CFO

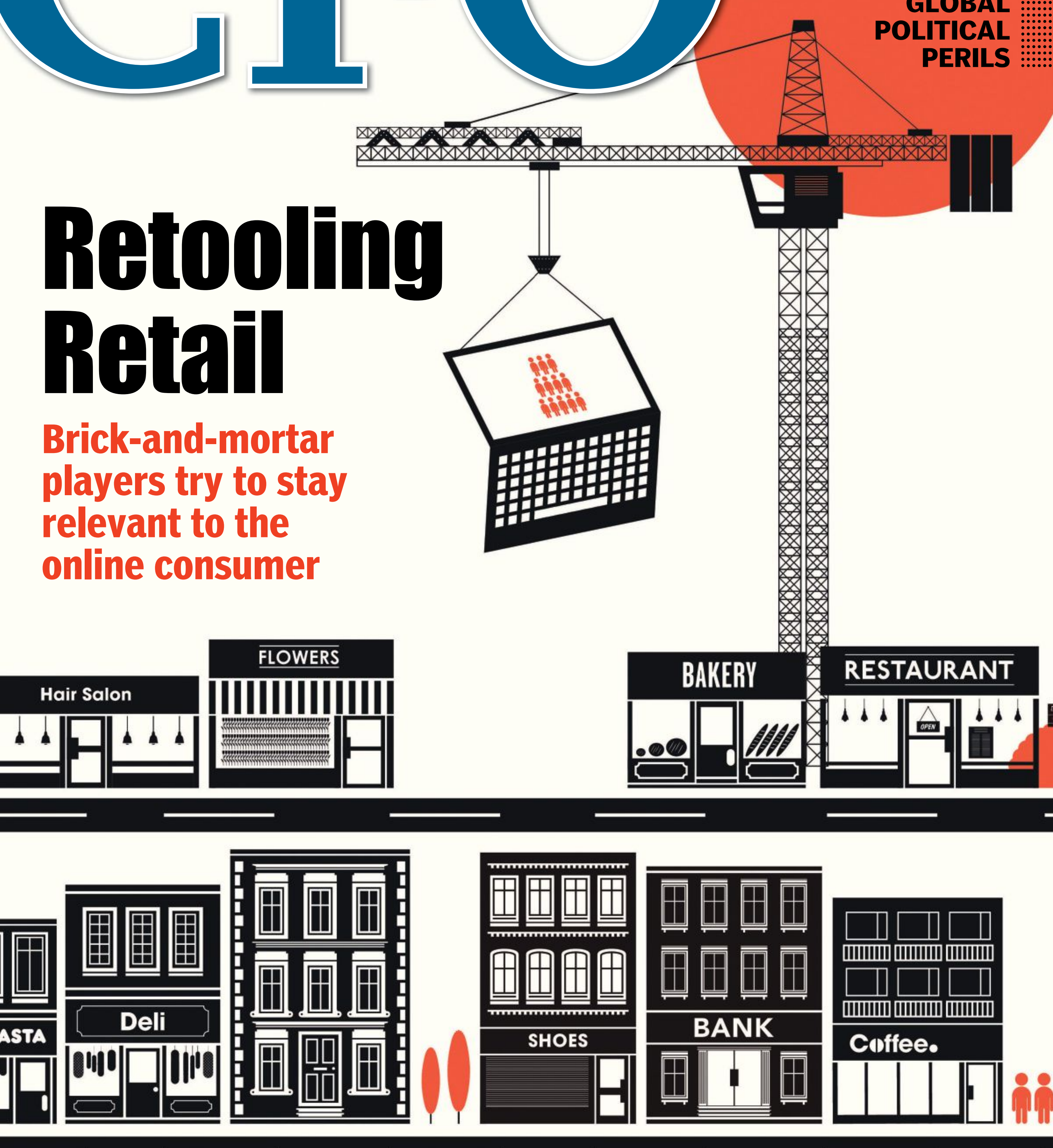
NOVEMBER 2016 | WWW.CFO.COM

FLEXIBLE, ATTENTIVE BANKS WANTED

GLOBAL POLITICAL PERILS

Retooling Retail

Brick-and-mortar players try to stay relevant to the online consumer



November 2016
Volume 32, No. 9

COVER STORY

24
The Changing Face of Retail
Can innovation by traditional retailers overcome the disruptive force of e-commerce?
By David M. Katz

