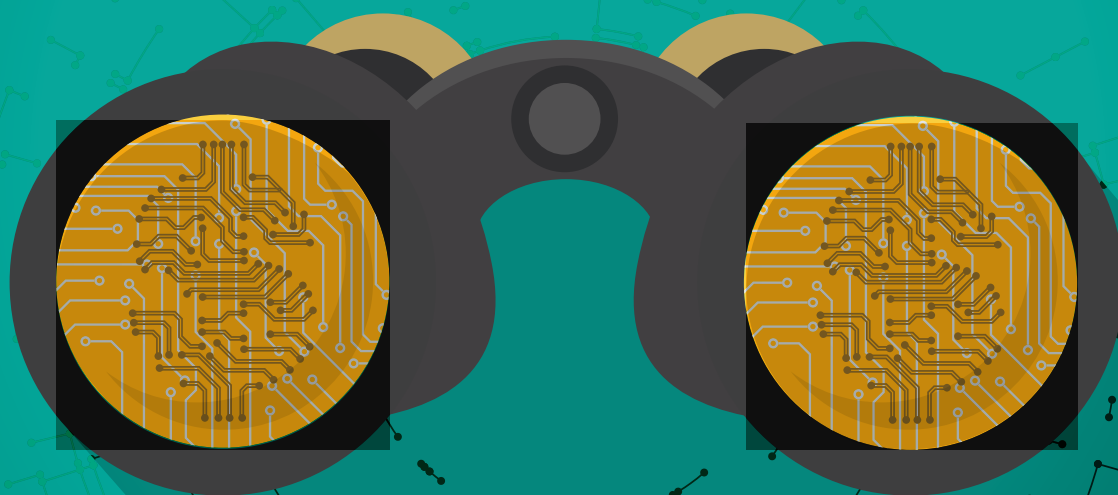


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WHO BENEFITS?**

**FASTOW'S SHOT
AT REDEMPTION**



TECH COMPANIES TO WATCH 2019

**20 vendors promising to raise
your organization's IQ**

BO CHENG

—
President, Altovista Technology Inc.



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31 **Cover Story**

Tech Companies to Watch 2019

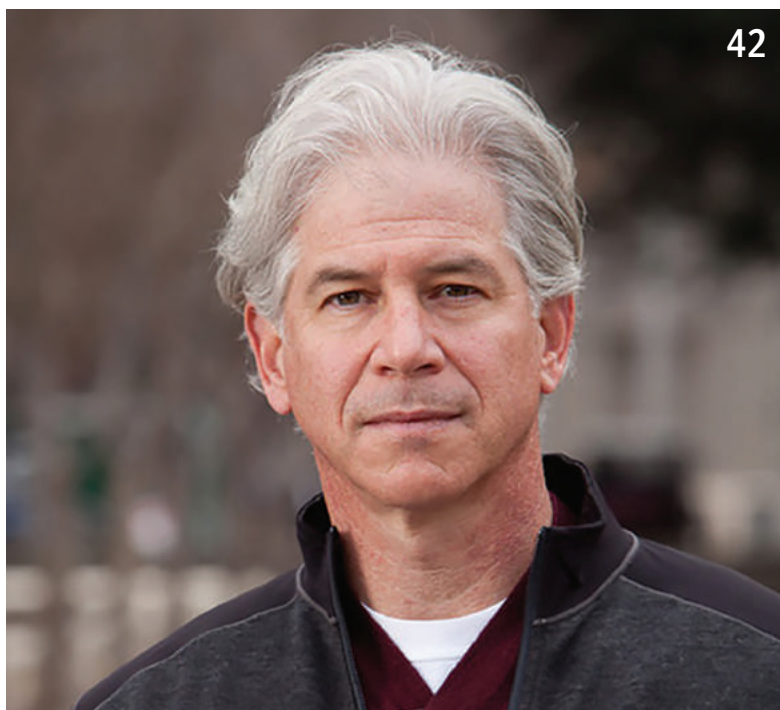
Intelligence-Boosting Tools

These 20 vendors are helping businesses unearth the actionable information hidden in their mountains of data.

By Karen Bannan, Yasmin Ghahremani, Keith Button, and the editors of CFO

- FortressIQ
- Behavox
- Completed.com
- YayPay
- Yapta
- AuditBoard
- Sisense
- App Annie
- Aviso
- Anaplan
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First Person

Andy Fastow and Me

The former Enron CFO and convicted felon talks with the *CFO* writer who first chronicled his “groundbreaking” manipulation of accounting rules.

By Russ Banham

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Greater Expectations

Last year, we conducted a major IT survey of finance chiefs and asked them what they wanted out of their technology

investments in 2018. The top three answers were “process efficiency,” “cost reduction,” and “reporting accuracy.”

Those are all crucial goals. But in 2019, I think CFOs (and their C-suite colleagues) have begun to and should expect more.

That’s why in this year’s edition of Tech Companies to Watch we focused on “Intelligence-Boosting Tools” (see page 31). What do we mean by that? In short, software that helps organizations solve problems, avoid information overload, and, most importantly, convert information into knowledge.

This new generation of tools aims to not replace human intelligence but enhance it. As an executive at Aviso, a sales forecasting tool we profiled, told us, “Human beings just don’t have the time or bandwidth to process all this data, but the answers to the business lie within the data.” I couldn’t agree more.

CFO Live

The notion of “expecting more” also extends to *CFO* and its products. This fall (November 13-14), we’re holding a new genre of event in New York. Called “CFO Live,” it’s a two-day, multi-

stage conference unlike any we’ve ever produced.

CFO Live will feature three tracks of hot topics such as cracking the glass ceiling, acquiring the social leadership skills to pioneer change, building a finance team, and preparing for the economy of 2020. There are also two-hour in-depth workshops on The Future of Finance. They will dig deep into trends in controllership, treasury, FP&A, and risk management.

In addition, a FinTech Launchpad will showcase vendors and products you need to know about. And we’ll have thought leaders debating some of the most controversial issues preoccupying corporate America. Find out more by clicking on “Events” in the top navigation bar of CFO.com.

By the way, we launched a redesign of CFO.com in March. I think you’ll find it cleaner, easier to navigate, and infinitely better at delivering the specific stories and content you want and need. If it doesn’t, be sure to let me know.

Vincent Ryan
Editor-in-Chief

EDITOR’S PICKS

► STARTUPS

Much has changed about the economics of early-stage companies. “How to Make Startup Stock Options a Better Deal for Employees” describes how firms need to move the vesting “goal posts” for early employees, because “the company may not go public until eight years after options vest.” See the Harvard Business Review website for more.

► LEADERSHIP

Everyone loves success stories and “[we] eagerly consume advice on how to be better and achieve more,” writes the president emeritus of Tufts University. However, “wouldn’t it be even more instructive to examine failure?” Read “The Value of Failure: How We Can Make the Most of Losing” on the Knowledge@Wharton website.

► STRATEGY

A CFO can develop a strategic mind-set by asking seven basic questions, according to Deloitte. Among them: “What is [the organization’s] greatest area of spend where there is a lot of uncertainty about return?” and “What would you like your company to stop doing?” See the finance section of Deloitte’s website for the full list.

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In **"The Simple Secret Behind Why Acquisitions Fail,"** investment manager Vitaliy Katsenelson said buyers too often simply pay too much. "Price is what you pay; value is what you get," he reminded us.

He wrote, "when a company is acquired, the purchase price is negotiated during long dinners at fine restaurants and usually goes higher than the latest stock quotation."

The article drew out some cynics. One, in fact, accused Katsenelson himself of sounding like **"a disgruntled after-the-fact compliance accountant justifying his cynicism."**

Responding to the author's contention that deals work only if "the sum of synergies turns the purchase price into a bargain," another reader offered, "I suspect the only synergy involved is the increase in executive pay for running a larger company and the fees that the 'consulting firms' earn."

A news brief that reported Rep. Maxine Waters **calling the recent pay raise for Wells Fargo's CEO "outrageous"** provoked even more extreme reactions.

Cutting to the chase, one audience member thundered, "Is this a freaking joke coming from Waters, who

lives in a \$4 million house?" Another took the congresswoman's barb personally: "At least the CEO earned it. Maxine has been sucking from my tax dollars for over 40 years and has yet to do anything useful."

A third comment noted that executive compensation is for a company's board of directors to decide, lecturing that "Rep. Waters has no right to determine one's pay."

But another reader, perhaps hailing from a different address on the political spectrum than the others, scoffed that "this is how the banker industry works, like it or not."

"Is Tax Reform Spurring Companies to Use Robots?" detailed a provision of the Tax Cuts and Jobs Act that allows companies to deduct 100% of the cost of equipment—including robots—in the year of its purchase, rather than depreciate the cost over several years.

Attorney Marvin Kirsner noted that the practice is controversial because of its potential to displace workers. That didn't bother one audience member, who said he'd "love to see" companies buy automation to help re-establish the U.S. industrial base.

"If it's robots over stock buybacks and dividends, fine," he commented. **"The least of our worries concerning the U.S. tax code changes is more capex leading to more automation."**

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is a wholly owned subsidiary of Argyle Executive Forum LLC, 50 Broad St., 1st Floor, New York, NY 10004 argyleforum.com

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STATS OF THE MONTH



ACTIVIST ACTIVITY

266

Number of U.S. companies targeted by activist investors in 2018, a record

161

Board seats won by activists, up 56% from 2017

40%

Percentage of activist campaigns launched by “first timers”

\$65 billion

Total capital deployed by activist investors

22

Number of campaigns launched by Elliott Management, the most of any fund

Source: Lazard's 2018 Review of Shareholder Activism

TOPLINE

M&A

Do Divestitures Trigger Share-Price Malaise?

A majority of divestitures are followed by lagging stock performance for the divesting firm, a study reveals. **By David McCann**

- Companies undertake divestitures only after deliberate strategic consideration and meticulous planning—or do they?

A new study documents that more than half of divestitures—sales or spinoffs of subsidiaries or business units—are associated with below-market share-price performance for the seller.

Willis Towers Watson (WTW) and City University of London's Cass Business School looked at more than 5,500 divestiture deals worth more than \$50 million (combined debt and equity) by publicly traded companies worldwide from 2010 through 2018.

The research tracked changes in divesting companies' share prices from six months prior to deal announcements to the end of the half-year following the announcements.

The counterintuitive result: for 54% of such deals, the change in share price trailed the MSCI World Index performance over the period studied. The underperformance averaged 2.1% for those deals, translating to aggregate unrealized market value of \$1.9 trillion.

Apparently, the investor relations outreach communicating the strategies underlying divestitures is often unconvincing. “Investors punish companies whose strategies and execution they disapprove of,” notes Duncan Smithson, senior director of mergers and acquisitions for WTW.

On the bright side, the other 46% of sellers saw their market value exceed the global index level by an aggregate \$2 trillion.



In other words, there's more to gain from a successful divestiture than there is to lose from an unsuccessful one.

Why, though, do a majority of divestiture deals fail to inspire investors?

For starters, divesting companies may be overmatched when negotiating deal terms with private equity firms, which acquire many divested entities, Smithson suggests.

“PE firms are professional deal-makers with a track record of aggressive negotiating,” he says. “The average corporate seller may not have people whose full-time job is doing transactions. There might be a couple of them in corporate development, but when finance, HR, and legal teams are up against PE buyers, they're typically double-hatting.”

Also, he continues, management may

underestimate the amount of work required.

Ideally, the company would “take a fairly deliberate and methodical approach to setting up a project management office or some other governance infrastructure to strategically guide the deal,” Smithson advises. At least some of the people on that team should be authorized to “put their day job on hold for a while,” he adds.

Such care should minimize disruption within the organization, he says. A classic example of disruptiveness arises when a sales team is selling products from both division A and division B, and it’s announced that division B will be sold.

“If there is not proactive

management of that sales force and communication of what the deal means in practice, inevitably there will be disruption,” Smithson explains. “They’ll see a client who’s interested in product B and wonder whether to steer the client to a division A product, or postpone or cancel [the discussion].”

Executives often underestimate the impact such uncertainty can have on the organization, he adds. They’ve been involved in strategic discussions about the future of the business unit for months, probably. As such, they’re way ahead of mid-level managers, sales staff, and rank-and-file employees on the “acceptance curve,” as Smithson puts it.

Another factor is that companies typically consider both a sale and

a spinoff upon deciding to divest a business or entity, and sometimes they change their minds midstream. However, Smithson notes, switching from a sale to a spinoff may be a particular recipe for disaster.

Spinoffs require much more work, because of the need to “stand up” an entirely new company and because there’s no buyer to share the work with.

“You can pivot from a spinoff to a sale fairly easily, even though there will be some sunk cost from all the work [expended],” Smithson says. “But you generally can’t prepare for a sale and then pivot to a spinoff—companies usually don’t then free up the resources to do an effective job of that.” **CEO**

HUMAN CAPITAL

PwC Hires More Tax Teams

In the latest such deal, most of Synchrony's tax department is now on PwC's payroll.

● At the beginning of 2017 PricewaterhouseCoopers made an unusual move: hiring General Electric’s huge tax team. PwC got not only a lot of tax expertise but also GE’s advanced tax-focused technology. GE, for its part, lowered its costs while retaining access to its legacy team of tax professionals.

After absorbing 600 additions to its workforce, the professional services firm set a goal to execute an additional five to seven such transactions in 2018. And it did that, PwC says, although it declines to identify the companies—except the latest one.

In January, 19 members of the tax team at Synchrony, a publicly held financial services firm that was a unit of GE Capital until a 2014 split-off, were transferred to PwC’s payroll. Only three members of the team remained with Synchrony, to perform such functions as signing off on the annual tax provision and weighing in on significant tax controversies.

As with the other deals, the new employees are not assimilated into PwC’s general tax practice; instead, they join PwC’s Insourced Solutions Tax (IST) unit.

PwC’s strategy in absorbing corporate tax departments involves not only using the new staffers to service their former employer but leveraging their expertise for other IST clients as well.

The backdrop for IST’s growth is a changing tax environment. “The tax world didn’t get any less complex in the U.S. with the passage of tax reform,” says Doug Thomas, leader of the IST. “And only adding to that complexity is the demand for increased transparency from worldwide taxing authorities.”

Thomas notes that at many companies, the most seasoned professionals, best deployed to high-level thinking, have no choice but to spend some of their time doing work that’s less suited to their experience.

“We hire thousands of kids out of school every year,” he says.

“That allows our more experienced team members to focus on what they’re good at. We leverage those less-experienced people for things that are appropriate for their skill level.”

Some of that freed-up time can also be redeployed to other clients. “We’ve done a lot of financial modeling around this business model,” Thomas says. **J.D.M.**



CYBERSECURITY

Cyber Breaches Lower Dividends

- Not many institutional investors question an issuer's approach to cybersecurity, but maybe they should.

After a cyber breach, companies are likely to suffer a short-term hit to their share prices, according to a new study by two professors at Warwick Business School. But in the long run, they typically lower their dividends and invest less in research and development, amounting to a "loss of their competitive edge."

Companies that have been victims of a cyberattack tend to reduce the resources dedicated to R&D, dividend payments, or "investments generally" in the subsequent five years, the paper found, as they seek to manage the financial risks caused by data breaches. This occurs even though

operating performance generally recovers. The effect on share prices on average lasts only three days.

