud (3%), balancing workload (3%), globalization (1%) and avoiding lawsuits (1%).
Attracting and retaining qualified staff was the most prevalent response by the forensic professionals.

**ATTRACTING AND RETAINING QUALIFIED STAFF**

One of the challenges identified in the survey is staffing in the broadest sense. At one point, the spotlight was on hiring new recruits when there was a decline in the number of accounting students coming out of college. Some of that spotlight has shifted to focus on internal succession and finding qualified candidates to successfully lead a firm into the future.

One of the tensions with staffing and succession planning is experience. This is especially true for forensic accounting firms seeking experienced testifiers. Being an effective forensic accountant takes years of résumé building and experience.

For some firms, the ability to attract and retain qualified candidates requires the recognition and acceptance that there exists a generation of practitioners and/or future forensic accountants who are developing their CPA skill set and forensic accounting experience while holding on to their personal commitment not to sacrifice family or personal time to advance in their professional careers.

To attract and retain qualified staff, a firm should:

- Acknowledge the strengths and weaknesses of its current structure; identify the staffing gaps and whether they can be filled by existing employees

- Be creative about recruitment and avoid getting locked into just one approach
  - Print ads: Be creative with your appeal for candidates, personalize the advertisement
  - Recruiter: Use the recruiter's network and give them permission to seek candidates through social media and alumni networking groups
  - Word of mouth: Reach out to your own personal network of professionals and reach beyond your existing community
  - Advertise: Use your state society of CPAs and out-of-state societies for advertising

- Be open with your firm employees. Share the firm vision and use your existing staff to recruit; they know your firm and your firm culture better than anyone.

- Be flexible with work expectations; do you offer flexible work schedules?

- Develop an internal leadership or mentoring program; establish a partner-in-training program

- Be transparent, invite the next generation of leaders to be active participants in management meetings
Keeping up with regulatory changes can be a daunting task. New rules are promulgated seemingly every day regarding income taxes, health care, accounting, litigation discovery and other key areas in which CPAs work. Staying abreast of the latest requirements is a key part of a successful practice, especially when clients are relying on us to interpret the rules and measure the impact to a business, transaction or dispute.

How can we stay on top of all this? A few key practices may help:

- Take stock of your business: Which regulations affect you? The Internal Revenue Service or the Financial Accounting Standards Board have an impact on many of us. Their guidelines affect both how we run our practices and the services we provide to clients. Depending on the size and scope of your practice, you could also be affected by ERISA, HIPAA and even OSHA rules. If these acronyms are somewhat foreign, help is available (see step No. 2).

- Leverage technology: Thankfully much if not all of the relevant information necessary can be found on the websites of the individual regulatory bodies. Forms and instructions can often be downloaded in PDF format. Many free and paid sites offer advice, articles, white papers and other guidance to help with interpretation and implementation of new regulations.

- Assign responsibility: Although everyone in your practice should be generally familiar with all the relevant rules, it may be helpful to assign specific individuals the task of updating and maintaining your firm’s institutional knowledge of new regulations. You can tackle the mountain of regulation by dividing and conquering.

- Be social: When possible, attend conferences and presentations featuring regulatory updates in person or even via webinar. It’s a great way to increase your awareness and conduct informative discussions with your peers.

- Let the knowledge come to you: Subscribe to key periodicals either online or in print that will notify you of new laws.

Create a process for identifying and staying current on key regulatory issues and you will enhance your practice and make yourself invaluable to your clients.
HANDLING ECONOMIC PRESSURES
A difficult economy puts many pressures on us and our clients. As you assess the impact of the economy to your practice, consider these areas:

- Billing: Billing and collection take on greater importance in a tough economy, so take time to assess your administrative practices regarding engagement letter provisions, billing frequency and retainer amount. Consistent procedures and good communications with your clients help to reduce the stress and uncertainty.

- Fee arrangements: Increased fee pressure is inevitable but, if handled properly, it can create new opportunities. You may find that your clients are amenable to alternative fee arrangements, including fixed fees and, where appropriate, a success fee. Open the dialogue with your clients to understand their concerns and work to create a fee arrangement that benefits you both. The discussion could also reveal new opportunities to help your stressed out clients in other areas.

- Human resources: Remember that your employees are also feeling the effects of a tough economy and they need reassurance and communication just as your clients do. Open the lines of communication to share the challenges you all are facing together. Employees will feel more respected and have a greater sense of involvement. They also just may surprise you with creative and helpful ideas.

Keep in mind that an uncertain economy can create some excellent avenues to enhance your relationships with clients and employees alike if you are creative in your approach.
COMPETITION AND FEE PRESSURE

Competition and fee pressure vary based on location, specialty and whether compliance work is involved. As an example, fees are higher in highly populated areas and lower in rural areas. Even in some sparsely populated states, fees are higher in the larger cities than in more rural areas. It’s also possible to command greater fees due to specialized training, experience and specialization. Finally, clients shop for price when compliance services, such as ESOP or gift tax valuations, are involved.