30
A Time Of Distruption
Political scenarios aplenty threaten global growth and the fortunes of multinationals.
By Ed Zwirn

40
Wanted: A Flexible, Attentive Bank
Corporate clients know what they want in a commercial bank, according to our third annual banking survey, but they rarely get it. **By Vincent Ryan**

36
›› Special Report: Predictive Analytics
The Power to Predict
What can predictive analytics really accomplish? Here are six examples of how firms are forecasting future probabilities and trends.
By Keith Button

Cover: Getty Images; clockwise from top left: Thinkstock (2)

CONTENTS

November 2016
Volume 32, No. 9

Up Front

4 ›› From the Editor

6 ›› Letters

8 ›› Topline ◗ FP&A function improves as tech spending rises ◗ SEC nabs EY over defective audits ◗ IPO market revived by tech ◗ fewer shares of stock granted to employees ◗ more companies buying cyber insurance ◗ CFO liability clarified ◗ and more.

14 | TECHNOLOGY

Ramping Up the Role Of Analytics Leader

The finance function, after years of stubbornly holding onto spreadsheets, is finally starting to delve into advanced analytics to make predictions about the future.

◗ **By Tom Davenport and Adrian Tay**

18 | ACCOUNTING

Eyes on the Size

Not all finance funtions are equally productive. For example, the best-performing companies need fewer employees to perform the general accounting function. Why?

◗ **By Mary Driscoll**

Spotlight: Intercompany Accounting

Regulators are targeting the historically lax process of accounting for intercompany transactions.

◗ **By David McCann**

20 | BANKING & CAPITAL MARKETS

The Longest Cash Cycle

Can financing mobile phone installment plans in the asset-backed security market cure wireless carriers' elongated cash cycles and mounting working capital requirements?

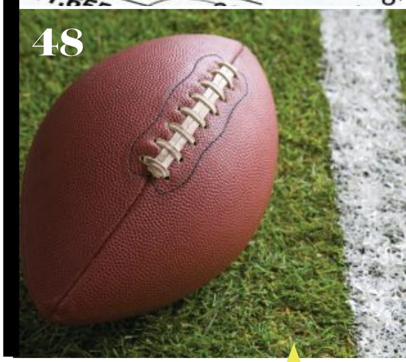
◗ **By Vincent Ryan**

22 | STRATEGY

Behind the Screens

In his new book, Lawrence Levy details his experience as CFO of Pixar, from before the release of *Toy Story* to the company's IPO.

◗ **By David McCann**



By the Numbers

44 ›› DEEP DIVE

CFO *Takes the Pulse of CFOs*

Is Breaking Up Always Hard?

In the latest Duke University/*CFO* Global Business Outlook Survey, finance executives reveal few concerns about the UK's Brexit decision.

By Josh Hyatt

46 ›› FIELD NOTES

Perspectives from CFO Research

New and Improving

Globalization and rapid technological change have finance executives rethinking their role in cultivating innovation.

By Josh Hyatt

48 ›› The Quiz

Money Machine

How much do you know about the National Football League, a business that would rank among the 200 largest corporations in the United States? Take our quiz on the most valuable professional sports league to find out.

Clockwise from top right: Thinkstock (5)


Seeing is believing.
Uncovering anomalies is at the heart of audit's value.
With advanced technology in the hands of experienced professionals, KPMG audit teams can enhance quality by identifying anomalies which can lead to new insights. Find out how the ability to use more robust data and precision analytics can bring greater visibility to the business.
kpmg.com/us/audit
Anticipate tomorrow. Deliver today.
KPMG
©2016 KPMG LLP, a Delaware limited liability partnership and the U.S. member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

A 10-Year Plan

»As you prepared your company's budget for 2017, did you consider where the business would be in 10 years? ¶ The World Economic Forum defines a global risk as "an occurrence that causes significant negative impact for several countries and industries over a time frame of up to 10 years." That element of time sparks a line of thought: Which global risks that we know of today will still be with us in a decade? Climate change is certainly one. But what about cybersecurity threats? Will they be vanquished by 2026?