"In the long run, security breaches appear to have a more significant impact on firms' strategies and policies than their cash flow," said Daniele Bianchi, assistant professor of finance at Warwick.

The study also found that CEOs weather the storm of a publicly disclosed cyberattack well: their total compensation is likely to increase in the years after a breach.

"Firms that suffer a data breach do not typically respond by firing the management, but by investing more in the existing CEO," said Bianchi.

This is consistent with the idea that "the average response is to invest more in the management to address possible structural flaws, as well as [to maintain] the integrity of the firm in response to the reputational damage it has suffered."

Bianchi and co-author Onur Tosun analyzed data breaches at 41 publicly listed companies in the United States between 2004 and 2016. They focused solely on breaches reported by the media, including incidents of stolen hardware, insider attacks, poor security, and hacking. The average cost per breach was \$35.4 million. | VINCENT RYAN



LEGAL

A Fox Minds the Henhouse

- What does a company do when the person in charge of managing compliance with insider trading rules gets caught for insider trading? Ask Apple.

The Securities and Exchange Commission in February charged the tech giant's former global head of corporate law, Gene Daniel Levoff, with trading Apple securities ahead of three quarterly earnings announcements in 2015 and 2016.

In July 2015, Levoff received material nonpublic financial data that showed Apple would miss analysts' third-quarter estimates for iPhone sales. Between July 17 and the public release of Apple's

quarterly earnings on July 21, the SEC complaint says, Levoff sold about \$10 million of stock—virtually all of his Apple holdings—from personal brokerage accounts.

Apple's share price dropped more than 4% when it disclosed the quarterly financial data. By trading on the material nonpublic information, Levoff avoided about \$345,000 in losses.

The SEC revealed that Levoff had "a previous history of insider trading," having traded on Apple's material nonpublic information as far back as 2011. That trading activity netted Levoff \$245,000 in profits.

"Levoff's alleged exploitation of his access to Apple's financial information was particularly egregious given his responsibility for imple-

menting the company's insider trading compliance policy," said Antonia Chion of the SEC.

Levoff reported to Apple's general counsel. He regularly notified employees of the blackout periods around earnings announcements. He also managed the company's corporate subsidiary structure and

served as a director of several Apple subsidiaries.

The SEC's complaint, filed in federal district court in Newark, N.J., charges Levoff with fraud and is seeking the return of his trading profits plus interest and penalties.

In a parallel action, the U.S. attorney's office for the district of New Jersey announced criminal charges against Levoff. | V.R.





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COMPENSATION

Gender Pay Gap Narrows for Mgmt. Accountants

● Within the ranks of U.S. management accountants, median total pay for women in 2018 was 88% of what men earned, according to the latest annual compensation survey by the Institute of Management Accountants.

That was up from 85% in 2017, according to IMA, which polled 1,633 of its U.S. members.

There appears to be reason for hope that the gender pay gap among this group of finance professionals will narrow further. That's because the younger management accountants are today, the smaller the gap. (See chart below.)

Looking at the data from the standpoint of management level was more sobering. Among "top" management accountants, women's median pay was only 74% that of men's. The figure was 84% for "senior" managers and 90% for "middle" managers. (At the lowest management level, there was no gender pay gap.)

However, the raw totals don't tell the whole story. For example, more U.S. women than men earned overtime pay. "Most likely, women in lower management are putting in more overtime to make up for a difference in base salary," the IMA wrote in its survey report.

Also, in middle management, the gap in median total compensation (90%) was wider than the gap in median base pay (93%). "This means that male respondents at this management level earn significantly more in additional compensation," wrote the IMA. "This is likely due to the difference in the percentage of men and women in middle management receiving bonuses: 73% of the men reported a bonus compared with 30% of women." | D.M.

Ah, Youth

The younger U.S. management accountants are, the smaller the pay gap between men and women.

Women's pay as a % of men's

Age Range	Base Salary	Total Comp
20-29	96%	97%
30-39	88%	90%
40-49	80%	81%
50+	80%	80%
All ages	88%	85%

Source: Institute of Management Accountants



TAX

IRS Finalizes Tax Breaks

● The Internal Revenue Service has proposed final regulations governing a new tax break aimed at encouraging U.S. multinationals to locate more of their assets and operations used in serving overseas markets back to the United States.

The FDII (Foreign-Derived Intangible Income) deduction is part of the Trump administration's tax reform package. The final regulations, published in the Federal Register in early March, provide guidance on how to determine the amount of the deduction.

The tax break could influence companies to contemplate serving foreign markets domestically, because it eliminates the incentive to locate intangible assets in low-tax foreign subsidiaries.

Under FDII, companies that produce goods and services in the U.S. and sell abroad can claim a 37.5% deduction, resulting in a 13.125% effective tax rate, as compared with a 21% corporate rate, for tax years beginning after Dec. 31, 2017 and before Jan. 1, 2026. After that the deduction is scheduled to be reduced to 21.875%, for an effective tax rate of 16.406%.

The companion provision in the tax law, known as Global Intangible Low-Taxed Income (GILTI), penalizes U.S. corporations that earn income through offshore entities that avoided U.S. taxes in the past.

Boeing, Archer Daniels Midland, and Intel are companies that have already listed FDII-related benefits in their financial statements.

The credit, however, could be challenged at the World Trade Organization as an impermissible export subsidy. | MATTHEW HELLER

‘Test the Waters’ Before IPOs?

● The Securities and Exchange Commission
● has proposed expanding a rule to allow companies to privately gauge the interest of prospective investors before going public.

The move is part of a broad push by SEC chairman Jay Clayton to make it easier for companies to go public amid a 50% decline in U.S. listings over the past two decades.

“Extending the test-the-waters reform to a broader range of issuers is designed to enhance their ability to conduct successful public securities offerings and lower their cost of capital, and ultimately to provide investors with more opportunities to invest in public companies,” Clayton said in a statement.

Current rules restrict such test offerings to smaller companies. Under the SEC’s definition, such “emerging growth companies” are defined as issuers with total annual gross revenue of less than \$1 billion during their most

recently completed fiscal year. New rules would apply both to institutional and accredited investors.

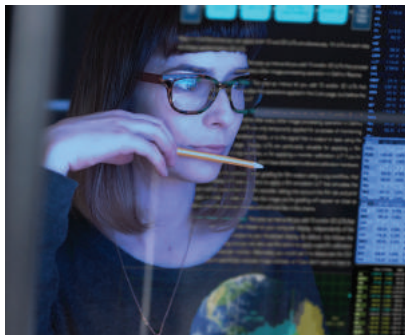
“I have seen first-hand how the modernization reforms of the [Jumpstart Our Business Startups] Act have helped companies and investors,” Clayton said. “The proposed rules would allow companies to more effectively consult with investors and better identify information that is important to them in advance of a public offering.”

Dina Ellis Rochkind, an attorney with law firm Paul Hastings, said the rule “will benefit issuers as it provides a realistic window

into the level of investor interest in an IPO as well as more accurately priced IPOs. Currently, the process is somewhat opaque. Expanding these provisions to all potential issuers is another step in the right direction.”

The proposal is subject to consultation and a final vote by the SEC commissioners.

Last August, Clayton, who is a Trump appointee, said he wanted to facilitate investment by individuals in companies that have not yet gone public. | **WILLIAM SPROUSE**



AUDITING

Internal Audit Can Do Better

● Most chief audit executives
● (CAEs) see significant gaps between existing performance levels and those they wish to attain, according to an Institute of Internal Auditors survey of 512 audit managers and directors, including 447 CAEs.

With respect to the top area of concern for CAEs, cybersecurity, 53% of survey participants said their organizations are putting forth “extremely significant” or “significant” effort to “communicate to executive management and the board the level of risk to the organization and efforts to address such risks.”

But while they don’t expect anything to be perfect, on average the respondents indicated they’d be happy if that figure reached 80%.

Similar gaps in current-vs.-desired effort levels relating to cybersecurity were found for:

- Providing assurance over readiness and response to cyber threats (46% currently vs. 82% desired)
- Working collaboratively with IT and others to build effective defenses and responses (41% vs. 64%)
- Ensuring communication and coordination with the organization regarding cyber risk (37% vs. 58%)

Asked about obstacles to addressing cybersecurity risk, about half (51%) of participants said a lack of cybersecurity expertise among internal audit staff had a significant or extremely significant effect.

Meanwhile, the survey exposed some other areas of lax attention to risks. For one, almost half

(48%) of those surveyed said their organizations are making weak or non-existent efforts to monitor third-party service providers.

Also, only 30% of the participants said they use advanced data analytics to identify and assess emerging and atypical risks. And 57% of them said they rarely or never discuss with the board or management the accuracy, completeness, timeliness, truthfulness, or transparency of information from internal audit. | **D.M.**



BANKING

Banks Warned About Crypto-Assets

- In March, the Basel Committee on Banking Supervision (BCBS) provided some clarity about the dangers of cryptocurrencies. It also gave some details of the steps banks need to take to manage any exposures to them.

The BCBS, a committee of international supervisory authorities, cautioned institutions about acquiring exposures to crypto-assets or providing services related to them.

Its official statement said, “The continued growth of crypto-asset trading platforms and new financial products related to crypto-assets” could raise concerns about financial system stability.

Given crypto-assets’ high degree of price volatility and lack of standardization, the BCBS said, banks

holding such assets need to adjust their governance and risk management practices as well as publicly disclose any direct or indirect exposures.

Fortunately, banks have limited direct exposures to crypto-assets. But if a bank does decide to dip its toe in, it needs to conduct a comprehensive analysis of the risks and ensure it has the technical expertise to adequately gauge them, the BCBS said.



Boards of directors and senior management teams should get timely updates related to a bank’s crypto-asset risk profile, and the exposures should figure into any evaluation of a bank’s capital and liquidity levels, the BCBS added.

Finally, the BCBS specified that a bank “should publicly disclose any material crypto-asset exposures or related services as part of its regular financial disclosures.” It would also need to specify the accounting treatment for such exposures.

The committee said it would continue to monitor banks’ direct and indirect exposures to such assets and at some point “clarify the prudential treatment of such exposures to appropriately reflect the high degree of risk.” | **V.R.**

ARTIFICIAL INTELLIGENCE

5 Reasons to Be Wary of AI

- Many companies expect in the near future to derive substantial benefits from artificial intelligence-powered technologies. However, there are obstacles to overcome.

In a survey of 300 C-level executives and their reports by consulting firm Protiviti, 16% of them said their companies were getting “very high” or “high” value from AI investments. More than three times that many (52%) said they anticipated doing so in two years.

Protiviti identified five barriers to AI adoption.

First, although improved cyber security is a major advantage of AI, the technology also poses new cyber-security risks arising from the greater

access to sensitive and personal data.

“You need to know the algorithms are using personal data in both a legal and ethical way, and that they’re thoroughly protecting that data,” says Protiviti managing director Tryone Canaday.

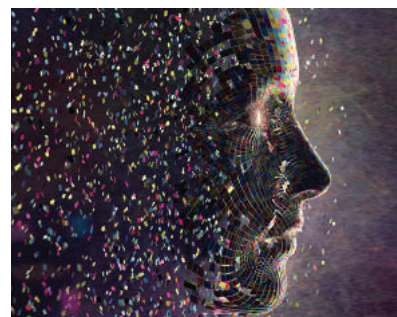
Second, auditing advanced AI applications is problematic. “How do you automate things like deep learning, where computers are essentially writing their own algorithms?” says Canaday. “Can a regulator have confidence even when people don’t understand how AI is coming up with its answers?”

Third, only half of companies apply as much rigor to AI business cases as to other investments. About one in three bases AI investments solely on proof of concept; one in five requires neither ROI nor proof of concept.

Fourth, compelling proofs of concepts and pilots are essential, as

senior executives remain skeptical about advanced AI. Only 8% of surveyed CEOs, 14% of COOs, and 21% of CFOs saw AI as considerably or very important to their business’s future.

Fifth, universities aren’t producing enough advanced AI specialists, thereby spawning a talent war and pushing up salaries. Canaday says the ultimate challenge is finding people that understand the business, the technology, and the data. “You need people who can connect those circles,” he says. | **D.M.**



FINANCIAL REPORTING

Pay Ratio Rule: 'Disclosure by Soundbite'

- Opponents of the CEO pay ratio rule have
- a new ally: a comprehensive academic analysis that constructs a strong case for the rule's worthlessness.

The paper is aptly titled "Securities Disclosure as Soundbite." Unlike every other SEC-required disclosure, the CEO pay ratio, which was implemented for 2018 fiscal years, may be reported absent any context. All that's required is the ratio between compensation for the company's CEO and that of its median-paid employee, such as "300:1."

"It's very bizarre," says George Georgiev, an Emory University law professor and co-author of the paper.

Why? For one, the rigorous recent enforcement of rules governing companies' use of non-GAAP metrics "shows that the SEC cares about the integrity of information," Georgiev says.



Also, other required executive compensation disclosures include tables and a long-form discussion about what the numbers mean.

The paper says the pay ratio is "lacking in accuracy, difficult to interpret, and incomplete.... The use of such an imprecise and easy-to-manipulate metric in substantive tax legislation is, quite plainly, poor public policy."

In companies with founder CEOs, appreciation in the CEO's stock holdings isn't included in the pay ratio, nor are distributions to the partners in limited partnerships.

Then there's the broad methodological flexibility for arriving at the pay ratio. It allows companies "to choose the pay ratio that places them in the best light," the professors say. "Thus, two similarly situated companies can report quite different numbers."

The SEC says different companies' pay ratios should not be compared, and that the rule's intent is to provide information on how companies are run. But in reality, says Georgiev, "it's click bait—it's supposed to incite emotions [over income inequality]." | D.M.



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A Powerful Platform for Managing Benefit Claims



Attention to employee well-being is a key part of being a responsible employer – and crucial to competing for the best talent. Employee benefits providers can be important partners in making a company stand out in this area. Choosing one used to be only about coverage and cost, but today employees and employers expect much more: managers require better, timelier information about the use of benefits, and workers want a claims process that's as easy as purchasing an item online.

In group life and disability insurance, the above needs are doubly important. Getting an employee on the road to wellness and recovery is always the primary aim. However, workers can find the traditional disability claims process difficult to navigate. And unplanned leave can disrupt a business that depends on a certain level of productivity.

The Hartford's improved tech platform, bolstered by its 2017 acquisition of Aetna's U.S. Group Life and Disability business, is making the experience straightforward and more manageable. The platform, called The Hartford's Ability Advantage, is an integrated claims and absence management system. A single portal provides disability and

leave-of-absence administration for employers while offering claimants a simple, personalized way to manage claims.

With Ability Advantage, employers have access to employees' claim and leave information; benefits usage; and eligibility for different kinds of leave. Employers also have access to their company's online billing and payment functions; policy and plan documents; as well as reporting and return-to-work management functions. Through the platform, employers can even receive responses to claim requests in real-time.

"Our technology provides employees with the features and convenience that they've come to expect, at a time when they most need support."

–Mike Concannon, Executive Vice President, Group Benefits, The Hartford

In addition, employers can quickly check employee leave and return-to-work dates, and reporting capabilities enable them to detect trends in the entire workforce or within individual

departments. The data collected can provide insights into how absence affects productivity and culture. For example, a disproportionate utilization of leave-of-absence benefits by workers may indicate the need to address employee engagement.