There are several ways to deal with these issues. One is to specialize. So, for example, a practitioner might focus on disputes involving valuation and/or commercial damages issues, doing virtually no tax or attest work. He or she would take advantage of professional education opportunities that match the specialty and become involved in the related professional organizations. That might involve obtaining credentials, volunteering in professional capacities and teaching. It’s also a good idea to attend the relevant conferences produced by professional organizations and to volunteer with the local bar association and courts and the American Bar Association. In addition, writing articles and books on your area of expertise further serves to distinguish you and establish your expertise.

Managing client expectations is another important step. It can be difficult for practitioners to predict the scope and cost of the work or the quality of records he or she will receive. If the client expresses fee concerns before the engagement begins, there are two options. First, agree to a fixed fee for a well-defined scope of work with a well-written engagement letter. The other choice is to break up the work into pieces. The practitioner takes a retainer and works until it is exhausted. At that point, the practitioner meets with the client and attorney to explain where the engagement stands and what problems have been encountered. All three then agree on whether to move forward and how much more the client is willing to spend before another review meeting takes place. This process keeps the client informed and in control of the cost.

Because of the fee pressures, some practitioners do little or no compliance work. Others, however, are quite successful because they develop systems that limit the time necessary to perform required tasks. These efficient systems enable them to handle large volumes and specialize in compliance.

The common themes when it comes to competition and fee pressures are to differentiate the practice from others and to convince referral sources that you are different, better qualified and available when needed. You want to be the first person your sources of work think of when they have a referral opportunity.
TECHNOLOGY
Another challenge for forensic and valuation professionals is technology. Rapid technology changes have altered the methods used to search for and identify fraud. Capturing and analyzing large volumes of data can require specialized training and equipment. Prior to Office 2007, Excel was limited to about 65,000 rows of data. The current version of Excel will allow 1,048,576 rows of data.

If the data set is larger than that, specialized software is required. Two of the primary providers are Idea and ACL. When analyzing large data sets, it is also important to ensure the computer used is sufficient. The computer should have copious amounts of RAM and an upgraded processor so it can load the data set into memory and perform calculations without freezing. Specialized training should include a course on statistics. When working with large data sets, it is important to understand confidence intervals and what samples can imply about the population, as well as test for anomalies.

CASE STUDY
A SMALL FVS FIRM’S TECHNOLOGY CHALLENGES
For smaller FVS firms, there are increasing challenges in keeping up with the evolving technologies necessary to respond to client needs. Some of the things one 20-person CPA firm recently addressed include:

- The firm making a strategic decision to migrate an appropriate portion of its data and software to the cloud later this year. The firm already relies on a cloud-based, offsite Internet-driven backup of data. Given the continued expansion of what would traditionally be deployed on the server, and the related constraints and maintenance issues there, firm leaders believe that 2012 could be the “year of the cloud” for many such firms.

- Providing all professional staff with at least dual monitors, and in several instances three monitors, to allow efficient access to multiple resources and electronically stored documents.
Application of the firm’s CCH Engagement software, which was developed as part of an integrated suite of software (e.g., tax preparation, time and billing, CRM, audit and review work) to organize tax and attestation engagement workpapers electronically, to business appraisal and litigation-based engagements. This resource, together with an investment in scanning technology, has allowed the firm to move toward a less-paper approach to most FVS-based engagements. The firm emphasizes less paper over paperless since it continues to rely on some printed documents.

Implementing the beginning of a formal and dedicated social media strategy to ensure the firm optimizes its presence and use of LinkedIn, Facebook, Twitter and blogging.

Evaluating and modifying requirements for recurring changes to passwords and related protocols used by employees to access the network and resources when working outside the office.

Conducting a firm-wide seminar on email etiquette, including what, how and when to use email versus other modes of communication. This in-service also addresses the inefficiencies that occur when individuals are constantly interrupted to check inbound emails throughout the work day.

Implementing a secure client portal for use whenever sensitive information is being sent to or from the office.

Coordinating a formal protocol for identifying and passing through costs incurred for electronically based resources (e.g., Duff & Phelps, RMA, Integra, IBIS, etc.), and the required modifications to the retention agreement to cover them.

Publishing guidance for employees on the use of cellphones and the personal use of the Internet during office hours. The firm has also considered its stance on supporting tablet-based technology in conjunction with, or in replacement of, laptop computers.