Imagining the future can help organizations determine which current risks will be lasting and require ongoing investment. Taken further, the 10-year time frame works for the entire corporate mission. Which parts of a business are likely to survive the next 10 years, and which are likely to fade away? Shouldn't that at least be guiding decisions on M&A, R&D, and global expansion?

Of course, assessing the current state of a market or business is much easier than predicting what may come next. There is an element of guesswork whenever you try to forecast: In predicting the future, it seems, we tend to make a lot of mistakes. "Over-optimism" is one. We assume that change will happen faster than it likely can.

The brick-and-mortar retail industry, which we profile in this issue (see "The Changing Face of Retail," page 24), is awash in secular change. E-commerce as a percentage of total retail spending in the United States is at 10%, and will at least double by 2026. But it could easily triple, and that might be the straw that breaks the camel's back for large traditional retail brands like Macy's. After all, in 2006, who could have predicted that a little text messaging program like WhatsApp would, in 10 years, be used by more than 1 billion people in 180 countries?

The fact is, for the most part, the C-suite doesn't consider a horizon as long as 10 years. And the average tenure for a CFO is a little more than 5 years, so what motivation is there? It's a shame, really. Many businesses will be wiped out in the next decade, and some that are thriving now will be under crippling competitive pressure. Will your company be one of them?

Vincent Ryan
Editor-in-Chief

CFO, Vol. 32, No. 9 (ISSN 8756-7113) is published 10 times a year and distributed to qualified chief financial officers by CFO Publishing LLC, 295 Devonshire St., Suite 310, Boston, MA 02110 **(editorial office).** Requests for reprints and permissions should be directed to FosteReprints, (866) 879-9144; E-mail: rhondab@fosterprinting.com; website: www.fostereprints.com. Periodicals postage paid at Boston, MA, and additional mailing offices. **POSTMASTER:** Send address changes to **CFO,** 45 West 45th Street, 12th Floor, New York, NY 10036. ***CFO*** is a registered trademark of CFO Publishing LLC. **SUBSCRIBER SERVICES:** To order a subscription or change your address, write to CFO, 45 West 45th Street, 12th Floor, New York, NY 10036, or call (212) 459-3004; or visit our website at **www.cfo.com/subscribe.** For questions regarding your subscription, please contact subscription@cfo.com. To order back issues, call (212) 459-3004. Back issues are $15 per copy, prepaid, and VISA/MasterCard orders only. Mailing list: We make a portion of our mailing list available to reputable firms.

EDITOR'S PICKS

FINANCE

CFO's Controller Summit takes place in Boston on November 30–December 1. This year's themes include accounting transformation, fostering leadership, and improving the close process. Among the speakers are the controllers of Danone and Bose, and the finance controller of GE Power. For more information, go to: https://theinnovationenterprise.com/summits/controller-summit-boston-2016/speakers.

TECHNOLOGY

Which decisions should we be comfortable delegating to algorithms and which ones should humans retain? In "When to Trust Robots with Decisions, and When Not To," Vasant Dhar of NYU lays out a risk-oriented framework for doing so. Read his HBR article at https://hbr.org/2016/05/when-to-trust-robots-with-decisions-and-when-not-to.

Mark Bennington

We treasure our relationships with our audience—even those among it who hold our feet to the fire.

One reader took issue with comments by accounting luminary Baruch Lev, who argued that "voluminous and increasingly complex quarterly and annual reports" have lost most of their "usefulness to investors." Further, he opined in an interview with *CFO* **("The End of Accounting?", Oct. 20)**, such reports "don't provide linear information about what will happen in the future."