One of the biggest challenges to effective and efficient leave management is tracking the seemingly constant changes to state and federal leave laws. To help ensure compliance, Ability Advantage features a rules-based system equipped with the latest legislative and employer-specific policy updates. The currency of the information gives employers confidence when confirming an employee's eligibility for leave.

On the employee side, Ability Advantage emphasizes ease of use. Workers can file claims and stay up-to-date on their benefits activity from a mobile device or desktop.

"Employees want an efficient and easy claims experience," says Mike Concannon, Executive Vice President, Group Benefits, The Hartford. "They want to be able to manage their claims activity at their convenience and connect with us in a way that best fits their needs."

For example, after a doctor visit, an employee may need to submit documentation to support their claim. The employee can quickly snap a photo of a document with their smartphone, access the portal, and upload the image to a dashboard. The capability not only saves the employee time, it may also result in faster claim processing.

Employees can also check their leave balances, set preferences for alerts and notifications, and request claim payment in different forms.

For assistance with claims while in the system, employees can either click-to-chat or schedule a call with a claims representative.

"Our technology provides the functionality and data that employers need to be able to understand and manage employee absences," notes Concannon. "It also provides employees with the features and convenience that they've come to expect, particularly at a time when they most need support."

A BETTER BENEFITS EXPERIENCE HAS A LOT TO DO WITH WHO'S BEHIND IT.

Leading the way in Group Disability, Leave Management and Life insurance means constantly investing in new ways to help you and your customers achieve better outcomes. It means making claim, leave and benefits management easy through our technology platform, The Hartford Ability Advantage. And it's the care from our team of highly-skilled clinicians that helps us deliver compassionate service for your customers when they need it most. **The Buck's Got Your Back.**

TheHartford.com/group



Sales Calls from Inside Prison Walls

Lead-generation firm Televerde puts purpose over profit by employing hundreds of incarcerated women to make sales calls. **By David McCann**

As a lead-generation company, Televerde's business is obviously very sales-oriented. CFO Jill Barnard says she works very closely with the sales organization to tailor the firm's approach on behalf of specific clients and to develop a broad menu of pricing options. ¶ Still, she doesn't any have in-person contact with most of the sales staff.

About 400 team members—more than half of Televerde's work force—are incarcerated women working in contact centers within minimum security prisons in Perryville, Ariz., and Rockville, Ind.

The women's direct supervisors, who are not incarcerated, work every day at the prisons as well.

Privately held Televerde, with annual revenue of \$40 million to \$50 million, serves business-to-business technology companies; high-profile clients include SAP and Marketo.

"This is the third sales organization I've been in, and it's pretty unique to not see a majority of your [team] day to day even though they're a big part of your life," says Barnard, who joined the company in October 2018.

Televerde has two missions. One is standard for any company: delivering shareholder value. But if anything, the company is more about purpose than profits. It was created in 1994 with the specific goal of giving disempowered women the opportunity to learn and to improve their lives.

Since then, more than 3,000 women who have worked for Televerde have been released from prison. Many

then continued to work for the company or its affiliate nonprofit organization, Arouet Foundation, which provides women such as themselves with programs focused on mentorship, coaching, family reunification, financial literacy, and career preparation.

At present, 57% of Televerde's corporate employees were formerly incarcerated.

For most of the company's history it shunned publicity. That's changed

since a new management team came in last year; it's set a goal to help enrich the lives of 10,000 more disempowered women over the next 10 years.

An Opportunity

Barnard was between jobs last year and preparing for a move into interim finance work when she took a backpacking trip in Asia with her daughter. A colleague of Barnard's on the board of the Arizona Business Leadership Association called her in Thailand with news that Televerde, where he had a contact, was doing a CFO search.

"I had some things in my pipeline and was totally approaching them from an interim standpoint," she recalls.

"Then I read about the business model and oh my gosh—I fell in love.

"Within our current leadership



Televerde contact center employees at work in a minimum security prison.

team,” she continues, “we’re all at a stage of our careers where the thought of being able to deliver shareholder value combined with our opportunity to help disempowered women brings an amazing, next-level purpose to our lives.”

Women at the prisons apply for employment with Televerde as positions become available. The company sifts through the applications and conducts an interview process focused on making sure women are committed to learning and working.

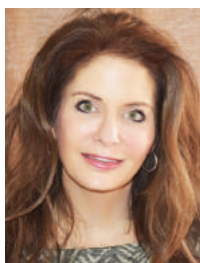
Those who are selected go sequentially through a training program; a side-by-side mentorship phase with experienced employees; auditions on the phone with Televerde employees posing as customers; being part of a two-person team calling actual customers; and finally moving on to making calls themselves.

“Our customers have very complex product offerings,” Barnard says. “The women are able to spend lots of time researching and understanding the clients they’re making calls for. That separates them from an average caller who may have a family to go home to at night and is dealing with kids and the rat race.”

Compliance Hurdles

Balanced against that advantage are certain realities of having an incarcerated work force. There are delays on emails Barnard sends to the incarcerated employees, because electronic communications have to go through the security protocols required by state corrections departments. Likewise, while employees have access to the internet, their usage is monitored.

The CFO’s job encompasses mak-



“It’s pretty unique to not see a majority of your [team] day to day even though they’re a big part of your life.”

—Jill Barnard, CFO, Televerde

ing sure Televerde is compliant with all corrections department rules. “There are interesting challenges that come from the workforce model, but it’s well worth it,” says Barnard.

Hiring activity is constant, with the company growing its business and employees regularly being released from prison. Some women apply for jobs several times before finally landing one.

The contact-center jobs are not all the same. Some employees simply provide clients with potential leads. Some are more involved in mid-funnel opportunities where they’re building rapport and a relationship with sales targets (although the latter aren’t aware that they’re communicating with a person in prison).

Aside from calling potential end customers, other activities a contact-center employee may be involved in include setting up in-person appointments between Televerde salespeople and potential end customers that have already shown some interest, and generating attendance for clients’ user conferences.

The most desired positions involve actually closing sales on the phone, to the extent that contracts with particular clients afford that opportunity.

While most of the positions are callers, there are opportunities for inmates to perform other roles for Televerde. “I

work closely with a gal who is an SQL programmer, and she does a lot of reporting for the finance team,” Barnard notes.

Other positions include call-center trainer, which facilitates onboarding of new hires; messaging coordinator,

which develops talking scripts and playbooks for calling; quality assurance representative; service delivery project coordinator, which facilitates the design and execution of client campaigns; and business intelligence technician.

Business for Good

A big part of Barnard’s role is making sure the company’s technology is current, including evaluating all the AI software that’s becoming available, how to use it, and how to avoid overusing it, she says. Some office software identifies sales opportunities for particular products and assigns callers trained in those products to contact targets at the right point in the sales cycle.

The company is hoping to expand into more prisons. One opportunity is with a prison in Glasgow, Scotland, where Televerde maintains a contact center staffed by non-incarcerated individuals. There’s another such office in Cordoba, Argentina.

There’s no better time than now than to be engaged with a business model like Televerde’s, according to Barnard. “With the millennial workforce really driving the idea of purpose-driven companies that change the world by doing business for good, it really lines up with the opportunity for us to share our story,” she says. **CFO**

Editor’s Choice



CAUTIOUS COMPENSATION BUDGETS

A large majority of companies don’t plan to raise pay amid recession concerns, according to a PayScale survey. Sixty-nine percent of companies said they plan to increase base pay by 3% or less this year, just keeping pace with inflation. Nineteen percent said they planned no base-pay increase at all.

Why Risk Management Should Be a Higher Priority

CFOs are equipped to turn risk into a business advantage. **By Kevin Dancey**

In 2014, the U.S. onshore oil industry faced a crisis. A rise in overseas production drove prices so low that most of the industry was operating at a loss. Many observers expected it to collapse, or at least shrink substantially. But that's not what happened. ¶ Far-sighted U.S. shale producers saw that short-term risk hid a long-term opportunity. With prices

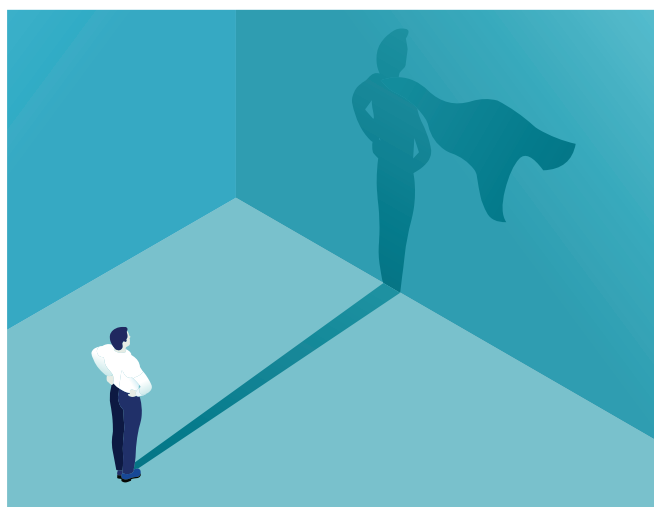
down, weaker companies would go bankrupt, allowing competitors to buy their assets at discount prices. The major producers bet that they could weather the storm and come out bigger and stronger.

And the risk-takers were right. Today, global oil prices are back up to around \$50 a barrel and the United States is a net oil exporter.

What happened to the U.S. oil industry is a classic case study in turning risk to your advantage. The kinds of multi-factor decisions involved are ones that will be increasingly familiar to CFOs in the future.

Companies today are exposed to an ever-more-complex array of risks and uncertainties, which are only set to accelerate in the years to come. Coping with geopolitical events, volatile financial markets, technology developments, cybersecurity threats, data privacy concerns, or climate change is no longer an advantage, but a necessity.

In particular, businesses have more data than ever, but often they don't have the full range of capabilities required to analyze that data and turn it into insights on risk mitigation and probability. Enterprises need someone to take the lead in breaking the data,



and the risk management functions they inform, out of the silos they sit in today.

There is no one better placed than the modern CFO to take on this job—and no one with a more pressing need to make sure it's done right.

Undervalued Too Often

In a 2018 study by North Carolina State University and the American Institute of Certified Public Accountants, fewer than one in five (20%) of organizations said they successfully integrated their enterprise risk man-

agement (ERM) function with their strategic and business planning.

More worryingly still, 65% of organizations said they had recently experienced an “operational surprise” arising from unanticipated risk.

In the past, that might have been a tenable, even if less-than-ideal

situation. But in a business environment that's more complex and faster moving by the day, it's no longer sustainable.

Research by IDC, also from 2018, indicated that the volume of data available to businesses would grow more than five-fold by 2025, and

the value of that data would increase. Simply by existing, this data creates a new risk factor for businesses. Even holding all other competitive variables constant, enterprises that respond to the ubiquity and volume of data by developing market-leading analytics capabilities will gain an edge over those that don't.

Today's market is entering a state of flux that's likely to persist for at least a generation. Emerging technologies such as blockchain, the internet of things, artificial intelligence, and others are disrupting

business models across all sectors.

To cope with this disruption, enterprises must be able to capture, integrate, and analyze data from all touchpoints and use the insights gained to spot developing risks and opportunities, adjust strategies and business models accordingly, and optimize operations in real-time to meet them.

Talent Needs

Often, we're told that enterprises find it difficult to respond to these challenges because there is a shortage of talent that can advance data analysis programs within the organization. That is universally true. In the United States, the economy needs 150,000 more skilled data analytics professionals than are available. In Europe, that figure is 420,000. In Asia-Pacific, it's one million.

Even more reason, then, for enterprises to make use of the CFO and the finance function. Deeply skilled at analyzing complex data, finance and accounting professionals stand ready and able to help the enterprise manage complex risk—today.

Enterprises that realize this and in which the CFO takes the lead in developing an integrated ERM approach will enjoy a competitive advantage over their rivals.

The good news is that some of the very technologies creating this complexity are also giving CFOs and their teams the tools and capacity to master that complexity. Increasingly,



“Deeply skilled at analyzing complex data, finance and accounting professionals stand ready and able to help the enterprise manage complex risk—today.”

—Kevin Dancey, CEO, IFAC

automation is freeing finance professionals from repetitive and low-value-add tasks. According to a study by Accenture, by 2021 45% of the tasks carried out by finance workers today will be automated.

How to See Risk

In the same study, 76% of CFOs said the role of the finance team would expand from core accountancy-based functions to include advanced digital and data analysis tasks. This shift will be enabled—and the finance team empowered—by the increasing sophistication and availability of a wide range of data collation, analysis, and visualization tools.

But for finance to be effective in this role, it needs more than new technology. It needs organizations to change the way they view risk. As leaders within their organizations, CFOs must push for the adoption of integrated ERM processes, including integrated reporting.

Such reporting takes into account not just financials, but also factors ranging from integrity of supply chains, to the value of the brand, the potential for disruption by new technology, the need to extract value from data and respecting consumer privacy.

The modern enterprise badly needs a leader with an overview of the business, who understands data modeling, risk, and how they relate to business strategy and performance. In most companies, the person best placed—by virtue of experience and the

range of skills in his or her team—is the CFO.

Although the board must oversee the task of integrating risk management, enterprises in which the CFO leads the risk-management function and drives an organization-wide approach to risk management will gain a competitive advantage. They will be better able to see opportunity where others only see risk or nothing at all, and react quickly with a plan for the long term.

Such enterprises will also be better placed to attract the next generation of finance talent, which has grown up in a fast-paced, data-rich world and will pursue accounting only if they continue to see it as a gateway to an exciting career in business.

To find out more about the future of integrated enterprise risk management, download IFAC's report, “Enabling the Accountant's Role in Effective Enterprise Risk Management.” **CFO**

Kevin Dancey is CEO of the International Federation of Accountants (IFAC), a global organization dedicated to strengthening the accountancy profession.

Editor's Choice



SEC HIRES FIRST CRO

The U.S. Securities and Exchange Commission named Gabriel Benincasa as chief risk officer, a position created to strengthen the SEC's risk management and cybersecurity efforts. Benincasa is the first person to hold the position. He was formally an attorney at Davis Polk & Wardwell and a senior adviser at a financial services consultancy.

Basketball CFO Takes His Shot at Real Estate

For Milwaukee Bucks CFO Pat McDonough, it was "sink or swim" when he joined the team as it was embarking on a huge real estate development phase. **By David McCann**

When is a sports-team CFO not a sports-team CFO? When he or she is attending to the team's other businesses. ¶ In the past decade-plus it's become a trend for sports franchises to spearhead real estate development in the area surrounding their stadium or arena, and to pursue other business paths. The most recent case in point: the NBA's Milwaukee Bucks.

The Bucks led the development of their new arena, Fiserv Forum, which opened in August 2018. The building lies within a 30-acre district on land owned by the Bucks that is alive with new and upcoming developments.

A parking structure and a sports science and training center for the team were also developed by the Bucks. An affiliate entity, Head of the Herd Real Estate Development, built a new medical office building and the Entertainment Block, a public plaza where one restaurant opened in January and two others are slated to launch this spring.

The newly developed district "gets away from the idea of a stadium built on an island surrounded by a sea of parking lots, where people go just to a game or another event and that's it," says Bucks CFO Patrick McDonough.

Still to come is a second phase of construction on the Bucks-owned land that may include residences, a hotel, and commercial offices. "There are a lot of great opportunities to round out the 'live-work-play' mantra of a mixed-use development," McDonough says.