Finally, the firm’s leaders urge FVS practitioners to review the AICPA’s Top Technologies Initiatives for insights into emerging trends, since they believe the pace of technological change is clearly accelerating. Sticking with proven software and hardware choices and solutions and steering clear of novel and intriguing offerings are important.
Spotlight on Specific Engagement Areas

Bankruptcy
Regarding pre-packaged bankruptcies, defined below, 53% of respondents from the FVS community expected an increase in the next two to five years. The anticipated increase was 20%. The mean percentage of business devoted to corporate bankruptcy was 70%, while 14% was devoted to personal. The mean percentage of time spent on Chapter 11 was 55%; on Chapter 7 it was 26%; and on Chapter 13 it was 7%. Roles performed in the survey participants’ bankruptcy practices included:

- Expert for the receiver or trustee (27%)
- Expert for the debtor (26%)
- Expert for the creditors’ committee (24%)
- Trustee (12%)
- Receiver (11%)

Roles Performed in Bankruptcy Practice

![Roles Performed in Bankruptcy Practice](chart.png)
Pre-packaged bankruptcies have become more common in recent years and may be a viable restructuring option for many companies. In a pre-packaged bankruptcy, the restructuring company and its major creditor groups negotiate the terms of a plan of reorganization before the debtor files for bankruptcy protection. The plan is circulated to the classes of impaired creditors who then have an opportunity to vote on the plan before a bankruptcy case is commenced.

As compared to an ordinary in-court restructuring, a pre-packaged proceeding can be much shorter and less expensive. In many pre-packaged proceedings, there are less than three months between filing and plan confirmation. In an ordinary in-court proceeding, it often can take more than a year to negotiate and confirm a reorganization plan. This long time in court requires a company to expend significant fees on bankruptcy counsel for the debtor, any statutory committees, and reorganization consultants, for example, and occasionally the company will suffer from diminished trade terms.

A pre-packaged filing, however, has a number of drawbacks when compared to other options. A pre-packaged proceeding requires more involvement from lawyers and typically increases the cost to the debtor as all parties will need to retain bankruptcy counsel, often at the restructuring company’s expense. An ordinary in-court restructuring can be filed with little to no notice. A pre-packaged proceeding requires months of negotiations and preparation beforehand. Therefore, a client seeking a pre-packaged bankruptcy must be aware of its need to restructure before its need becomes acute and it no longer has sufficient liquidity to support a long restructuring effort.
CASE STUDY

In one recent pre-packaged bankruptcy, the debtor was a mid-sized homebuilder with operations in a number of states (the “Debtor”). Prior to the economic downturn and housing slowdown, the Debtor was building homes in a variety of markets that were severely impacted by the housing slowdown, which significantly affected the Debtor’s operations and reduced the number of homes that it was able to sell. When the housing slowdown occurred, the Debtor consolidated operations, exited some of the markets hit hardest by the slowdown and refocused its efforts on healthier coastal housing markets. However, the Debtor had a significant amount of debt on its balance sheet, including hundreds of millions of dollars in old secured and unsecured notes. Substantially, all of the Debtor’s assets were pledged to the secured creditor.

In this case, the Debtor determined that it would not be able to avoid a debt default. At that point, the Debtor brought in outside restructuring consultants and initiated talks with a small group of holders of the unsecured bonds and the secured lender. After months of negotiation, the negotiating parties reached an agreement to restructure the secured and unsecured notes. The deal reduced the amount of debt owed by almost $200 million, extended the term of the secured loan and the remaining unsecured notes, and gave holders of the unsecured notes equity in the reorganized Debtor, all while raising new cash with which to operate. Importantly, the requisite vote for the unsecured note holders was obtained under the Bankruptcy Code, but would not have been sufficient to permit the restructuring, had the indenture governed voting for the reorganization.

As the foregoing demonstrates, a pre-packaged proceeding can have many benefits for debtors in need of a balance sheet restructuring. A pre-packaged proceeding will likely save them money in the form of reduced professional fees and bankruptcy-related expenses and allow them to pass through bankruptcy quickly. However, coordinating the pre-packaged proceeding requires significant planning by the debtor and utilization of skilled legal and financial advisors.
Computer Forensic Analysis
A total of 83% of the respondents reported that they expected to spend more time on computer forensic investigations in the next two to five years, with the mean anticipated increase at 20%. A total of 57% said they would be hiring more people to provide computer forensic investigative services. Respondents said that 39% of clients were developing in-house capabilities to address their investigative needs, but 37% of clients have not updated data retention policies in response to risk of litigation.

Data retrieval methods were the computer forensic techniques most often applied (41%), followed by computer-assisted auditing techniques (25%) and IT auditing skills (25%).

Computer Forensic Techniques
Today, with the sophistication of powerful software and the technological ability to extract large amounts of data, 100% of the population of information can be analyzed. Data can be retrieved from a company’s general ledger system, time and expense systems, network drives, user files, various types of logs (i.e., web logs, building access logs), and essentially anywhere electronic data reside. Some of the benefits of incorporating data analysis include:

- Ability to analyze 100% of data populations in a fraction of the time required of a manual process
- Comparing relevant types of data from different systems or sources can help to show a more complete picture
- Ability to easily trend relevant data over periods of time; fluctuations in trending lines can be analyzed further for false positives and potential risk factors
- Certain risk criteria can be quickly searched for and identified in the entire data population and extracted for further analysis
- Testing the effectiveness of the control environment and policies in place by identifying attributes that violate rules
- Identifying trends unknown to company personnel and consultants or practitioners