The reader chastised Lev for his dismissal of traditional reporting. "Yes, GAAP has become more and more complex," he wrote, "but that has been driven by both the growing complexity of business models—can you summarize Pfizer in a page?—and willful attempts to spin results in a manner that makes things seem rosier than they really are.

"While it is true that financial results are of historical significance, to say or even imply that they have no or little predictive value is to ignore what the world tells us. A case in point now is Sears, which is on a watch list for bankruptcy in the next two years. And the list of predictive uses goes from there."

THE BUZZ

In an article about a Deloitte survey touching on politics and economics **("CFOs: Financial Future Hangs on Upcoming Election," Oct. 4)**, 87% of finance chiefs opined that the election's outcome would impact their companies financially, "at least somewhat." Therefore, the article said, CFOs will be cautious over the next year.

That elicited this (somewhat) snarky comment: "87% believe the election will affect their economic future, somewhat? So will the coming winter, spring, and summer, somewhat. **As for CFOs being cautious about the next 12 months, when are CFOs not cautious?"**

An Oct. 11 article, "More Pain Ahead for States' Pension Plans," told of Moody's prediction that states' unfunded liabilities will increase by 40% over the next two years. Just bringing up public pensions was enough to ignite a fiery response from an ardent critic of the same. The comment didn't quite complete its point, but there's no mistaking the sentiment:

"Recognizing how these extraordinarily generous pensions were granted, via **collusion between the public-sector unions and our elected officials,** with the former buying the favorable votes of the latter (on pay, pensions, and benefits) with campaign contributions and election support"—and so on. Pity on politicians.

CFO

ARGYLE

CFO Publishing LLC is a wholly owned subsidiary of Argyle Executive Forum LLC, 122 W 26th Street 2nd Floor, New York, NY 10001
www.argyleforum.com

PRESIDENT & CEO Danny Phillips

CFO Magazine/cfo.com

EDITOR-IN-CHIEF
Vincent Ryan (vinceryan@cfo.com)

MANAGING EDITOR Deana Colucci

DEPUTY EDITORS:
David M. Katz (davidkatz@cfo.com)
David McCann (davidmccann@cfo.com)

WEB EDITOR Sean Allocca

CFO Marketing Services

DIRECTOR, MARKETING SERVICES
Chris Schmidt

CONTENT MANAGER
Kim Zimmerman

SENIOR WEBCAST PRODUCER
Joe Fleischer

Advertising Sales

SVP, SALES Katie Brennan, (646) 277-6476

NORTHEAST
Haley Moore, (646) 277-6478; fax: (212) 459-3007
Brian Kleve, (646) 556-7653; fax: (212) 459-3007

MIDATLANTIC/SOUTHEAST
Matt Moore, (212) 488-4702; fax: (212) 459-3007
Brian Kleve, (646) 556-7653; fax: (212) 459-3007

CENTRAL/CENTRAL MIDATLANTIC
Brian Kleve, (646) 556-7653; fax: (212) 459-3007

MIDWEST, PACIFIC NW
Shelly Schmeling, (312) 932-9392; fax: (212) 459-3007
Brian Kleve, (646) 556-7653; fax: (212) 459-3007

WEST COAST
Judy Hayes, (925) 736-7617
Brian Kleve, (646) 556-7653; fax: (212) 459-3007

Editorial Offices

295 Devonshire St., Suite 310
Boston, MA 02110
(617) 345-9700

45 West 45th St., 12th Floor
New York, NY 10036
(212) 459-3004

Subscriber Services

www.cfo.com/subscribe

CFO WELCOMES YOUR LETTERS

Send to: The Editor, *CFO,* 295 Devonshire St., Suite 310, Boston, MA 02110, or e-mail us at: letters@cfo.com. Please include your full name, title, company name, address, and telephone number. Letters are subject to editing for clarity and length.


saama
Data leads to insight.
Insight leads to opportunity.
Opportunity leads Silicon Valley to Ohio.
Saama is smart. Which is why they're expanding in Ohio.
Saama, the Silicon Valley-based leader in mining data-driven insights, needs talent and thriving business ecosystems to succeed. Which is exactly what they discovered in Ohio. But don't take our word for it.
Take theirs.
See why Saama chose Ohio at jobs-ohio.com/Saama
Tech pioneer Ken Coleman, Saama Chairman
Welcome to Ohio. It's on.
Ohio