McDonough came to the Bucks



Fiserv Forum hosts up to 200 events a year, including the Milwaukee Bucks, college basketball, and concerts.

in 2014, along with a new ownership group, after spending 13 years in finance and accounting leadership posts with Madison Square Garden, owner of the New York Knicks NBA team and the New York Rangers NHL team. There, his work was all about the Knicks. Before joining the Bucks, he had no real estate experience.

He recently spoke with *CFO* about his involvement in the real estate operations and running finance for a pro sports franchise. An edited version of the conversation follows.

You started your career with PricewaterhouseCoopers. How'd you get from a professional services firm into the sports business?

Fortunately for me, the office that hired me in the New York metro region happened to run the NBA's salary-cap audit. That's where they put me in

my first year there. I stayed in that job for three years and got to know some people in the league. After those three years the Knicks had an opening right at the level of experience I had. It was awesome. I was a huge Knicks fan.

What challenges does the diversity of the Bucks' businesses present to you?

The biggest challenge is the diversity itself. Typically in this job you're responsible for the operations of the team and in some cases the arena. Madison Square Garden is a huge public company with lots of different business lines, but my experience was just on the team side.

More specifically, the challenge I faced was getting smart about real estate development, including the arena construction project. I had to learn about things like real estate financing and lease structures.

How did you go about educating yourself?

It was sink or swim, so I swam. I reached out to some CFOs of other teams that I knew. Also, among the four people in our ownership group, some of them made their fortunes in real estate. They took us through Real Estate 101 and were patient with us as we got up to speed.

How did the team acquire all that real estate?

There were grand negotiations with the city, the county, and the state about the new arena. About 15 years ago a freeway spur was taken down in hopes of developing new downtown space, but there were environmental concerns and some underground work would have been necessary, and it just never happened. So, one part of the deal was getting ownership rights to that property from the county.

Another part was our agreement to pay for demolishing the old arena—the Bradley Center, which had been owned by the prior team ownership—in exchange for the land it sat upon.

How are you doing with prioritizing your time among all of your various activities?

The advantage I had coming in was that I knew a lot about the team side of things. I knew the team wasn't going to be any more complicated than the Knicks. That allowed me to dedicate 80% of my time to the real estate side.

I understand that since you arrived the organization has expanded from 80 to 330 employees. Did the real estate business account for most of that?

No, the big growth was actually in sales, for both the team and the arena. The prior ownership ran a much smaller business. It was probably consistent with the previous generation of sports-team ownership, where it wasn't their primary source of income and the ecosystem was smaller.

Our ownership viewed it from day

one as an opportunity to transform a longstanding NBA franchise by aggressively marketing and selling like the team had never been marketed and sold before.

How do your revenue streams stack up? Which is the largest?

If we're talking local revenues, tickets are No. 1, and TV and sponsorships are about tied at No. 2. Next is food and beverage (F&B).

For the real estate, right now we're looking at about a 10% return on equity. It's pretty much the traditional model of construction financing and equity, and we're getting what we think are some pretty good rents relative to the market, due to the attractiveness of our development.

Is there a correlation between the size of those revenue streams and what you're most focused on?

Not really. For example, we just started the first year of our new local TV deal with Fox. We signed it in May, and leading up to that we spent a lot of time running scenarios and advising on that. It's a great revenue stream, but it's locked in for seven years, so we can pause on that.

What levers can the finance organization pull to influence revenue?

It's about pricing—for tickets, for F&B, and our sponsorship rates—and working with the sales team to make sure we're maximizing revenue through pricing and unit sales.

We've increased prices pretty aggressively for the past couple of years, and it wasn't rocket science. We looked back over the previous 16 years, and the Bucks' ticket prices basically stayed the same, while the league average grew by 3% annually. There was a huge gap between our prices and the average NBA prices—not the high-end markets, just the average.

Pricing is part science but also part



Patrick McDonough

art. There's no formula you can run to spit out what you should charge for Row 20, Seat 3.

But we have to price appropriately and responsibly. We had to consider how to implement increases over a few years to build to the right price point for year

one of the new arena, rather than turn people off with a punitive increase all at once. You need to be aware of your market and its price sensitivity.

The Bucks are having a great season on the court. Is there any way at all to draw a link between that and anything you guys on the finance and business side are doing?

It would be a loose link at best. We have nothing to do with acquiring the talent, the coaches and their plans and systems, or developing athletes.

But what the current ownership brought in was a best-in-class culture. Whether that's in the basketball front office, finding the right type of players, or building that culture on the business side, the attitude is that we don't want to think or act like we're 26th or 27th in the NBA market rankings.

We may never have the ticket sales that the Knicks or Golden State Warriors have, but we're not going to accept being [near the bottom] in local revenues. Seeing significant growth and accomplishments on both the basketball and business sides at the same time is really cool.

There's been an explosion in player salaries recently. Do you play any advisory role with respect to what the team can afford to pay?

We don't opine on how much a guy is worth. We do work together with basketball operations to make sure that macro player salary assumptions flow through our financial projections, and that ownership sees that as they approve how much to spend on particular guys. **CFO**

Buybacks: Is Reform Overdue?

Regulators are asking who is ultimately benefiting from share repurchases.

By Ramona Dzinkowski

Fueled by the Tax Cuts and Jobs Act, 2018 was a bonanza year for stock buybacks. According to numbers from Standard & Poor's, U.S. companies repurchased \$806.4 billion of their own stock last year, up 55% over 2017. Buybacks accounted for the lion's share of the \$1.23 trillion (35% more than the year prior) that issuers returned to shareholders. ¶ Over a longer period, the numbers are staggering.

Since 2009, S&P 500 companies have repurchased \$4.7 trillion worth of shares. That's about the size of the entire exchange-traded fund industry. That much money flowing back into shareholders' pockets through buybacks has not gone unnoticed. Hot debate rages on as to whether this is good business practice, or whether buybacks are simply feathering the nest of corporate executives at the expense of the economy as a whole.

According to a joint statement by Sens. Chuck Schumer of New York and Bernie Sanders of Vermont, "when a company buys back its stock, boosting its value, the benefits go overwhelmingly to shareholders and executives, not workers." Furthermore, "when corporations direct resources to buy back shares on this scale, they restrain their capacity to reinvest profits more meaningfully in the company in terms of [research and development], equipment, higher wages, paid medical leave, retirement benefits, and worker retraining."

Clearly the discussion has evolved (or devolved) into the realm of political populism. But the question is still worth asking: Do share buybacks make economic sense?

Gregory Milano, CEO and managing partner of Fortuna Advisors, argues



that Schumer and Sanders are off-base. "By failing to see how such payouts to shareholders increase capital productivity, the senators have misunderstood the critical economic function of them," he says. Buybacks recycle "excess capital" from large, mature companies with fewer investment or employment opportunities to "the next generation of Apples and Amazons," he adds.

Legitimate Uses

Why do companies repurchase stock in the first place? Dr. Howard Johnson, managing director at Duff & Phelps, explains one of the big drivers for the

massive repurchases: they are a low risk way of getting rid of too much cash on the balance sheet.

"Many schools of thought suggest that cash on the balance sheet gets discounted by the market, because it may cause inefficiencies on the part of management, or may signify the company simply can't find adequate

alternative uses of capital," Johnson says. "Where managers aren't willing to put excess cash to work in the company's own growth initiatives or acquisitions, they find that the best return is through the repurchase of outstanding shares."

Another reason for acquiring outstanding shares, Johnson adds, is to signal that the company's shares are undervalued. "By repurchasing stock, management is hoping to demonstrate to the

market that it believes the value of its shares will rise over time."

There is also evidence to suggest that companies with lots of cash on their books are more likely to be takeover targets. At small- and mid-cap firms, says Johnson, management will sometimes buy back stock to defend against takeovers.

As to why companies prefer to boost shareholder value by buying back stock rather than raising dividends, "dividends are longer-term commitments for the company, and if you eventually need to decrease the dividend that sends a very negative signal to the market," Johnson notes.

Few would dispute that the reasons Johnson lists are indeed motivations for stock buybacks. But there may be others. Some experts suggest that short-termism is the primary driver behind stock repurchases, as managers time them so that their companies meet earnings expectations.

In his most recent study on the topic of earnings manipulation, Ahmet Kurt, professor of accounting at Suffolk University in Boston, found that 14% of the companies undertaking regular stock buybacks on the open market from 2004 to 2011 would have missed analysts' earnings-per-share forecasts had they not repurchased stock. That figure is even higher, 29%, among firms engaging in accelerated share repurchases (ASRs), which are completed much more quickly (a few days) than open-market buybacks.

Questionable Benefits

Despite the potential use of buybacks to temporarily meet short-term profit targets, they could still be a good investment. But are they, at least in terms of driving shareholder value? Have shareholders benefited when companies repurchased stocks?

In the last year to April 1, 2019, the answer is no. When compared with the performance of the S&P 500 overall, year-over-year performance of the 100 stocks with the highest buyback ratios in the S&P lagged by more than 3%. Although that is not truly an apples-to-apples comparison, it does support much of the criticism that this year's massive buybacks were a bad investment for companies that ultimately left shareholders worse off.

The argument that a share buyback is a good investment, at least from the perspective of a boost to the share price, is flawed to begin with, says Kurt. "It's very difficult, even for the company's executives, to predict the movements in a company's stock price," he says.

Kurt points to Apple and Wells Fargo as examples. Apple repurchased

29 million of its shares in September 2018 for an average price of \$222 per share. Three months later, the company's stock was trading around \$150. "So, in hindsight, Apple's buyback does not look like a good investment," Kurt says. Similarly, Wells Fargo bought back 26.6 million shares at an average price of \$61 in February 2018. But, the company's stock price fell below \$45 in December 2018. As of April 1, neither stock had recovered.

If companies were acting in the best interests of their shareholders, adds Johnson, they would execute buybacks differently. "Any rational CFO would compare the economic return on the share buyback against other possible uses of cash and time the repurchases accordingly," he insists. Unfortunately, in practice this hasn't been the case.

To track buyback performance, Fortuna Advisors has developed what it refers to as "buyback ROI." The metric can be used to compare returns on buybacks with returns on capital spending, acquisitions, and other investments. Buyback ROI measures the annualized internal rate of return based on the cost of buybacks, the avoided dividends, and the price of the repurchased shares at the end of the period.

In its 2018 study of the buyback ROI of a sample of S&P 500 companies, Fortuna found that three of every

"By repurchasing stock, management is hoping to demonstrate to the market that it believes the value of its shares will rise over time."

—Dr. Howard Johnson, managing director, Duff & Phelps

four companies mistimed their repurchases over the prior five years. They did this to such an extent that their buyback ROI was below their total shareholder return.

"Companies tended to buy back their shares closer to the peaks than the troughs," explains Milano. "This failure to time buybacks more judiciously reduces the benefit of buybacks to the remaining shareholders."

Who is ultimately benefiting from buybacks then? Kurt leans toward the argument that senior company executives are the big winners. He notes that repurchasing stock offers them two main benefits.

First, it lifts the stock price in the short run, enhancing the value of executives' stock and option holdings. Second, it helps increase their cash payments, because many executive bonus plans have EPS performance targets as a payout criterion.

Commissioner Robert Jackson of the Securities and Exchange Commission tends to agree. In a March 2019 letter to Democratic Senator Chris Van Hollen of Maryland, Jackson commented, "If executives believe a buyback is the right thing to do, they should hold their stock over the long term." In referring to a study by Jackson's office of all buybacks between January 2017 and the end of 2018, Jackson said, "we found that many executives use buybacks to cash out. That creates the risk that insiders' own interests—rather than the long-term needs of investors, employees, and communities—are driving buybacks."

Shaving Share Counts

Of the 444 issuers that bought back shares in 2018, these were the largest spenders.

Largest buybacks among S&P 500 companies

Apple	\$74.2 billion
Oracle	\$29.3 billion
Wells Fargo	\$20.9 billion
Microsoft	\$16.3 billion
Merck	\$9.1 billion

Source: S&P 500 Dow Jones Indices

“If executives believe a buyback is the right thing to do, they should hold their stock over the long term.”

—Robert Jackson, SEC Commissioner

Jackson went even further. He suggested that stock performance is even worse when insiders sell their shares upon the announcement of a buyback, concluding that “when executives sell into a buyback, the buyback is more likely to produce a short-term stock-price pop than a long-term, sustainable value increase.”

According to Jackson’s study, 90 days after buyback announcements, firms with insider cash-outs underperformed the others in the study’s sample by more than 8%. “Whether insider sales cause the stock to fall or simply reflect insiders’ view that the buyback won’t add value in the long run, the opportunity to cash out stock-based pay gives executives reason to pursue buybacks that do not produce long-term value,” Jackson concludes.

Ideas for Change

What should regulators do about buybacks, if anything?

Sens. Schumer and Sanders are calling for some unusual measures. They propose setting minimum requirements for corporate investment as a prior condition to buying back stock. Requirements would include such things as paying all workers a minimum wage of \$15 per hour, providing seven days of sick leave, and offering decent pensions and reliable health-care benefits.

They also recommend considering limiting the payout of dividends through the tax code.

These proposals have been met with an avalanche of opposition, of course. According to Milano, the chief effect of the senators’ proposals would be to trap more capital inside companies that cannot productively use it.

“Any regulation that limits or restricts buybacks would be extremely bad for the economy and for the markets,” he says. Instead he recommends that companies restructure management incentives, “to re-align their compensation structures to promote good investments.”

Companies that pay bonuses tied to increasing return on capital employed (ROCE) are encouraging the managers of their most profitable businesses to limit their growth investments, Milano says. If your business is already earning 40% ROCE, he questions, why take on a project earning 30% and drag down the average? “Companies can correct this problem by paying bonuses based on an economic profit measure that charges at the cost of capital for the use of capital, but without penalizing new investments

that could reduce their average ROCE.”

Other experts like Kurt tend to agree that corporate boards don’t always set the right incentives for executives. But Kurt also sees some value in curbing issuers’ enthusiasm for share repurchases through legislation.

“The senators’ call for limiting buybacks should be carefully considered, as it would motivate executives to find and invest in positive net present value projects, thereby improving corporate earnings in America through higher profitability instead of lower share count,” he says. Kurt also says that imposing a mandatory blackout period for corporate insiders after repurchase announcements may help to some extent, as it would reduce the attractiveness of buybacks by limiting the financial flexibility of executives.

On March 6, 2019, SEC commissioner Jackson requested an open comment period to revisit SEC rules “to make sure they protect American companies, investors, and employees in light of today’s unprecedented volume of buybacks.” He pointed to revisiting the safe-harbor rules for insiders selling upon the announcement of buybacks.

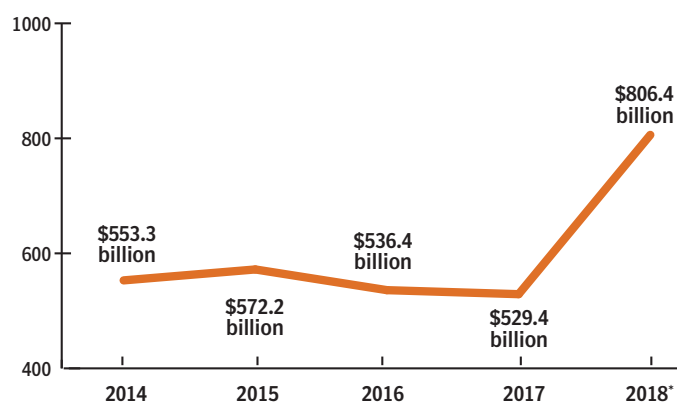
“In a world where stock-based pay gives executives powerful incentives to seek opportunities to sell their shares, SEC rules on buybacks should do more to protect ordinary investors who save for the long run,” according to Jackson. “Outdated SEC rules give safe-harbor treatment to buybacks that do little more than give executives a chance to cash out.” **CFO**

Ramona Dzinkowski is a journalist and president of RND Research Group.