Before undertaking a computer forensic engagement, it is important for the forensic accountant to understand the scope of the data to be reviewed. Computers contain a significant data trail that, when analyzed properly, can yield a treasure trove of information. Data can be retrieved from computer access logs to determine when employees are at work and what information was accessed or recorded. Time stamps provide information that indicates exactly when the data entry occurred and reveal data manipulation that has been used to prevent a fraud from being detected. Logs can also be used to evaluate Internet access and determine what websites employees are accessing while at work.
The respondents believed that the greatest technology-related threats to organizations in the coming two to five years included:

- Use of mobile devices (28%)
- Malicious insiders (19%)
- Remote access (19%)
- Social networking (18%)
- Malware (10%)

**Threats for Organizations**
USE OF MOBILE DEVICES

Advances in phone technology raise the risks to personal information. Smartphones today essentially are tiny computers that house personal user data such as passwords, financial information, contacts, emails, texts, etc. While a few available apps attempt to protect data, unlike the case with computers, there is no antivirus software to install to keep personal information safe. What’s a CPA to do?

The New York Times suggests several ways to protect your information.

- For iPhone users: Download the Find my iPhone free app that allows you to visit a website and see your (lost, stolen or misplaced) phone on a map. You can send a message to your phone that locks or erases it.

- For Android users: Download the Lookout app that allows you to find your phone, scan downloaded apps for malware and back up your data to servers. A paid version lets you wipe the data from your phone and warns you if it visits unsafe websites.
  – Lookout Inc. estimates that more than a million phones worldwide already have been affected.

- The article also suggests protecting yourself on Wi-Fi networks by using a VPN connection.

You can also prevent attacks by changing your SIM card often, buying apps only from Google or Apple, avoiding unofficial versions of popular apps and being sure the requested permissions make sense. Keep in mind that antivirus apps, like Lookout, Norton and AVG, screen only for viruses, worms and Trojans, and other malware programs already in circulation.

Be aware of popular types of attacks. One version is a typical man-in-the-middle attack, in which someone hacks into a phone’s operating system and reroutes data to make a stop at a third party before it reaches its final destination. This allows access to everything you say or do on your phone. It can even instruct your phone to record audio and video when it is turned off. This attack is commonly achieved through a link in a text message.

Be careful what you download or click on with your phone. While an antivirus program may fix mistakes on your computer, you can’t rely on them for your smartphone.
MALICIOUS INSIDERS

In a deteriorating economy, the threat from malicious insiders increases, often dramatically. Financial pressures put corresponding pressure on the motivation element of the fraud triangle and in turn expose weak internal controls, both manual and automated.

The threat landscape can be quite large, but certain common vectors appear, such as:

- Theft or loss of intellectual property including trade secrets, propriety product designs, bid or proposal data, business plan information, marketing plan information, etc.
- Fraudulent business transactions, such as payments to sham vendors or for fake invoices or payroll to fictitious employees
- Fraudulent payments for ACH, wire transfer or credit card transactions

Control issues unique to insider threats can have a significant impact on litigation efforts. These include:

- Insufficient controls on access privilege for user accounts on key production or financial systems
- Ability to download sensitive data to removable media, such as thumb drives or CD/DVD drives, with no logging
- Lack of event logging (transaction auditing) on network systems and key database and application systems; this is exacerbated by the fact that most key logging capabilities are disabled in the default installation
- Lack of sound control policies for key payment systems, such as required dual control for wire transfers

These factors can pose significant challenges for forensic investigators trying to build a case supported by objective evidence. Consider the example of an employee accused of downloading proprietary designs and customer information files to sell to a competitor. Significant eyewitness testimony and other circumstantial evidence made a strong case against the employee, but the lack of basic internal controls inhibited the forensic investigators’ ability to support that evidence with objective data. For example, the employee had access to sensitive areas of the network file server that were unrelated to job function. In addition, neither the network file server nor the employee’s workstation was configured to log download events.
REmOTE ACCESS

The work force is becoming more mobile and the pace of business is increasing at a dramatic rate. Employees, including executives, demand access to systems anytime and from anywhere. As a result, the concept of the “network perimeter” is becoming harder to define.

In addition, as new technology enables remote access capabilities, security features are often outpaced by user functionality, leaving enterprises vulnerable in ways that are not immediately apparent.

Poorly secured remote access can leave an enterprise vulnerable to unauthorized remote access to key systems and data, including intellectual property, trade secrets, propriety product designs, bid or proposal data, business plan information, marketing plan details and more. It can also allow access to systems and facilitate fraudulent ACH, wire transfer or credit card transactions.