STATS OF THE MONTH

THE ENFORCER

868
Total SEC actions filed in the government's fiscal year 2016, compared with 807 the prior year

$4 billion
Total disgorgement and penalties ordered by the SEC in 2016

$57 million
SEC distributions to whistleblowers, a single-year high

21
Record number of actions filed by the SEC under the Foreign Corrupt Practices Act

Note: all data based on the government's fiscal year ended September 30, 2016
Source: Securities and Exchange Commission

Topline

TECHNOLOGY

Disappointed with FP&A? Ramp Up Tech Spending

Investing in today's analytics tools will easily pay for itself in staff time saved and better-quality analysis, AFP study finds.

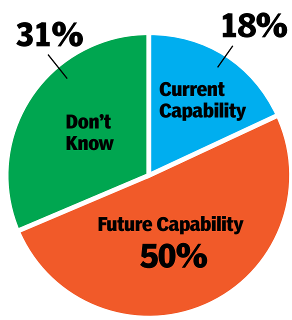
It might not come as much of a surprise to learn that the more companies spend on analytics technology, the better the performance of their financial planning and analysis functions. What might be less intuitive is just how extreme the advantage is when using more FP&A-oriented technology.

In an Association for Finance Professionals survey of 255 FP&A practitioners, 55% said they primarily use spreadsheets to deliver analysis for the planning, budgeting, and forecasting process. AFP's research, however, strongly suggests that companies where spreadsheets are king are stuck in the past and falling far short of optimizing their FP&A functions.

The survey results reveal that, when investment in technology accounts for less than 10% of total FP&A spending, companies expend an average of 384 full-time-equivalent days per year, and a median of 60 FTE days, to collect and manipulate budget data (each "day" being the equivalent of one day of work by a full-time-equivalent staffer).

Use of Predictive Modeling* to Analyze Big Data

% distribution of organizations



*e.g., forecasting, time-series analysis
Source: Association for Finance Professionals' FP&A Benchmarking Survey, October 2016

Spending incrementally more on technology makes a huge difference. Where technology is 10% to 19% of FP&A spending, the average number of FTE days devoted to such activities falls by more than half, to 154, while the median also drops by half, to 30 days.

In fact, the more an organization spends on technology, the less time is wasted on "grunt work." Companies for which technology is 20% to 49% of the FP&A budget expend an average of just 62 FTE days, and a median of only 14 days, to collect and manipulate data.

The ability to automate transactional and reporting activities represents a big move up the maturity curve for FP&A, which not many years ago was typically a mostly backward-looking function.

"Greater investment in technology liberates FP&A staff to do what they were hired to do, and what their organizations need them to do: conduct robust analysis and forecasting to better inform their company's strategic decisions," says Jim Kaitz, AFP's president and CEO.

Many new analytics tools offer "self-service" functionalities that do not require

IT-department intervention, which often results in bottlenecks and delays in delivery of timely analysis to management and business leaders, according to AFP's report on the research.

Investment in technology also allows companies to look further into the future. Predictive analytics is a functionality that many FP&A teams see as the next big step forward, AFP notes. (See chart, facing page.)

"Cloud-based solutions free up FP&A analysts to run their own queries, giving them a chance to use real-time information to feed predictive models," AFP says. "FP&A functions that are not yet able to ask the 'why?' and 'what's next?' questions realize they must acquire that capability."

While large companies currently make greater use of predictive analytics than smaller ones, interest in the use of such technology is agnostic as to company size. Among those with annual revenue of at least $10 billion, 41% said they currently use predictive modeling for activities including forecasting and time-series analysis. And 45% identified it as a capability they expect to acquire in the future.

By comparison, only 15% of companies with revenue between $1 billion and $9.9 billion use predictive modeling. But 43% of them are looking to a future that includes that technology. Interest is even greater among firms with revenue of less than $1 billion: while 13% of them use predictive analytics now, 58% are targeting it for future use.