Bumper Crop

The value of buybacks hit a record in 2018—a 37% increase from the previous record set in 2007.

Total share buybacks for S&P 500 companies



*Preliminary numbers as of March 25, 2019.
Source: S&P 500 Dow Jones Indices

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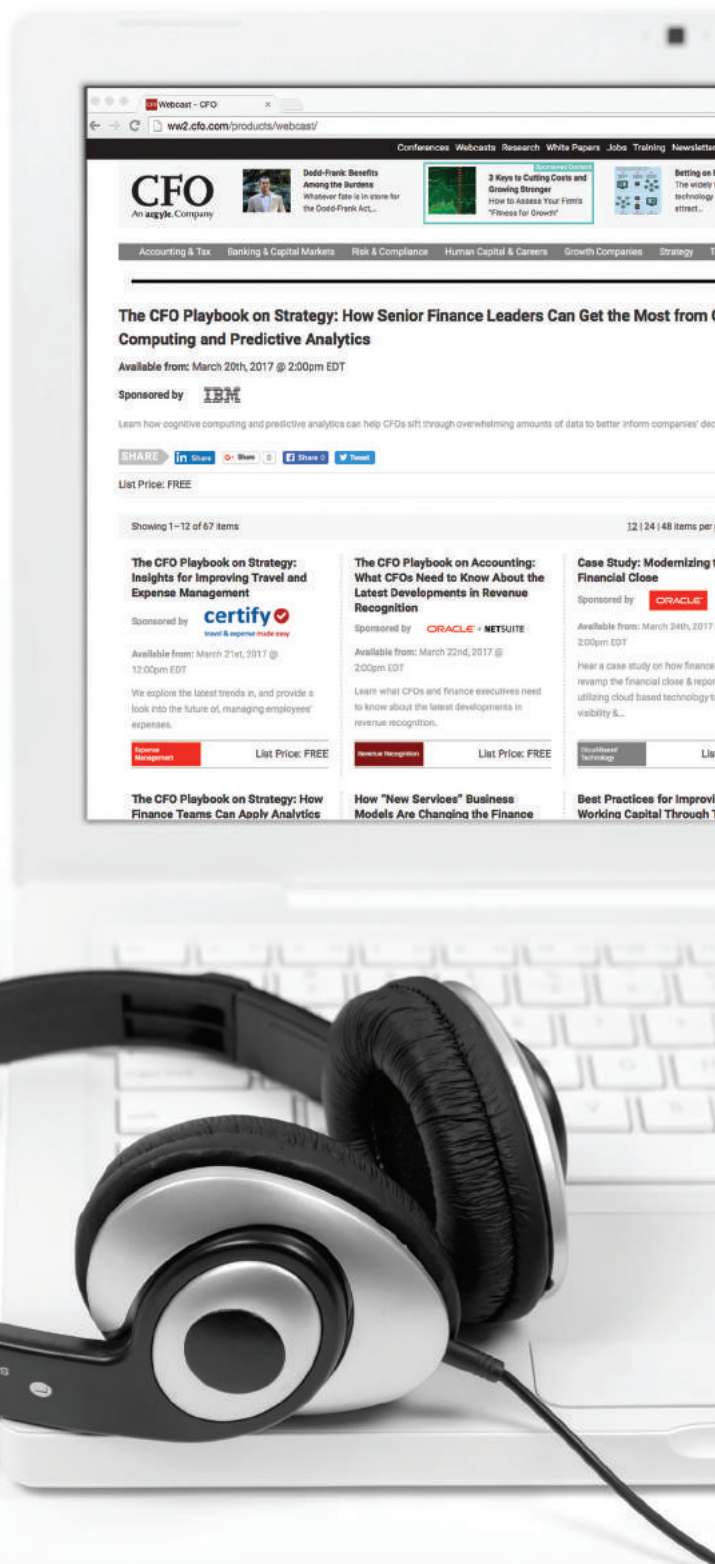
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TECH COMPANIES

2019

TO WATCH

Intelligence-Boosting Tools

These 20 vendors are helping businesses unearth the actionable information hidden in their mountains of data.

If you were asked in secret if your organization always acted intelligently, demonstrating the capacity for logic, self-awareness, learning, and even emotional knowledge, what would you say? Probably (in confidence, of course), you would say your business sometimes behaves irrationally, making unwise, incoherent decisions.

Fortunately, organizations can get smarter. In this third year of *CFO*'s Tech Companies to Watch, we found a notable shift in the applications being offered by vendors. In every functional area of the companies that made our annual list—process management, recruiting, travel expenses, receivables management, and compliance among them—the goal is unearthing the real story behind the data to make more intelligent decisions.

Software is still about automation, of course, but efficiency replacing drudgery is hardly the primary aim. Filling the organizational thirst for better information, information that has a rich context

and, when acted on, has a large impact on performance, is the holy grail. The business applications of artificial intelligence and machine learning, in other words, are starting to really arrive.

Of course, like any technology products, the new intelligence tools aren't magical solutions. Early AI researchers in the 1950s and '60s couldn't contain their enthusiasm: "Machines will be capable of doing any work a man can do in 20 years," one famously said then. Obviously, that didn't happen. There's plenty of work that humans must do before and in conjunction with implementing AI software platforms, like identifying use cases and establishing data integrity policies, and they are crucial to any success.

We can't tell you how much heavy lifting is needed to get a real return on the products below. The profiles will help you gauge, however, whether these tools deserve a closer look by your organization, as it journeys toward a smarter version of itself.



FORTRESSIQ

Guiding RPA Investments

Many traditional finance activities, as well as other corporate processes, can be automated. But executing the automation is just the back end of a much bigger task—deciding which processes are the best candidates.

Robotic process automation (RPA) vendors, for example, are better at building bots to take over particular processes than they are at helping companies tackle that bigger task. That's where a growing category of artificial intelligence companies like FortressIQ comes in.

FortressIQ emerged from stealth mode in December 2018 with \$16 million in venture funding. As of February, CEO Pankaj Chowdhry told *CFO*, the company had 6 enterprise clients, including 3 of the world's 10 largest banks and one of the largest consumer product companies. He added that FortressIQ was ready to sign contracts with more than two dozen in the second quarter.

What's all the excitement about?

Picture a huge company with thousands of back-office workers who regularly perform tens of thousands of processes across finance, accounting, procurement, human resources, and other functions. It has a \$2 million budget for process automation this year—but what exactly should that money be spent on?

The company could hire a big consulting firm to come in, disruptively interview hundreds of staffers, watch them work, and ultimately recommend the best candidates for RPA. Alternatively, it could plug in FortressIQ's cognitive process analysis software and

achieve the same result at a fraction of the cost and in much shorter time, according to Chowdhry.

"If a company has a business transformation project going on, and automation is a piece of it, it's going to spend a third of the [automation] budget just to get that current-state assessment," Chowdhry says. "And it needs that, because if it doesn't know what it's doing now, it can't improve on it."



Pankaj Chowdhry
CEO of FortressIQ

Headquarters: San Francisco
Founded: 2017
Employees: 25
Product category: Process management

FortressIQ's software integrates with the video cards in clients' desktop and laptop computers—the same technology layer that enables screen-sharing—to essentially record video of what happens on screens as workers perform processes.

The software is necessarily complex. For example, it has to understand a range of non-linear actions, since different workers perform process steps in different orders. Sophisticated data mining technology extracts the actual process steps from all such "noise," facilitating the creation of process maps that are FortressIQ's main deliverable to clients.

Fortress doesn't make explicit recommendations for what clients should automate. According to Chowdhry, the mapping itself "can be transformational for a business, because it allows decision-making based not on who's yelling the loudest but on actual data."

"[THE MAPPING ITSELF] ALLOWS DECISION-MAKING BASED NOT ON WHO'S YELLING THE LOUDEST BUT ON ACTUAL DATA," CHOWDHRY SAYS.

FortressIQ partners with the major RPA vendors. "We tell you the processes you could automate, which you do in their systems," the CEO notes.

But deciding to automate a process is just one outcome clients arrive at after receiving the process documentation. They also might choose to (1) standardize some processes by training everyone to perform them a certain way; (2) reconfigure systems to conform to the way employees perform processes; (3) hire consultants to re-engineer processes; or (4) outsource processes.

"If you don't have the data, you can't make any of those decisions," says Chowdhry. • **DAVID McCANN**

BEHAVOX

People Analytics

Communication technologies are transforming financial services companies into data powerhouses. But if they aren't putting the data to good use, they're losing out on valuable insight. Behavox uses artificial intelligence and machine learning to aggregate and analyze large volumes of unstructured communications. Pulling from emails, phone calls, trade deals, and chats, the AI-driven platform compiles actionable insights into a firm's compliance, risk, conduct, and performance.

"What could you possibly learn about your organization if you had access to all of the communica-

tion data of your people?” asks Erkin Adylov, Behavox’s founder and CEO. “Our technology helps managers and the compliance team find [that] needle in the haystack.”

About 80% of Behavox’s 20 to 30 customers, mostly in financial services, use the product for regulatory compliance and surveillance. By collecting and analyzing employee-generated data, Behavox can flag anything it thinks is a violation, allowing the company to catch it before getting hit with hefty fines. The system also captures and reports hidden behavioral patterns that could bring to light inappropriate employee behavior that could tarnish the company’s reputation.

“Using technology is really important from a risk management perspective because when fines come in they come in thick and fast and in big lumps of money,” says Adylov. “But the other thing is keeping the company out of the headlines. Imagine that a company ends up in headlines for #MeToo, for bribing an official in an emerging market, or for market manipulation. It’s not just the fines, it’s reputation as well”—a sullied reputation leads to clients canceling contracts or going to competitors.

In one case, the Behavox software caught a client’s employee inserting several pages of proprietary information into the middle of a 150-page report, which was then emailed as a PDF attachment. If a compliance officer had manually reviewed the seemingly innocent attachment, nothing would have stood out as malicious. But the AI system was able to go deep into the attachment, flag it, and highlight the exact pages that contained the proprietary information, says Adylov.

“WHAT COULD YOU POSSIBLY LEARN ABOUT YOUR ORGANIZATION IF YOU HAD ACCESS TO ALL OF THE COMMUNICATION DATA OF YOUR PEOPLE?” SAYS ADYLOV.

The other 20% of the company’s business that is quickly growing is automating data entry into customer relationship management systems, freeing the sales force to focus on selling. The system also mines client communications. Having access to all communications data helps salespeople

and account management staff be more efficient.

Clients describe Behavox as mission-critical software, especially as compliance reporting lines are now going up straight to the C-level and the board of directors, according to Adylov. “One of our clients

<p>Erkin Adylov Founder & CEO of Behavox</p>	
<p>Headquarters: New York</p>	
<p>Year founded: 2014</p>	
<p>Employees: 92</p>	
<p>Product category:</p>	<p>Behavioral operating system</p>

asked the compliance team to install a dashboard on an additional screen on his desktop so that he could actually watch how many [compliance] alerts were being generated,” says Adylov. “He essentially has a high level of reporting from our system on a daily basis.”

The alternative to automating compliance surveillance is manually sorting through communications, which is time-consuming and very expensive.

“A CFO would reap the immediate benefits of rationalizing the workforce. Meaning that they won’t need to hire thousands of people or outsource it to expensive consulting firms that could compromise the firm’s data security,” says Adylov.

Behavox has plenty of independent competitors in the risk and compliance space targeting financial services, but it is on a growth trajectory of 150% to 200%. “We hope to sustain that growth rate for the next three years,” says Adylov. “Our target is to go public in three or four years—we would need to hit revenue of \$100 million plus.” • **LAUREN MUSKETT**

COMPLETED.COM

Reviewing the Boss

Fast-growing startups face enormous challenges in building out their managerial and supervisory ranks. Where can they find useful and reliable feedback on potential candidates to aid their hiring decisions? For that matter, what’s the best way for established companies to evaluate the performance of existing managers and supervisors?

LinkedIn, of course, allows professionals to highlight their work histories. As such, human resources executives and hiring managers find it valuable. What it lacks is reliable information on job performance. The published “recommendations” of individuals can’t be considered reviews because they are uniformly positive.

Completed.com is a brand-new effort to fill that gap. It functions much more like Yelp than LinkedIn.



Michael Zammuto
CEO of Completed.com

Headquarters: San Francisco
Founded: 2017
Employees: 10
Product category: Talent assessment

Instead of rating products and services, reviewers rate the performance of business professionals—most often their bosses, but also peers or subordinates.

To be sure, it's a fledgling effort. The site was beta tested in 2017 and launched in December 2018, and the volume of reviews so far is understandably modest. The focus has been on seeding

it with basic profile information on managers and supervisors, which was mostly acquired from marketing databases.

Visitors to the site can search for people by name and, if the profile of the person they're looking for doesn't exist, they can create it. The company expected to have about 50 million profiles on the site by the end of March, according to CEO Michael Zammuto.

Completed.com is currently in pre-revenue stage. "Once we have a significant volume of reviews, we'll be able to add some pay features," Zammuto says. "I don't know when that will be, but my guess is probably not this year."

The first such features likely would be recruiting tools. For example, a company might pay for a list of the top-rated 5% of programmers in its industry or the most highly rated accounting managers in a certain city.

Of course, review sites share a common problem: people can leave reviews that dishonestly or unrealistically trash or praise the review subject. Any number of motivations drive such behavior—revenge, competitive rivalry, financial gain, or merely the urge to prank.

Completed.com battles that problem with a hybrid approach, using both technology and human screeners. Each review generates a "credibility score." The score isn't visible to the public, but the company uses it in deciding whether to publish a review.

The credibility score takes into account dozens of factors, no one of which is a "smoking gun" that automatically disqualifies a review. Site visitors can choose to leave a review anonymously, but that counts against

its credibility, as does when the reviewer claims to work in, say, Iowa, but has a Singapore IP address.

Artificial intelligence-driven sentiment analysis is performed to identify reviews that are negative or positive to an unacceptable degree. Word choices and even grammar are analyzed. A user who has previously posted reviews that were accepted is gauged more credible than one who hasn't.

Reviews with low credibility scores aren't routinely rejected. Instead, they are sent on for human review. "We want to offer constructive feedback on business professionals that isn't excessively kind or excessively personal or cruel," says Zammuto.

The motivations for people to write valid reviews aren't brilliantly clear, but the same was true early on for business-oriented review sites like Glassdoor.

THE COMPANY EXPECTS TO HAVE ABOUT 50 MILLION PROFILES ON THE SITE BY THE END OF MARCH.

Zammuto says, "You have to remember how important a boss is to a job. 'People don't quit jobs, they quit bosses' is a famous HR saying. And almost everybody who has a job wishes their boss were better at something."

The hope is that the site can expand into offering ratings of business professionals' skills in specific areas. As likely will be the case with the overall site, that might be an unsettling prospect to some managers; and to others, a welcome one. • **D.M.**

YAYPAY

Collect Them All

The idea for YayPay crystallized for serial entrepreneur Anthony Venus when he was still in the thick of running London-based Meridian Equity Partners.