Control issues unique to remote access threats can have a significant impact on litigation efforts. These include:

- Lost or stolen laptops that are poorly secured can provide a pathway into the production systems
- Smartphones with weak security parameters can provide attackers with access to data stored in emails as well as unencrypted network credentials; in some cases this information can be intercepted in Bluetooth transmissions
- Installing remote access clients on employee-owned systems (such as an executive’s home computer) can leave an enterprise vulnerable to a back door remote access threat; employee-owned systems are rarely secured as well as enterprise systems and are increasingly targeted by attackers who discover executive information using simple Google searches

Forensic investigators need to consider remote access capabilities carefully to properly build a case supported by objective evidence.

Consider the example of the executive who accesses production systems via a virtual private network (VPN) client on his home computer. That same computer is used by family members who use risky online services that introduce malware. The author of the malware can then leverage this access to reach enterprise services. This often leaves an electronic footprint that initially appears to be insider fraud, but forensic investigators must remain open to the possibility of outside threats.
SOCIAL NETWORKING
Social media is more than LOLs, OMGs, “like this” posts and 140-character tweets. Important evidence and even corporate business records have migrated to social networking sites like Twitter, LinkedIn, MySpace, Facebook, YouTube, Foursquare and other Web 2.0 venues. Their content often is highly relevant to:

- Conducting a background check or impeaching a witness
- Determining a corporate position on an issue, or its acknowledgement of a fact or circumstance
- Proving whether a person was cyber-bullied or threatened by another, including in witness-tampering cases
- Establishing whether a subject associates with another person or evidencing intent, predisposition or motive
- Challenging an individual’s physical location alibi
- Gathering information relevant to other aspects of the investigation

What is more, litigation has proliferated about whether social networking site content violates others’ intellectual property rights; whether the sites themselves infringe the privacy of their own users; or even whether fraudulent or other illegal activity, such as the sale of “knock-off“ luxury goods or the promotion of prostitution, occurs with actual or constructive knowledge.

In all of these contexts, adequately preserving the content at issue is critical, which can be challenging given its dynamic and often multi-format nature. To properly collect and authenticate social networking content, it is critical to develop and run custom programs and tools, execute emerging forensic methodologies, and maintain a robust chain of custody documentation to ensure that this highly relevant evidence is authenticated for admissibility. After the preservation phase, significant forensic skill is required to analyze and quantify the preserved data and answer relevant questions.

A recent example of the use of social media involved rebutting the claims of a computer forensic expert. While conducting an investigation into the background of the expert who was scheduled to testify in a jury trial it was learned that this “expert” participated in a digital forensic listserv. While on the listserv, the “expert” asked for help on the most basic questions regarding the preservation and analysis of digital media. This is one example of how what you say and the sites you visit can be used against you.
MALWARE
The development and proliferation of malware has become big business for online thieves and can be a significant challenge for forensic investigators. Malware can be used to:

- Eavesdrop on systems to obtain sensitive information such as login credentials or private communications
- Siphon data meeting certain criteria (such as credit card information) from production systems
- Automate the process of escalating to administrator privilege (rootkits)
- Cause damage to targeted systems, as in denial of service or data wiping

Malware can be introduced in production systems in several ways that can pose challenges for forensic investigators. These include:

- Email phishing attacks that trick users into visiting malicious websites
- Users clicking on advertisements that appear in trusted websites but are placed by third parties. These third parties are often the target of attackers who attach malware to their advertisements
- Seeding attacks that are initiated using a mislabeled piece of digital media, such as a thumb or CD/DVD; for example, an attacker may place a thumb drive containing malware but labeled “payroll data” on the floor of an office building (or even in the parking lot) hoping to entice an employee to insert it into a workstation

The source of malware often is difficult for forensic investigators to trace. Attackers often use proxy servers or previously compromised systems to introduce it. Malware that “phones home” to attackers often masks the destination using similar means.

Attackers are increasingly targeting small businesses with malware on the assumption that users may be less sophisticated and their controls less robust and effective. Consider the example of the Main Street newsstand that was infected by malware. It was introduced when an employee clicked on an ad placed on a social networking site using her work enterprise workstation. Once the computer was infected, the malware identified and siphoned credit card numbers obtained by point-of-sale systems and sent them to accomplices in Eastern Europe using a series of proxy servers.
Economic Damages
To calculate damages, most respondents use a hybrid approach (60%), while an equal number (15%) used either ex-ante or ex-post. The majority (35%) calculated damages for five years, while 29% calculated them in perpetuity. Another 17% calculated them for three years, 9% for 10 years, 9% for zero years and 1% for one year.

When discounting future damages back to present value, most (73%) accounted for the additional risk in both the assumptions and discount rate. A total of 19% accounted for the risk in the discount rate alone and 8% in the assumptions alone.

Ex-ante damage calculations rely on historic information and information that was available at the time of the damage. Ex-post damages calculations use information regarding the actual losses during the damage period. As indicated above, the majority of survey respondents use the hybrid method for calculating damages. This approach utilizes actual information during the damage period for the calculation of “but-for” damages and a discount factor to discount the damage amount back to the date of the loss.