"Greater investment in technology liberates FP&A staff to do what they were hired to do."

›› Jim Kaitz, president and CEO, AFP

Another finding of the study is that analytics technologies allow companies better access to data. At 40% of companies, according to the research, data is still locked at business-unit levels, with insights generated by departments and lines of business. Only 9% of survey respondents said that "real-time, internal and external data is readily accessible across the enterprise based on need, information is shared extensively across the enterprise, and data-driven decision-making is part of the organization's culture."

DAVID McCANN

AUDITING

EY Fined $11.8M Over Defective Audits

Ernst & Young has agreed to pay more than $11.8 million to settle charges that it failed to detect an extensive accounting fraud at Weatherford International even though it had classified the oil services firm as a high-risk client.

The Securities and Exchange Commission accused EY of a "significant audit failure," saying auditors ignored red flags as Weatherford accumulated a "phantom" $461 million income tax receivable between 2007 and 2010. Despite Weatherford's reputation as "a particularly risky and difficult client" and "known deficiencies" in its controls over income taxes, EY accepted the client's unsupported explanations for post-closing accounting adjustments, the SEC said in an administrative order.

EY's payment of $9 million in disgorgement, $1.8 million in interest, and a $1 million penalty will add to the $140 million settlement to which Weatherford agreed. The SEC also censured Craig Fronckiewicz, the EY partner who coordinated the audits, and Sarah Adams, a former tax partner who was part of the audit engagement team.

"Audit and national office professionals must appropriately address known deficiencies in their auditing of high-risk areas, and auditors must have the fortitude to refuse to sign off on an audit if important issues remain unresolved," Andrew Ceresney, director of the SEC's division of enforcement, said in a news release. "Ernst & Young failed to ensure that material post-closing accounting adjustments were justified by appropriate audit evidence, leading to a significant audit failure."

Weatherford became a client of EY's Southwest region in 2001. According to the SEC, the firm concluded by 2004 that Weatherford posed a "significant risk," citing, among other things, its "domineering CEO," "acquisitive nature," and history of completing significant or unusual transactions at quarter-end or year-end.

As a result, the energy company was designated for "close monitoring," the highest-risk category that EY recognized, but it was not until February 2011 that the engagement team performed an additional review and discovered the phantom $461 million receivable.

"By failing to comply with PCAOB standards, [EY was] a cause of Weatherford's issuance of materially false and misleading financial statements," the SEC said. **MATTHEW HELLER**

Thinkstock

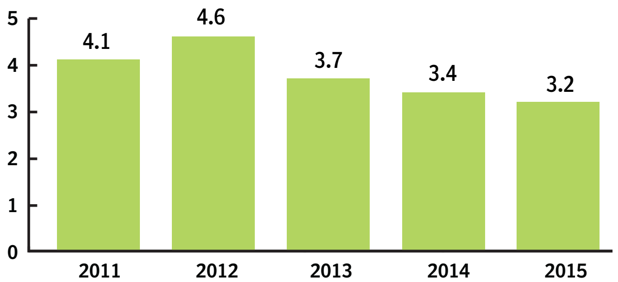
COMPENSATION

Fewer Shares, More Value Awarded

While more companies are using stock awards as a compensation vehicle, the number of shares granted has declined in recent years as stock prices rise and fewer shares are needed to deliver intended pay levels, according to a new report from compensation research firm Equilar.

Among S&P 500 companies, the average number of restricted shares or restricted stock units granted to employees was 3.2 million in 2015. While that amount rose from 4.1 million shares in 2011 to more than 4.6 million in 2012, it has since decreased.

Average Restricted Stock Grants
S&P 500 companies, in millions of shares



Source: Equilar

Consider, for example, that the S&P index has grown from about 1,220 in September of 2011 to more than 2,170 as of September 2016. Given this growth, when you do the math, companies are granting more overall value despite any decline in the number of shares granted.