"We had a long list of accounts receivables [AR] outstanding and we didn't have an automated way to get them resolved," he explains. "I looked around the office and realized we had great sales and marketing software and all this automation in the front office. But in the back office and finance, all we had was an ERP system. It was great, but it was simply a record-keeping system that didn't automate very much."

After selling Meridian in 2014 and taking a year off, Venus—with the help of YayPay co-founder and chief technology officer Eugene Vyborov—started working on a solution to a common AR problem: getting paid on

time. The two took the scaffolding of their idea to TechCrunch's Startup Battlefield contest, and made it into the finals, which further solidified their resolve.

"We looked at the entire order-to-cash or credit-to-cash cycle—credit assessment, invoicing, collections management, payments, cash applications and the analytics surrounding that whole process," says Venus.

The pair started with automating communications—setting up various workflows with different kinds of messaging. The YayPay software-as-a-service collections offering, designed for companies handling up to 500,000 invoices per month, is simple but elegant. Once an invoice goes into the system, AR can set parameters around automatic communication. For instance, a payment reminder can be emailed 14 days after invoice creation. If the email isn't opened after five days, another trigger alerts finance to give the customer a call. If the customer doesn't respond, responsibility for the unpaid invoice shifts to a manager. Since all of these steps happen without human intervention, invoices are less likely to drop through the cracks.

In addition, an analytics component coupled with machine learning helps users understand which customers are most likely to pay and when, making cash flow easier to predict, says Venus. Employees can be three times as productive as they would be using traditional AR tools such as spreadsheets and email, Venus claims.

Every invoice goes into a single dashboard, which shows real-time days sales outstanding, payer trends, and collection activity, among other data. This information is aggregated so the AR staff gets a prioritized list of accounts and customers for collections. Customers are rated on an A through F scale based on historical payment data and the amount of outstanding invoices. This, along with other collections information, is available to sales, potentially helping improve customer service and the overall sales cycle, says Venus.

"We have sales users [of YayPay] and they're interested to understand if the customers that they have sold to actually paid," Venus says. It avoids disagreements with finance later on "when they find that the

customer hasn't paid. We're able to loop them in early on in case finance needs their cooperation to give customers a nudge." Customers benefit from YayPay too because they can pay their invoices

"TEN YEARS FROM NOW WHEN WE LOOK INTO THE BACK OFFICE IT'S GOING TO BE A VERY DIFFERENT PLACE," SAYS VENUS.

Anthony Venus
CEO of YayPay

Headquarters: New York
Year founded: 2015
Employees: 50
Product category: Accounts receivable management



by credit card or ACH through the service's customer statement portal.

YayPay, which officially launched in 2017, is integrated with a variety of ERP, billing, and customer relationship management platforms, including NetSuite, Sage, Quickbooks, and Salesforce.com.

Venus says YayPay has lots of room to grow. "Right now, penetration in the accounts receivable automation software market is only 5%, with 95% of organizations using spreadsheets and people. Ten years from now when we look into the back office it's going to be a very different place." • **KAREN BANNAN**

YAPTA

Deal Tracker

We've all had the frustrating situation of booking a flight or hotel, only to see the price drop dramatically a day or two later. At the corporate level, those price fluctuations can add up to millions of dollars a year.

Seattle-based Yapta tracks airfare and hotel rates not only before booking, but also after. With its FareIQ and RoomIQ services, if a fare or rate drops enough to make changing the reservation worth it, the traveler gets an alert. Yapta takes into account any change fees from the airline, hotel, or travel management company before sounding the alarm.

Users can set a savings threshold they want met before being alerted. For instance, a corporate



James Filsinger
CEO of Yapta

Headquarters: Seattle
Founded: 2007
Employees: 64
Product category: Travel expense management

travel manager may decide he doesn't want to be bothered unless the company will save at least \$50. Yapta can even automatically rebook the ticket or hotel in some cases.

Yapta says so far clients see an average savings of 4%. In dollar terms, clients save on average \$260 per plane ticket and \$109 per hotel stay. Shell, for instance, saved \$6.5 million—\$3.9 million on airfare and \$2.6 million on hotel spend—during its first year using Yapta.

Nearly all of Yapta's customers are on a payment plan where Yapta takes 35% of that savings. That's it for costs, unless the company opts for other services, like the automated rebooking function. "The client is always guaranteed a return on investment for using our product," says CEO James Filsinger. "If they do not save any money, they don't pay us."

For the traveler, the experience may be invisible. Yapta only follows airfares with the same flight number, departure date and time, airline, cabin class, and ticket type as the original flight. And it only tracks hotel rates at the same hotel originally booked.

The enterprise offering is a shift from when Yapta started out in 2007 with a travel price-tracking tool targeted at consumers. In 2011, Concur (now SAP Concur) invested \$5 million in the company and suggested a pivot to the enterprise space. For customers, there's nothing to install and no risk, so it seemed like capturing some of the market would be easy.

Cracking the corporate market was a challenge. "No one wanted to be first," Filsinger says. "We did a lot of pilot [programs] to begin with to prove value."

Once Yapta signed General Electric in 2014, the dominoes started to fall. Yapta now has more than 8,000 corporate customers across 36 countries, including 39 of the companies in the Fortune 100.

Yapta's revenues grew ninefold between 2013 and 2017, placing it on the Deloitte list of 500 fastest-growing tech companies in North America in 2018 for the second year in a row. In 2018, unaudited revenues were \$23.4 million. • **YASMIN GHAHREMANI**

"THE CLIENT IS ALWAYS GUARANTEED A RETURN ON INVESTMENT FOR USING OUR PRODUCT," SAYS FILSINGER.

AUDITBOARD

GRC Upstart

For many years, businesses have embraced software platforms for managing key disciplines like enterprise resource planning and customer relationship management. Governance, risk, and compliance (GRC) software? Not so much—even though the first such systems were developed not long after their ERP and CRM counterparts.

AuditBoard is a relative newcomer in the field, so it has some catching up to do from a market share standpoint. But it's attracting a lot of attention. Front and center is a \$40 million B-round investment led by high-profile venture capital firm Battery Ventures, secured in August 2018. It has also landed the likes of Activision, Cornerstone, Exelon, Express Scripts, Lennar Homes, Lionsgate, Public Storage, HD Supply, TripAdvisor, and Truecar as customers.

The company's cloud-based GRC platform is designed to mostly eliminate the thousands of spreadsheets managed by internal audit departments. AuditBoard bills itself as having a "full suite" of audit management and compliance solutions for Sarbanes-Oxley, controls management, operational audits, enterprise risk management, and workflow management.

While far from the only player with a cloud system for managing audit, compliance, and risk, AuditBoard is winning acclaim for ease of use and responsive customer support, judging by posts on technology-product-review sites like G2 Crowd and Capterra.

The director of internal audit at a precious metals company says AuditBoard's SOXHUB tool provides a one-stop real-time glance of the current status of a compliance process: "You don't have to go to a different folder for test papers and supporting documents, then a different folder for narratives and another folder for walkthroughs."

Daniel Kim, AuditBoard's CEO, was a chief audit executive for two publicly held companies before co-founding the company. "We built the software from the ground up,



Daniel Kim
CEO of AuditBoard

Headquarters: Los Angeles

Founded: 2014

Employees: 125

Product category: Governance, risk management, and compliance

“WE BUILT THE SOFTWARE FROM THE GROUND UP, DESIGNING IT EXACTLY FOR HOW AUDITORS WORK,” SAYS KIM.

designing it exactly for how auditors work,” says Kim. “The intuitive design is about knowing all the specific technical click-throughs that auditors make.”

AuditBoard

may have a built-in advantage when it comes to ease of use. It was developed for the cloud, unlike some of the older, on-premises systems that have been reconfigured for the cloud. To address GRC, other vendors have reconfigured tools designed for other functions.

In any event, the efficiencies resulting from the elimination of spreadsheets and the user-friendly technology and design free up auditors’ time “to work on the strategic operational projects that the CFO wants,” according to Kim.

Internal audit is just one of three constituent GRC stakeholders for which the AuditBoard platform is designed. It also provides external auditors and company business units and process owners with a view into internal audit’s work, thereby facilitating collaboration. At the same time, each group’s experience in the system is tailored to its needs; likewise, AuditBoard provides dedicated training for each. Pricing is based on data usage rather than seat licensing; all three user groups get unlimited access to the system.

Kim doesn’t lack for ambition or confidence in AuditBoard’s future. “Over the next couple of years as we get to 2,000 clients, we’ll be the de facto leader in the audit compliance space,” he says. • **D.M.**

SISENSE

Top-Speed Analytics

Business intelligence (BI) tools usually involved a trade-off: speed for data complexity. For example, an executive may want to analyze how strongly salespeople’s performance correlates with their commissions—and then ask that question by product line or by geography. That means taking information about sales, inventory, profits, and more, and mashing it all together before even pushing the button to get the results. Many BI solutions require the user to go to the IT department to request that the data sets be combined, stretching out the process for weeks.

Sisense, though, has developed technology that allows business users to do all of that themselves, on the

<p>Amir Orad CEO of Sisense</p>	
<p>Headquarters: New York Year founded: 2004 Employees: 500+ Product category: Business intelligence</p>	

fly. “We give users access to dynamic dashboards so they can slice and dice information about the business on their own,” says Sisense CEO Amir Orad.

The Sisense platform is able to do this because it uses ultra-fast cache memory on the central processing unit (in-chip architecture), as well as slower-to-access in-memory storage in RAM as a staging ground for its computations.

“Sisense has figured out a way to move data between RAM and the CPU faster than an operating system would do it on its own,” says Forrester principal analyst Boris Evelson. “The capability makes all types of calculations faster than most other BI platforms.” Sisense chief strategy officer Guy Levy-Yurista says the platform operates about 50 times faster than it would operate if it just used RAM.

Forrester named Sisense a “strong performer” in a 2017 market analysis, behind the “leader” category but in the company of larger BI players SAS and SAP. Likewise, Gartner dubbed Sisense a “visionary” in its February 2019 magic quadrant analysis of the analytics and business intelligence market.

Sisense has \$200 million worth of funding and thousands of customers, including GE, Nasdaq, and Philips. About half of Sisense’s customers embed its solution to offer their own clients better analytics. Anaqua, for example, a leading provider of intellectual property management software, chose Sisense to enable its clients to get answers about how to treat their patents as assets.

In those use cases, “we allow the CFO to make financial decisions about

“WE GIVE USERS ACCESS TO DYNAMIC DASHBOARDS SO THEY CAN SLICE AND DICE INFORMATION ABOUT THE BUSINESS ON THEIR OWN,” SAYS ORAD.

whether they should renew, protect, buy, sell, or lease their patents,” says Orad. “With Sisense you can ask a question and get an answer on the spot without going and rebuilding your data repositories and databases.”

Sisense’s latest move is the commercial launch of a product called Sisense Hunch. It reduces terabytes of data to a few megabytes, delivering answers that are slightly less accurate but come faster. For instance, instead of knowing a sales figure is \$10,500,327, the user might be satisfied to know that the answer is about \$10,500,000. Because the data set is so much smaller and easier to work with (and uses a tiny fraction of the storage footprint), the user is able to get an answer in 1/1,000 of a second instead of 10 minutes.

Forrester’s Evelson is bullish on Hunch, and on Sisense in general, but he has a word of caution. “Sisense has great market traction and momentum, but so do the other 20-plus leading BI vendors that I track,” he says. “BI is a paradoxical animal. The supply side of the market is very mature, the demand side is not.” If nothing else, that means Sisense and its competitors have a lot of room for growth. • Y.G.

APP ANNIE

The App for Apps

App vendors have long employed the free-to-pay paradigm, getting users to download apps, hooking them on an experience, and turning them into subscribers. App Annie, a software-as-a-service app analytics and data-as-a-service (DaaS) company, uses the same model as the apps it tracks—with solid results.

The company, which has an 80% market share and one million registered users of its service, tracks more than 14 million apps worldwide. It takes anonymized and aggregated data from apps, consumer panels, and ad networks, analyzes it, and provides those insights to its customers. Using this data, developers can improve apps and potentially compete more effectively.

The two main App Annie offerings are Intelligence

and Connect. The free version of DaaS Intelligence provides data such as daily and historical app store rankings, version updates, in-app purchases, and keyword rankings. It is the paid premium version of Intelligence that brought the company into profitability, though. That version features more granular data, breaking down the app market by, among other attributes, size, active users, and market penetration.

App Annie also offers developers insights into their own app’s usage and advertising performance via its SaaS Connect platform. The platform aggregates a developer’s own proprietary app data into a single graphical interface. Publishers can see how well in-app ad campaigns perform, for instance, and download their aggregated data for use in other applications. A premium paid version of Connect helps publishers with predictive analytics and advertising strategy.

“We provide comprehensive market data on usage patterns—[monthly active users], [daily active users], time in app, frequency in app, correlation analysis. If they’re using Uber, how likely are they to use Bank of America?” explains Ted Krantz, the company’s CEO and a veteran of PeopleSoft and SAP. “And then we also have a marketing dimension that really ties into ad network performance.” The developer can see when the ads are refreshed and how long they’re playing, and “make some inferences based on the success of those creatives.”

The earliest users of the service were global gaming developers, but over time App Annie’s reach has expanded. It has garnered more than 1,100 paid customers, including LinkedIn, Coca-Cola, and Mattel. In 2019, the company hopes to boost that number by introducing a version of its services for the mobile web. That would allow developers to capture clients that may not have mobile apps as well as those that want to merge their app and mobile web development strategies.

“We’re moving beyond the app into more of a full mobile-performance equation,” says Krantz.

Another improvement helps app developers move from reactive to proactive. The company recently launched App Annie Lab, a platform where customers can see new features and offerings early on in an App Annie product build. While the access is free and early adopters get a feel for the company’s newest product offerings, there is an App Annie ask: real-time iterative feedback. The company wants user experience data.

**DEVELOPERS CAN
IMPROVE APPS
AND POTENTIALLY
COMPETE MORE
EFFECTIVELY.**

<p>Ted Krantz CEO of App Annie</p>	
<p>Headquarters: San Francisco</p>	
<p>Year founded: 2010</p>	
<p>Employees: 350 Product category: Mobile app analytics</p>	

“It increases our stickiness and helps us with product direction,” explains Krantz.

Going forward, this kind of collaboration will help App Annie with its biggest challenge: getting people to see the app-centric company as a mobile provider. It’s something Krantz and new CFO Susan Kim, who has a background in investment banking and operations, are expecting to tackle this year.

• **KAREN BANNAN**

AVISO

Nailing the Forecast

If you’re a CFO who thinks sales executives tend to make over-rosy projections about when and whether a sale will close, you’re probably looking for a better information source. That’s where Aviso’s artificial intelligence-driven sales forecasting software comes in.

For most companies, potential sales categorized as “commits”—meaning they will definitely close—are actually only 65% to 85% likely to close, says Stephen D’Angelo, president of Aviso, an early-stage software provider.

Part of Aviso’s appeal to finance chiefs is that its software can forecast quarterly sales much more accurately than any sales leader—D’Angelo claims it forecasts with 92% to 96% accuracy. It can also predict the probability a sale will close within a given quarter.