CASE STUDY
The plaintiff was a California supplier of duck products to the defendant, a national chain of natural products grocery stores. Under an oral contract entered into in 2006, the defendant agreed to give the plaintiff the same amount of business even if the plaintiff exited the foie gras market. The plaintiff exited the foie gras business and almost immediately thereafter the defendant terminated the oral contract.

Damages began in 2006 and ran through 2016 when California legislation would force the plaintiff to exit the foie gras business. Industry financial trends between 2006 and 2011 were used to estimate what would have happened if the oral contract had been followed.

The trial occurred in 2011. The plaintiff’s damage expert took the difference between the estimated “but for” sales to the defendant and the actual sales the plaintiff was able to make in mitigation. The plaintiff’s damage expert then estimated the incremental costs to make the additional sales that were not mitigated. The resulting annual cash flows from 2006 through 2016 were then discounted from the midpoint of each year of the damage period using a risk adjusted discount rate to the date of the breach of the oral agreement in 2006. Prejudgment interest was then added to these damages from 2006 through the date of trial in 2011.

The jury awarded the plaintiff full damages. The hybrid approach properly measures the damages as of the date of the legal violation and takes into consideration all information after that date, thereby more precisely measuring what would have happened “but for” the legal violation.
FVS participants performed economic damages services in a wide range of situations, with a majority focused on breach of contracts and business torts. Other areas include:

- Employment
- Personal injury
- Wrongful death
- Intellectual property
- Merger and acquisition (M&A)
- Unfair competition

Professionals from business and industry whose companies were involved in economic damages cases said they mainly focused on breach of contracts. Other areas include:

- Business torts
- Employment
- Personal injury
- Wrongful death
- Merger and acquisition (M&A)
- Unfair competition
A total of 45% of the professionals from business and industry surveyed indicated that their companies either had experienced no cases or were involved only in business interruption claims, real estate devaluation, loan losses, cash fraud and regulatory reporting.

Among those who worked with an outside expert on the calculation of economic damages, the largest group said they chose the expert based on a referral from an external auditor (50%). Another 25% relied on a referral from an external counsel, 17% used a referral from an internal counsel and 8% used a referral from private equity holders.

**How the Expert Who Testified on the Calculation of Economic Damages Was Selected**
FVS survey participants expect increases in demand for services in breach of contracts (23%), business torts (17%), intellectual property (15%), employment (13%), M&A (12%), unfair competition (7%), personal injury (6%), wrongful death (4%) and other areas (3%).

**Increase In Types Of Cases Expected in the Next 2 To 5 Years**
Family Law
A total of 48% of respondents had handled more divorce cases in the past year. Those who saw an increase experienced about a 20% uptick. The economy was cited as a strong factor in the increase in cases.

CASE STUDY
Family law continues to be an active and important area in forensic accounting. In fact, many attorneys won’t proceed with a financially complicated divorce without a forensic accountant on their team. This provides them with information they would not have gotten on their own as well as some protection from malpractice.

A forensic accounting firm was retained as the joint/neutral appraiser to value a company that specialized in building playgrounds for schools. The husband 100% owner also had a 1% interest in a related company that purchased playground equipment. As an aside, the other 99% owner of the related company was his girlfriend of many years.

While performing the forensic analysis of expenditures through the company(s), the analyst saw excessive equipment purchases being made through the construction company. About $700,000 was written off as expenditures with no purchase receipts or paid bills to support it. Additionally, real estate taxes on properties that were not known marital assets were also being paid and deducted through the business. The forensic analyst requested a property search for both the business owner and his girlfriend.

At that point, the business owner came clean and admitted that the money taken out of the company was used to purchase investment real estate properties, all of which were bought in the girlfriend’s name. The forensic accountant then traced money through real estate records and closing statements. The real estate purchase had been going on for about five years, with some of the original properties already sold and the profits rolled over into new properties.

What initially appeared to be a straightforward valuation of a closely held family business turned into a forensic tracing assignment. The lesson learned here is that there is typically no easy or straightforward assignment in family law work. Each case is different and always interesting.
While 62% saw no change in the level of alternate dispute resolution, 36% saw an increase, with a mean increase of 20%. Areas of greater activity included mediation (42%), collaboration (31%), arbitration (15%) and binding arbitration (12%).

**Areas With An Increase In Alternative Dispute Resolution (ADR)**

- Mediation: 42%
- Collaborative: 31%
- Arbitration: 15%
- Binding Arbitration: 12%
Similarly, 58% saw no change in the use of mutually agreed-upon experts, while 39% saw an increase and only 3% reported a decline. A total of 81% saw no change in the use of court-appointed experts, while 17% saw an increase and 2% saw a decline.
At 90%, valuation was the analysis most often performed in a divorce engagement. Equitable distribution was second (70%), followed by marital vs. non-marital (69%), standard of living (54%), separate vs. community property (46%) and other analyses (17%).