In the past few years, a shift in pay design at the executive level has also contributed to this trend. For example, more than 80% of the S&P 500 companies now use performance equity awards for their top officers, compared with about 65% just five years ago, the report found. As a result, executive pay is now often tied to reaching specific performance goals in order to earn those shares.

"To some degree, companies have curtailed certain larger grants to their top executives in light of shareholder scrutiny and say-on-pay votes, and instead afford management an upside by tying company performance to equity pay," said Matthew Goforth, research and content specialist at Equilar. "By doing so, executives may earn more shares than were targeted, but only if they deliver superior performance."

By far, S&P 500 companies in the technology sector granted the most stock in 2015, awarding a median amount of approximately 2.8 million shares. That was two-and-a-half times as much as the next highest sector, utilities. D.M.

DISCLOSURE

Voluntary Audit Disclosures Growing

Large U.S. companies are continuing to increase voluntary audit committee–related disclosures in a number of areas, including how they oversee and appoint external auditors and the reasons for changes in fees.

In a review of the 2016 proxy statements of *Fortune* 100 companies, EY's Center for Board Matters said firms are exceeding the minimum disclosure requirements in response to the concerns of investors. Under the Sarbanes-Oxley Act of 2002, audit committees took on a much larger role in oversight of auditors, but the law didn't require them to disclose much about their efforts.

According to EY, more companies are disclosing how they oversee external auditors, with 82% specifying that the audit committee is responsible for the appointment, compensation, and oversight of the auditor, compared with 65% in 2014.

The percentage of companies that disclosed factors considered by the audit committee when assessing the qualifications and work quality of the external auditor increased by 50%, up from 42% in 2015.

"As institutional investors demand enhanced transparency and better communications from boards, audit committees at *Fortune* 100 companies continue to respond by offering greater insights into their oversight work," Ann Yerger, executive director of the EY Center, said. "It's encouraging that voluntary audit-related disclosures continue to grow."

EY reported a significant increase in disclosures stating that the audit committee believed the choice of external auditor was in the best interests of the company, the shareholders, or both. In 2016, 73% of companies disclosed such information, up from 63% in 2015 and only 3% in 2012.

As far as fee-related disclosures, 31% of companies provided information about the reasons for changes in audit fees, compared with 21% in 2015. M.H.

CAPITAL MARKETS

Tech Breathes New Life into IPOs

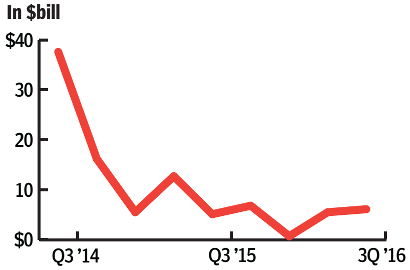
The sluggish IPO market is on track for one of its worst years since the financial crisis, but a resurgent technology sector, and the largest tech deal since the $25 billion Alibaba offering in September 2014, could help the market rebound from a shaky first half.

Thirty-three initial public offerings raised $6.1 billion in the third quarter, beating the $5.1 billion mark from the same period a year ago, and on par with the 10-year median average of $6.2 billion, according to a September report by Renaissance Capital, an IPO investment adviser and research firm.

The market continues to rebound after volatility triggered by Brexit earlier in the year, with companies that went public in the third quarter boasting an average return of 41%—the highest level since the fourth quarter of 2013—compared with a negative 4% average loss during that period in 2015. More than 9 in 10 companies (93.9%) ended the quarter with their stock above their offer prices. Third-quarter deal volume (33 IPOs) also remained relatively consistent with the prior period, but drastically outpaced a dismal first-quarter tally of only eight.

A Recovering Market

The U.S. IPO market returned to a level near its 10-year median in terms of dollars raised.



Note: total quarterly proceeds, U.S. IPOs
Source: Renaissance Capital

The tech sector provided the market with a much-needed shot in the arm, thanks primarily to the year's largest IPO by Japanese messaging app LINE. On file for more than two years, the LINE deal raised $1.1 billion, the most since Alibaba's IPO.