Finance teams at Aviso client companies use its dashboards weekly or even daily to check sales projections by product, region, or other attribute. They can then apply that to planning for spending on marketing, personnel, and research and development. Based on Aviso’s forecasts, CFOs can optimize their com-

panies’ sales resources to spend more time on likely sales instead of “garbage opportunities,” D’Angelo says. “We give them early warning signs or early green lights, early in the quarter and then throughout the quarter.”

Aviso’s software calculates sales forecasts for a company by starting with the individual projections made by everyone in sales, from salespeople to the sales manager to the chief sales officer. The artificial intelligence component of the Aviso software then augments that data by applying high-speed

pattern-matching to whatever additional data the company makes available to the algorithm. That may include information from a customer relationship management system, for example, or even emails and calendar items.

The AI component then fine-tunes itself in its subsequent forecasts as it learns which factors are most predictive.

“It’s amazing how through this pattern-matching we’re able to identify deals that are progressing well, sales that are not progressing well, or what should be done on (certain) sales,” D’Angelo says. That helps improve win rates and speed up closing of pipeline deals. “Human beings just don’t have the time or bandwidth to process all this data, but the answers to the business lie within the data,” he adds.

BASED ON AVISO’S FORECASTS, CFOS CAN OPTIMIZE THEIR COMPANIES’ SALES RESOURCES.

Since launching, Aviso has landed some well-known corporate clients. They include Dell, Honeywell, GitHub, Glassdoor, and Splunk Technology. The company has raised \$31 million in venture capital so far and is currently seeking additional series B funding.

The market, of course, is loaded with competition. There’s a baker’s dozen of other companies in the sales forecasting niche, according to analysts from Gartner Research and Smart Selling Tools, a specialized sales technology consultant. In addition, software giants Microsoft (Dynamics), Oracle (CX), Salesforce.com, and SAP are attempting to add sales forecasting to their offerings, says Tad Travis, a Gartner director.

For example, Salesforce, considered the “big gorilla” in the sales technology universe, offers an AI platform called Salesforce Einstein that can be adapted for sales forecasting, says Nancy Nardin, founder of Smart Selling Tools. But it doesn’t offer the turnkey capabilities of Aviso, she adds.

On the plus side, Aviso’s ability to forecast renewal revenue, such as subscriptions for consumer companies, stands out from other sales forecasting competitors, Travis says. “That’s a good spot to be in,” he says. • **KEITH BUTTON**



Stephen D’Angelo
President of Aviso

Headquarters: Redwood City, California
Founded: 2011
Employees: 51-100
Product category: Sales forecasting



ANAPLAN

Designs on Dominance

What organization wouldn't want to improve at financial planning? Plans sometimes fail, but having them is a distinct advantage. A tool to help build and maintain a plan, of course, has to do a lot: budgetary relationships and financial dependencies need to be automatic, for example; the product needs to make real-time adjustments (because companies plan more frequently than 5 to 10 years ago); it has to connect decision-makers across the enterprise; and it has to be easy to use. Those are just table stakes.

Many vendors are competing to check those boxes and more. Notable among them is publicly held Anaplan, a 10-year-old player in the space that boasts 1,100 customers worldwide. Anaplan's "connected planning" platform lets CFOs "continuously analyze business performance, make real-time adjustments to forecasts and plans amid fluctuating market conditions, and instantly communicate any impacts of those changes to the entire business," says CFO Dave Morton, who came on in September 2018 and spent more than 20 years at Seagate Technologies.

Anaplan approaches planning in a different way than traditional finance-centric solutions. "Our platform sits on top of any other transactional systems (like ERP) and is not tied to bundled solutions," says Morton. "This reduces friction and rapidly increases the agility of data analysis and decision-making."

Dave Morton
CFO of Anaplan

Headquarters: San Francisco
Year founded: 2008
Employees: 1,100
Product category:
Financial planning and modeling



Anaplan's cloud-based solution uses a proprietary, in-memory modeling engine called Hyperblock. The company says the technology allows thousands of concurrent users to access a centralized data pool and also facilitates planning models that reach down to the level of individual transactions.

How are businesses deploying Anaplan's platform?

"THE POWER OF THE PLATFORM STARTS WITH THE OPPORTUNITY TO REEXAMINE AND REIMAGINE YOUR PROCESS TO MAKE IT BETTER," SAYS MORTON.

Financial planning and analysis, demand and supply chain planning, and sales compensation and territory management are among the applications, according to the company. A life sciences client is using it to manage a drug trial, all the way down to the patient level. A media industry customer uses it to manage every product launch and product discount. "With a unified data source for all trade promotion efforts, the [company's] process is more efficient and reliable," says Morton. "They've replaced spreadsheets with real-time reporting and now have complete confidence in the data."

Additionally, in concert with Deloitte, Anaplan has developed a tool for consumer packaged goods companies that handles demand planning tied to consumer promotions. Deloitte and other large consulting firms are important partners for Anaplan, which has about 1,000 trained consultants. They use the platform to deliver their solution set, which might be around zero-based budgeting, for example, or the reduction of working capital, says Morton.

"The power of the platform starts with the opportunity to reexamine and reimagine your process to make it better, so you can do more and solve for an even bigger challenge," he adds. "We recommend that our customers work with an implementation partner to help them realize even greater value."

As of fiscal year 2019, ended January 31, Anaplan had 248 accounts with annual recurring revenue of more than \$250,000. The company's total revenue increased 43% year over year, to \$241 million. For fiscal 2020, Anaplan projects another 32% of revenue growth.

Equity investors have high expectations, too, as Anaplan boasted a \$5 billion valuation in late March. "We're on a strong financial trajectory to grow revenues, drive leverage in the business model, and increase our cash-flow generation." Sound too optimistic? One of Anaplan's financial services customers has been able to reduce its planning process from three months to one week. If other customers get similar results, Anaplan could become a juggernaut.

• VINCENT RYAN

10 MORE TO KEEP AN EYE ON

These companies are also striving to help enterprises corral their data and use it to operate more intelligently.

1

Zendesk

Category: Customer service

The Zendesk customer support platform helps customer conversations flow seamlessly across phone, chat, email, and social media. Communications are managed in one place, so team members can track conversations and follow an ongoing thread. Customers include Airbnb, Ingersoll Rand, and Tesco.



2

CCH Tagetik

Category: Corporate performance management

Aimed at “growing, complex organizations,” CCH Tagetik’s software won numerous product awards this year. The platform shortens the consolidation and closing process and helps finance compare the impact of different scenarios. A new analytic “hub” enables the collection, transformation, and validation of all kinds of data from any source to create a single financial ecosystem.

3

Chorus.ai

Category: Performance management

Still using old technology to record calls? Chorus.ai captures, stores, and analyzes conversations in sales calls and customer meetings, helping management break down the predictors of success. A sales team can dive deep into calls using a proprietary algorithm that detects critical moments.

4

Stabilitas

Category: Threat management

Stabilitas’ threat response software monitors real-time security information and delivers instant alerts when assets are impacted or at risk. Applications include crisis communications, business continuity, and travel risk management.

5

GTreasury

Category: Treasury management

GTreasury is a veteran in the treasury space. It had a notable 2018, with heady revenue growth, a new CFO, and the acquisition of Visual Risk. Its integrated, end-to-end cash and risk management solution streamlines processes while providing visibility into liquidity, payments, and financial risk management. The platform connects cash positioning, forecasting, and banking in-house, offering full visibility.

6

Sage Intacct

Category: Accounting



Sage Intacct’s cloud-based platform provides financial and operational insights in real time. The solution also offers time

and expense management, project accounting, and revenue management. “From our front-end [accounts receivable] system to our [accounts payable] process, we have reduced our timeframes from days to a matter of hours,” says one user on G2 Crowd.

7

Shopify

Category: E-commerce

Among the myriad e-commerce platforms, Shopify stands out. It has 800,000 active stores bringing in \$100 billion worth of sales. The platform makes it simple to launch, manage, and grow an online store. Merchants can sell across multiple channels, including online marketplaces, social media, and in-person with point-of-sale.

8

Apptio

Category: IT spend optimization

Make smart decisions as you plan, analyze, and optimize technology investments. Using machine learning, Apptio’s software translates technology costs across a company’s IT portfolio. The software helps users set future targets and measure business results.

9

OmiseGo

Category: Digital wallet

Ethereum-based OmiseGo says it is “the answer to a fundamental coordination problem” among payment processors, gateways, banks, and others: the inability to exchange value and make payments across both fiat money and cryptocurrencies. OmiseGo’s goal? Disrupt mainstream banking and offer freedom to conduct commerce outside of traditional networks.

10

IVM

Category: Smart vending

Used by the likes of Intel, Microsoft, and Facebook, IVM’s smart vending and locker solutions let employees swipe their ID badge and access everything from repair and operations products to IT peripherals, PCs, and office supplies. The smart vending lockers report on stock levels and track key metrics such as supply costs, procurement process costs, and overhead.





FIRST PERSON **Andy Fastow and Me**

Enron's former CFO and convicted felon Andrew Fastow talks with the *CFO* writer who first chronicled his "groundbreaking" manipulation of accounting rules.

•
BY RUSS BANHAM



Twenty years ago,

CFO gave Enron finance chief Andrew S. Fastow a CFO Excellence Award in the category of “capital structure management.” In a feature story naming him an award recipient, Fastow said, “Our story is one of a kind.” Little did he know how prophetic those words would soon become.

I remember Fastow well, as I wrote that October 1999 story. It explored his financial wizardry in helping turn a sleepy natural gas pipeline company into a blazing energy trading firm. At its height, Enron was the seventh largest company in America; its market capitalization hit \$35 billion. For the story, I interviewed Fastow, Enron’s CEO Kenneth L. Lay, and president and COO Jeffrey K. Skilling. All would soon become notorious.

Two years after the story appeared, Enron became the biggest accounting scandal in American history. The upsurge in market capitalization that Fastow crowed about had been whittled down to nothing. His financial wizardry, as it turned out, was “smoke and mirrors” designed to mask Enron’s true financial performance. The company filed for bankruptcy on December 2, 2001, putting thousands out of work. Most of Enron’s employees had invested their retirement savings in the company’s stock. Other shareholders lost billions.

A U.S. Securities and Exchange Commission investigation followed, as did a criminal investigation by the U.S. Department of Justice. Fastow was charged with 78 counts of fraud for his central role in developing the off-balance-sheet special-purpose entities that led to the company’s collapse. He subsequently entered a plea agreement, forfeited his net worth of \$24 million, and served a six-year prison sentence in a federal detention center in Oakdale, Louisiana. He was released from prison in December 2011.

The CFO article on Fastow was the first in-depth piece of journalism to lay out the complex finance and accounting strategies that underpinned Enron’s meteoric rise. In the story, Fastow was lauded. Said one Lehman Brothers analyst, “Thanks to Andy Fastow, Enron has been able to develop all these different businesses, which require huge amounts of capital, without diluting the stock price or deteriorating its credit quality—both of which actually have gone up. He has invented a groundbreaking strategy.”

What I had failed to capture, in a story meant to celebrate Fastow as a CFO wunderkind, was his shrewd manipulation of the accounting rules,

which was unbeknownst to me and the impartial panel of CFOs who selected him for the award. He had been the chief engineer of the deals that made Enron’s financial performance and balance sheet appear much stronger than they were.

When Enron blew up in 2001, some of the fallout struck me as the writer of the article. I received anonymous emailed death threats, perhaps from embittered employees and shareholders. Although I was simply the messenger, I still felt guilt and shame.

He’s Back

I write this prologue for a reason. Over the past two years, Fastow has been on the public speaking circuit. A few months ago, I reached out to him on LinkedIn to request an interview. In our subsequent discussions via Skype, two of his comments stood out.



“I received anonymous emailed death threats, perhaps from embittered employees and shareholders. Although I was simply the messenger, I still felt guilt and shame.”

—Russ Banham,
CFO writer

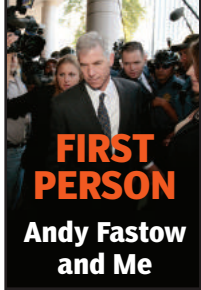
which was unbeknownst to me and the impartial panel of CFOs who selected him for the award. He had been the chief engineer of the deals that made Enron’s financial performance and balance sheet appear much stronger than they were.

During a Skype interview, he set up his laptop so I could watch a video of his keynote speech on trust and ethics in front of 2,000 people at the “In the Black: Accounting & Finance Innovation Summit” in Las Vegas, sponsored by Blackline.

A few minutes into the speech, Fastow walked offstage and came back. In his right hand, he was

One was his assertion that the factors causing the collapse of Enron are in play at other companies. The other was his contention that the Sarbanes-Oxley Act, enacted in 2002 to prevent another Enron debacle, will not stop another Enron from happening.

He had given presentations over the past two years to university business students and organizations of certified fraud examiners, but these were his people—finance and accounting professionals. As one finance executive in the audience later told me, “I wanted to know what the world’s greatest CFO criminal mastermind could possibly have to say about ethics and trust.”



holding his CFO Excellence trophy. In his left hand was his prison identification card. He then raised both arms and said, “How is it possible to go from a CFO of the year to federal prison for doing the same deals?”

The thesis of Fastow’s presentation is rules vs. principles, his argument that someone can follow the rulebook and still fail to do the right thing. That was Fastow’s wrongdoing, according to him. “I found every way I could to technically comply with the [accounting] rules,” he told the assembled. “But what I did was unethical and unprincipled. And it caused harm to people. For that, I deserved to go to prison.”

“Legal Fraud”

In our conversations, Fastow repeated the fact that all his structured transactions were approved by Enron’s accountants, senior management, and board of directors; internal and external attorneys; bank attorneys; and its audit firm, Arthur Andersen. (That Arthur Andersen approved them is not saying much—after the Enron debacle, its auditing business shut down.) “How is it possible to have all these smart people approve these deals and end up committing the greatest fraud in corporate history?” Fastow asked me.

He then answered his own question. “The fundamental problem is this: Virtually all the safeguards that have been built into the system are compliance and legal procedures to catch rulebreakers. But rulebreakers are only part of the problem. The more insidious and dangerous problem is the rule ‘users’—the rule exploiters who find the loopholes.”

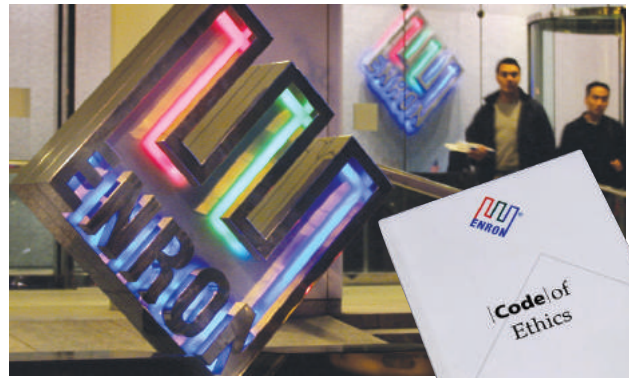
Fastow was perhaps the world’s best rule user of his time. All he needed were accounting assumptions and structured finance to transform the appearance of Enron.

There is some truth to what Fastow attests to about using loopholes. Bethany McLean, co-author (with Peter Elkind) of the book, “The Smartest Guys in the Room: The Amazing Rise and Scandalous Fall of Enron,” has stated on more than one occasion that what Fastow perpetrated was “legal fraud,” an oxymoron suggesting that a CFO can follow the rules and exploit them to such an extent that the end result is fraud.