Types of Analysis Performed by Firms
Valuation
Overall, 42% of respondents saw an increased demand for valuation services in the last year. Among the increases were:

- 67% who saw a rise in services related to shareholder/partner disputes
- 52% in contractual disputes
- 51% in matrimonial/family law
- 47% in gift and estate issues
- 29% in bankruptcy, insolvency and reorganization

The areas that respondents expected to grow in the next two to five years were:

- Shareholder/partner disputes (28%)
- Family law/matrimonial dissolution (25%)
- Contractual disputes (22%)
- Bankruptcy, insolvency and reorganization (18%)

**Types Of Cases Expected to Have An Increase During the Next 2 to 5 Years**

- Shareholder/Partner Disputes: 29%
- Family Law/Matrimonial Dissolution: 25%
- Contractual Disputes: 23%
- Bankruptcy, Insolvency, and Reorganization: 19%
- Other: 4%
As demonstrated above, the greatest increase is anticipated in shareholder/partner disputes. Shareholder disputes can be dissenting shareholder actions or oppressed shareholder cases. Wrongful termination claims may also be a factor in the dispute. These cases are governed by state law and typically require a valuation analysis to assist the trier of fact in determining the value of the dissenting or oppressed shareholder’s interest in company. State law will define the standard of value as well as the applicability of certain discounts.

**CASE STUDY**

In a recent dispute between two shareholders, there were a series of issues, claims and counterclaims that required the application of valuation principles and methodologies. The case involved the termination of a 50% shareholder and another key employee. The terminated shareholder filed several shareholder actions including one to dissolve the company and formed a competing business with the former key employee. The other 50% shareholder filed several counterclaims and an election to purchase the terminated shareholder’s interest instead of dissolution. The key employee, who was bound by a non-compete agreement, was sued for breach of the non-compete and filed a counterclaim for breach of agreement and unpaid wages. The valuator was tasked with determining the value of the non-compete as well as valuing the business at the date that the shareholder dissolution action was filed.

The key employee was fired three months before the action to dissolve the business. As a result, three valuation analyses were required as of two different dates. One valuation was prepared to address the value of the business on the date of filing, another analysis to determine the valuation of the business at the date of the key employee’s termination with the employee in place and a third valuation analysis at the termination date without the key employee in place. The second and third analyses were prepared to determine the value of the non-compete.

The standard of value required by applicable state law in the dissolution action was Fair Value and was determined using all three of the accepted valuation approaches. The judge concluded that the value of the terminated shareholder’s 50% of the company was $525,000 at the date the dissolution action was filed.

For the purposes of valuing the non-compete, the valuator utilized a discounted cash flow methodology to analyze the impact of the loss of revenue attributed to the key employee. Sales records and internal company records regarding referrals were utilized to isolate the income generated by the employee. Other company records regarding variable costs and compensation were also utilized in the projections. The court determined that the value of the non-compete was $150,000 based on the difference in the value of the company at the termination date with and without the key employee.
Financial Statement Misrepresentation
Respondents from business and industry indicated that the overwhelming majority (67%) of financial statement misrepresentations involved overstatements of accounts receivable, inventory, securities or other assets. Detection of the misrepresentations included methods such as physical inventory, a third-party tax advisor, and a new CFO performing a balance sheet review.

The largest number (36%) of respondents from the FVS community thought revenue recognition would be the most prevalent issue in this area in the next two to five years, followed closely by valuation of assets carried at fair value (32%). Another 19% cited treatment of off-balance-sheet assets and liabilities, and 5% pointed to reserves for assets carried at cost or modified cost.

Most Prevalent Issues Over Next 2 to 5 Years
Over the next two to five years, 78% believed that allegations of inadequate internal control over financial reporting would be a prevalent issue in conjunction with other issues.

When participants from business and industry were asked what internal controls their organizations used to ensure that any internally performed impairment testing and mark-to-market of assets/liabilities were conducted in accordance with all professional standards and requirements, most used one or more people who were not involved in the preparation of the analyses, who review the impairment analyses and/or mark-to-market calculations. Another 23% said the internally prepared impairment testing and mark-to-market were reviewed and approved by a designated senior management member. A total of 13% used a checklist that incorporates valuation criteria and employed GAAP/IFRS requirements in the review process. Eight percent said that review steps require review sign-off for each step and that the date on which the review was performed must be noted. An equal number said that issues requiring follow-up were flagged for sign-off by a reviewer. Only 4% reported having a checklist requiring follow-up and a sign-off and date when it was done. The senior management member who signs off on the ultimate conclusion was most often the CFO (77%), with the controller a distant second (13%), followed by treasurer (6%) and director of corporate finance (4%).