“My just asking the question, ‘Am I following the rules?’ was insufficient,” Fastow said. “I should have also been asking the question whether or not my behavior was ethical. I may have been trying to stay within the rules, but I was also, most definitely, trying to be misleading.”

I asked Fastow if he believes other CFOs ever feel compelled to exploit the rules. He responded with an analogy about Bill Belichick, head coach of the New England Patriots, who says he uses obscure football rules to his team’s competitive advantage and to make sure it wins.

If I understand Fastow correctly, he believes human nature leads some people to do whatever they can to win, including bending the rules. The easier that is, the greater the chance of doing it.



A number of Enron’s executives faced a slew of charges, including securities fraud, conspiracy, and insider trading.

Enron’s use of mark-to-market (or fair-value) accounting, instead of the historical cost method, allowed it to recast deals that had resulted in a loss and recognize them as future profit. “Fair value accounting is a good example of where ethics come into play, as it provides you with all these gray areas that allow for creative flexibility,” Fastow said.

Such “creative flexibility” is in play today at many companies, he added, asserting, “All CFOs believe they are really good at identifying, processing, and managing risk, but the reality is that the brain sees what it wants to see. We process risk in a biased way.”



“My personal belief is that almost every CFO wants to be ethical and do the right thing, but the problem is identifying you’re in an ethical risk-creating situation to begin with.”

—Andy Fastow, former Enron CFO

that almost every CFO wants to be ethical and do the right thing, but the problem is identifying you’re in an ethical risk-creating situation to begin with.”

Pressed to elaborate, Fastow offered this example to me, a resident of Los Angeles: “You realize that virtually every seismologist agrees that California is 1,000 years overdue for a catastrophic earthquake. You’re sitting on a major fault line. And yet you don’t wake up every morning worrying about your family dying in a massive quake or your net worth being obliterated. You’re processing risk in a biased way—‘it won’t happen to me and even if it does it won’t be that bad.’ Your brain knows the answer you want—that you want to live in L.A. So, it dismisses or minimizes the risk.”

Making company results appear better than they are is actually not dissimilar. “CFOs know the answer they want—hitting the quarterly target,” he said. “So, their brains minimize risk in order to get there. My personal belief is

In other words, you can commit fraud and still be technically within the rules. What you can't do, though, is successfully argue in a court of law that because you didn't break the rules you are not guilty. Like Fastow, disgraced former CEO Bernie Ebbers of WorldCom learned this the hard way, when the Second Circuit Court of Appeals rejected his argument that the government had to prove violations of generally accepted accounting principles (GAAP) for his conviction on fraud and conspiracy to stand.

As the court stated in 2006, "To be sure, GAAP may have relevance in that a defendant's good faith attempt to comply with GAAP ... may negate the government's claim of an intent to deceive. [However,] if the government proves that a defendant was responsible for financial reports that intentionally and materially misled investors, the [securities fraud] statute is satisfied." Simply put, the intent to mislead investors signifies a criminal purpose, irrespective of accounting rule loopholes.

What It's Worth

It's not unusual for former convicts to leverage their "expertise" in helping law enforcement. Bank robber Willie Sutton spent his last years consulting with banks on theft-deterrent techniques. Fastow is giving talks about rules vs. principles and consulting with corporate management and non-executive board directors about corporate culture and unrecognized risks—the "dangers of the gray areas."

These gray areas stain all regulations, claimed Fastow, including the Sarbanes-Oxley legislation. "SOX is only asking 'Are you following the rules?'" Fastow said. By now his point is clear: Ethics in corporate governance, an even timelier subject these days, is crucial.

Asked what boards of directors can do to feel confident that they have a clear picture of financial results, Fastow touted the data transparency provided by finance and accounting software. He further noted the possible use of an artificial intelligence (AI) tool developed by software provider KeenCorp that analyzes employee emails for evidence of negative tension in a company.

In 2016, KeenCorp, analyzed several years' worth of emails sent by Enron's top 150 executives. Not surprisingly, when Enron approached insolvency, index scores fell precipitously, signaling high amounts of tension among executives. Yet, two years earlier, on June 28, 1999, when Enron seemingly was on top of the world, equally low scores were posted. The firm reached out to Fastow in 2016 for an explanation.

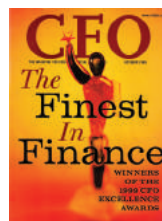
It turns out that on that date in 1999, Fastow had spent hours talking with Enron's board and senior management about "LJM," the name given the complex transactions he'd designed to hide the company's poorly performing assets to spruce up its financial statements. The software's analysis of emails that day intuited negative tension about the deals.

"The algorithm pinpointed the day when the most existential decision was made," Fastow said. (Fastow has since become an investor in KeenCorp, it should be noted.)

Not to Be Forgotten

After nearly two decades, some of the facts about the Enron scandal are starting to fade from memory. Here were some notable ones.

- **Andy Fastow** was fired in October 2001 after a *Wall Street Journal* story revealed that a limited partnership he had set up as finance chief racked up millions of dollars in profits from transactions conducted with Enron. The partnership had been created in December 1999.
- Not too long afterward, **Enron restated earnings** going back to 1997, shaving nearly \$600 million off net income from 1997 to 2000, or about 23% of what had been reported.
- In December 2001, the Securities and Exchange Commission and a few congressional committees were seeking out Fastow, who **it was rumored had fled the country**, possibly to Israel. Fastow resurfaced at a New York press conference, which his lawyer held to dispel the rumors. His lawyer was **David Boies**, who later represented the NFL in its antitrust litigation and sat on the board of Theranos.
- Fastow's right-hand man, former managing director of **Enron Global Finance Michael Kopper**, struck a plea deal with the feds in October 2002. He identified Fastow as a major player in the accounting schemes. **Kopper served 23 months in prison**. He was the first high-ranking Enron executive to plead guilty.



- There were some prominent executives among the other recipients of **CFO's Excellence Awards** in 1999. They included Greg Maffei, Microsoft; Larry Carter, Cisco Systems; Lawrence Kellner, Continental Airlines; John B. Menzer, Walmart; and Richard F. Wallman, AlliedSignal. Maffei is now CEO of Liberty Media and Kellner was CEO of Continental Airlines from 2004 to 2009. Menzer was CEO of Michaels Stores from 2009 to 2012.

What is one to make of Andy Fastow today? It's a difficult question. I reached out to three finance and accounting professionals who attended the "In the Black" summit. They said he appeared humbled by his ethical lapses and had something useful to offer. However, none of them had personally suffered from Fastow's criminal manipulations. And that's exactly what they were.

His victims might be pleased to know that Fastow appears condemned to forever make his penance. Despite it all, though, his family held together, offering him a measure of solace. As someone linked to him in perpetuity, I'm happy for that. **CFO**

Russ Banham is a Pulitzer-nominated financial journalist and best-selling author.

Hire Quickly and Compliantly Worldwide

Ease the challenges of managing an international workforce with a global employer of record. **By Chris Schmidt**

For a growing company, pursuing and achieving the goal of international expansion can be fraught with challenges—especially for firms unaccustomed to navigating the legal, regulatory, and cultural terrain of an unfamiliar locale. Indeed, in a new survey of U.S. senior finance executives working at companies expanding abroad, about half (51%) agreed that legal, human resources, or tax compliance challenges have been a substantial barrier to implementing their international strategies. The survey was conducted by CFO Research, in collaboration with Globalization Partners, a global employer of record.

On the legal and regulatory front, hiring even one overseas employee can require setting up a subsidiary or regional presence to handle all personnel functions. Those functions include registering with tax authorities, opening local bank accounts, acquiring local commercial certifications, and administering payroll and employee benefits in accordance with local laws and regulations.

Some companies look to skirt regulations by setting up international employees as contractors. But they must

be careful to ensure that contractors, by virtue of their responsibilities, aren't actually employees entitled to the rights and benefits associated with that status. Misclassifying contractors can lead to fines and other penalties.

Simplifying Global Expansion

Given the HR challenges associated with overseas expansion, many companies turn to a model in which they outsource the international employment process to a third-party specialist. This third party, known as a global employer of record (EOR), is the legal entity that employs workers in a foreign country on behalf of a client. A global EOR handles recruiting (or simply onboarding of new hires), manages payroll, and offers benefits packages in line with local requirements and expectations. The global EOR assumes all responsibility for compliance with legal requirements. Its on-the-ground presence ensures that it's in touch with the local employment culture, too.

In the CFO Research survey of 53 senior finance executives, more than half (58%) of respondents said their organizations already engage a global EOR to support their international business strategy or plan to do so in the next three years. This group included 23% who work with a global EOR today, and 19% who planned to do so within one year. What's more, nearly all the survey respondents—94%—agreed that a trusted global EOR can do a much better job of overcoming potential barriers to in-country operations than a typical company can do on its own. And 96% agreed that it's essential for CFOs to understand the capabilities of a trusted global EOR to fully inform enterprise decisions on overseas expansion.

The top perceived benefit of working with a global EOR is the assurance of legal and HR compliance, cited by 51% of survey respondents, followed by the assurance of being in regulatory compliance (42%) and the ability to leverage the global EOR's local knowledge (40%).

In fact, many finance executives (83%) saw using a trusted global EOR as a best practice for relieving the management and administrative burdens of overseas business expansion.

FIGURE 1

Which of the following regulatory and legal compliance issues related to overseas expansion are most critical for global employers of record to successfully address?



Multiple responses allowed

Risk Mitigation

A large number of finance executives—85% of those surveyed—agreed that using a trusted global EOR is also a best practice for addressing the enterprise risks that accompany overseas ventures.

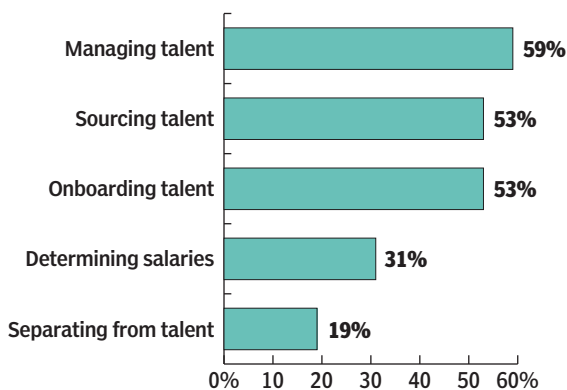
Those executives identified a wide range of risks companies assume when they grow beyond their own country's borders. At the top—and deemed most critical for global EORs to successfully address—are regulatory and legal compliance risks, cited by 66% of survey respondents. Notably, that figure is up 10 percentage points from a similar CFO Research survey in 2018, although in 2018 it was still the top risk cited. The uptick may reflect an appreciation for how quickly laws and regulations relating to employment can change around the globe.

Tax structure challenges were another leading risk, cited by 51% of survey respondents (up from 46% a year earlier), as was human capital/talent availability, cited by 45% (up from 38% a year ago). Roughly a third of survey respondents said they were also worried about political instability impacting their international business operations.

Which regulatory and compliance issues were seen as the most important for global EORs to manage? Ensuring compliance with tax laws was cited by 55% of respondents, followed by ensuring compliance with labor laws (53%) and international trade laws and agreements (47%). (See Figure 1.)

FIGURE 2

Which of the following human capital/talent issues related to overseas expansion are most critical for global employers of record to successfully address?



Multiple responses allowed



83%

of finance executives saw using a trusted global EOR as a best practice for relieving the management and administrative burdens of overseas business expansion.

.....

Managing Talent Worldwide

A global EOR can help find and onboard talent when staffing an office or operation in a new country. Both were cited as human capital challenges that were critical for global EORs to address. (See Figure 2.)

But according to senior finance executives, the most important thing a global EOR can do—cited by 59% of survey respondents—is to manage that talent.

The reasons aren't hard to fathom. Employees not only need the tools to succeed, but also want to know their position is legally secure and stable and that their employer understands their specific needs and expectations. A global EOR's on-the-ground presence and in-country experience can

help to ensure success on all those fronts.

Employees working in a distant country also have a natural desire to feel connected to and engaged with their employer. Even simple things that a global EOR can offer—like onboarding videos in the local language—can be important in building a long-distance employer-employee bond.

Interestingly, nearly one in five senior finance executives believed global EORs also have an important role to play if a company has to let go of an international employee. Just as each country has laws and regulations defining what rights and benefits workers are entitled to as employees, so each country has its own rules for terminating employees. A global EOR, familiar with local laws and culture, can help clients sidestep costly mistakes.

In sum, expanding into another country, whether that means hiring a single sales representative or building a large distribution or manufacturing facility, presents numerous challenges for employers. Beyond getting their international strategy right, businesses have to comply with a vast array of laws and regulations when hiring, compensating, and terminating employees. And they must be sensitive to local employment customs if they're going to earn the goodwill of their new employees. Finally, they must be prepared to repeat this process over and over again as they move into still more countries, since employment law and norms can vary greatly from one to the next.

For a clear majority of survey respondents, the solution is to offload these responsibilities onto a trusted global EOR whose global reach and local presence in countries around the world allows them to navigate employment challenges on their clients' behalf. Businesses that opt for this solution enter new geographies more confidently, capably, and quickly than they could on their own. **CFO**



Stay or Go

If inhabitants of the United Kingdom had access to a time machine, we're pretty sure they would turn back the clock to February 20, 2016. That's the date former Prime Minister David Cameron announced a public referendum on whether the UK should leave the European Union. See how much you know about the long-running British political drama dubbed "Brexit."

- 1 What was the result of the June 2016 referendum on whether Britain should remain in the EU?
 - A. A tie; 50% for Leave, 50% for Remain
 - B. 57% for Remain
 - C. 65% for Leave
 - D. 52% for Leave
- 2 Which country or geographic region did not vote to remain in the EU?
 - A. London
 - B. Northern Ireland
 - C. Scotland
 - D. Wales
- 3 What was the official slogan of the Leave campaign?
 - A. "Return to Normalcy"
 - B. "Change We Need"
 - C. "Take Back Control"
 - D. "Forward"
- 4 Since the Brexit vote, which trio of companies announced plans to move a headquarters or main office out of the UK?
 - A. Sony, Panasonic, Dyson
 - B. Barclays, Sainsbury's, Land Rover
 - C. Royal Dutch Shell, Total, Allianz
 - D. Total, Nestle, Amazon
- 5 Which EU city has been the most popular for the relocation of London-based banks?
 - A. Amsterdam
 - B. Dublin
 - C. Frankfurt
 - D. Paris
- 6 In the context of a Brexit withdrawal agreement, to what does the term "backstop" refer?
 - A. A fallback plan for a partial UK withdrawal
 - B. A deal to ensure no "hard border" in Northern Ireland
 - C. A central bank scheme to prop up the British Pound
 - D. An emergency post-EU immigration policy
- 7 Which territory of a EU member state withdrew from the EU (or its predecessor the European Community) in 1985?
 - A. Greenland
 - B. Cayman Islands
 - C. French Guiana
 - D. Falkland Islands
- 8 In the HBO movie, "Brexit," Benedict Cumberbatch plays which real-life person?
 - A. Michael Gove, British politician
 - B. Dominic Cummings, Leave campaign director
 - C. Nigel Farage, Brexit party leader
 - D. Matthew Elliott, lobbyist

ANSWERS: 1-D; 2-D; 3-C; 4-A; 5-C; 6-B; 7-A; 8-B

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