Respondents from the FVS community anticipate that the most allegations of financial misrepresentation would be spread across various business sectors, including:

- Investing entities (hedge funds, etc.): 25%
- Lending institutions: 19%
- Services (health care, etc.): 16%
- Governmental entities: 12%
- Real estate: 10%
- High tech: 7%
- Other: 6%
- Manufacturing: 3%
- Insurance: 2%
Business Sectors Expected to Have the Most Allegations of Financial Misrepresentation in the Next 2 to 5 Years

- Lending Institutions: 19%
- Investing Entities: 25%
- High Tech: 16%
- Services: 7%
- Real Estate: 10%
- Manufacturing: 3%
- Governmental Entities: 12%
- Other: 6%
- Insurance: 2%
Knowledge of forensic procedures (48%) was the training area that respondents believed would be the most useful background for these services. Others included knowledge about computer-driven internal control (16%), valuation (13%), accounting standards (8%), auditing standards (4%), internal control in general (5%) and other types (6%).

**Most Useful Training Related to Financial Statement Misrepresentation Over the Next 2 to 5 Years**

![Training Areas Pie Chart]

**Fraud Prevention, Detection and Response**

The financial fraud expected to increase the most in the next two to five years was fraud committed wholly by company personnel (38%). Another 34% of respondents from the FVS community thought the most likely jump would be in fraud committed by company personnel with the involvement of third parties. Some 18% expected no change in fraud, while 10% saw an increase in fraud committed entirely by third parties (such as a Madoff-type fraud against investment funds). Increases in embezzlement would also most likely involve company personnel on their own, according to 51% of respondents, while another 32% believed it would involve company personnel working with third parties and 17% expected no change. Increases in corrupt practices, on the other hand, would most likely involve company personnel working with third parties, according to 53%, with another 27% expecting an increase involving company personnel working alone and 20% involving third parties working alone.
In the next two to five years, most respondents expected companies’ allocation of efforts to prevent or detect fraud to spur an increase in the use of outside consultants versus in-house personnel (54%).

A total of 58% expected significant improvements in companies’ overall ability to prevent fraud. In evaluating specific fraud prevention methods, 78% thought computer-based controls would provide improvements, while 65% thought the screening of new employees would be a factor. Fifty-nine percent thought internal whistleblower hotlines would lead to improvements, while 55% looked to physical controls. Forty-five percent expected improvements due to external whistleblower hotlines and 44% selected screening of current employees.

These percentages shifted slightly when they were asked what areas would help in the detection of fraud as compared to the prevention of fraud. Fifty-six percent thought improvements overall were possible in the next two to five years. A total of 81% thought computer-based controls would bring significant improvements in fraud detection. Other effective methods cited were internal hotlines, screening of new employees, physical controls, external hotlines and screening of current employees.

To prevent fraud, approaches cited by respondents from business and industry included general internal controls (16%), division of responsibilities (15%), screening of new employees (15%), appropriate oversight (14%), physical controls (12%) and computer-based controls (12%). Other techniques used were the internal audit function (7%), screening current employees (5%), anti-fraud education program (3%) and others (1%).

Most frequently used techniques referred to by respondents to detect fraud included general internal controls (24%), appropriate oversight (22%), physical controls (17%) and computer-based controls (16%). Other approaches included the internal audit function (11%), whistleblower hotline (9%) and others (1%).

Among the frauds that occurred based on the business and industry responses, 25% reported false payment requests, 21% reported check or credit card fraud and 19% reported employee theft. A total of 15% reported misuse of assets, 7% false billing schemes, 6% payroll fraud, 4% skimming of cash and 3% other types.

Fraud detection methods in these cases included internal tip-offs (22%), external tip-offs (21%), accidental discovery (17%), internal controls (16%), internal audit (14%), whistleblowing (6%), law enforcement investigation (2%) and others (2%).

A total of 29% of the financial frauds occurred in operations, including the customer service department, shop floor and warehouse. Accounts payable and sales came in second (18% each). They were followed by third party (8%), marketing (8%), payroll (6%) and others.
Conclusion and Limitations

The main objective of this research was to obtain information from professionals in the forensic and valuation services community and business and industry about the trends affecting their practice areas and to examine the current state of the litigation and regulatory environment in the wake of the recent economic crisis and associated changes in the economy. The overriding conclusion that can be drawn from the study is that there is strong demand for forensic and valuation services across the board. An overwhelming majority expected continued robust demand during the coming two to five years, coincident with an increase in litigation and regulatory enforcement. In fact, a full quarter said they had hired more professionals. The majority of business and industry professionals studied in a companion survey said they used outside valuation experts, underscoring the demand for services.

For firms, the findings indicate that the recruitment, retention and continuing education of their professionals would be an ongoing priority, given the need to manage and execute an expanding workload. Indeed, many respondents planned to hire more professionals in next two to five years in a variety of areas. Succession will also likely be a key concern for many forensic and valuation practices, as leaders who have built practices pass the reins to younger professionals who will need a combination of technical, practice development and leadership abilities. At the same time, firms may also adapt to a trend in which law firms or the ultimate client brings forensic accounting expertise in-house.

Practitioners may also be challenged to keep up with advances in technology that can significantly alter and improve the way they conduct research or approach other areas of their practice. In terms of computer forensic services, more than half the respondents said they would be adding staff with computer forensic investigative skills, indicating recruitment and retention could be a particular challenge in this area.
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