The second-largest tech deal came from the software company Nutanix, which raised $238 million, 42% more than anticipated. Nutanix's offering was the best-performing of the quarter with a 131% return. With 10 deals in the third quarter, tech has raised the most in IPO proceeds in 2016. **SEAN ALLOCCA**

INSURANCE

Cybersecurity Insurance: A Must-Have

Welcome to the brave new world of cybersecurity. A September survey by the Risk and Insurance Management Society found that 80% of responding companies bought a stand-alone cybersecurity policy in 2016. The takeaway: Policies exclusively covering cyber exposures are now the norm for many large companies.

The annual RIMS cyber survey polled 272 respondents on a range of issues, from cyber exposure concerns to first-party and third-party risk to government regulations.

Almost 70% of companies now transfer risk of cyber exposure to a third party. Twenty-four percent of the risk managers surveyed say their companies will each spend more than $1 million on cybersecurity protections, including active monitoring and employee education, by year-end.

"Failure to keep pace with technological advancements will leave an organization at a terrible disadvantage," says Julie Pemberton, director of enterprise risk and insurance management for Outerwall and president of RIMS. "Embracing technology has enabled organizations to strengthen their performance but at the same time has created many new exposures that risk management must address."

Respondents are most worried about reputational harm (82%), notification costs (76%), and business interruptions caused by both network outages (76%) and data loss (75%) from cyber breaches. Cyber extortions (63%) and the theft of trade secrets or intellectual property (42%) are also concerns.

The purchase of stand-alone cybersecurity policies increased 29% from the previous year. That's thanks in part to better education and more versatile insurance packages, says Emily Cummins, a member of the RIMS board of directors.

"As insurance suites become increasingly available, more and more companies want to procure a plan that can fit their own unique needs." **S.A.**

Thinkstock

FRAUD

Court Clarifies CFO Liability

The Securities and Exchange Commission has prevailed in a court fight over the liability of CFOs in the filing of false financial statements.

In December 2013, U.S. Judge Manuel Real found Peter L. Jensen, Basin Water's ex-CEO, and former CFO Thomas C. Tekulve not liable on all of the SEC's claims alleging the two men engaged in "sham transactions" to fraudulently boost the startup company's revenues.

But the 9th U.S. Circuit Court of Appeals said the trial judge erred in finding that the executives complied with Rule 13a-14 of the Securities Exchange Act by merely signing the certification that Basin Water's financial reports were accurate.

The rule also allows the SEC to sue CEOs and CFOs for certifying false or misleading statements, the court said in a recent opinion, finding that "a mere signature is not enough for compliance."

"Rule 13a-14 ... includes an implicit truthfulness requirement," a three-judge panel said. "It is not enough for CEOs and CFOs to sign their names to a document certifying that SEC filings include no material misstatements or omissions without a sufficient basis to believe that the certification is accurate."

The 9th Circuit also said Judge Real improperly denied the SEC a jury trial and erred in ruling that Jensen and Tekulve did not have to disgorge any incentive- or equity-based compensation as a result of Basin Water's restatement of financial results because the restatement was not triggered by their own misconduct.

The disgorgement remedy authorized under the Sarbanes-Oxley Act is "merited to prevent corporate officers from profiting from the proceeds of misconduct, whether it is their own misconduct or the misconduct of the companies they are paid to run," the court said.

"The 9th Circuit has upped the ante for CEOs and CFOs—but by exactly how much remains to be decided in future cases," attorney Bruce A. Ericson of the law firm Pillsbury Winthrop Shaw Pittman commented. M.H.

Ramping Up the Role Of Analytics Leader

The finance function is finally starting to delve into advanced analytics and can influence its use outside of finance as well. By Tom Davenport and Adrian Tay

The fictional crime-solver Sherlock Holmes once referred in a conversation to "the curious incident of the dog in the night-time." A Scotland Yard detective replied, "The dog did nothing in the night-time." Holmes retorted, "That was the curious incident." ¶ In the field of analytics, the equivalent of the dog that didn't bark is the relatively low level of adoption of advanced analytics in finance and accounting functions. Despite being a quantitative field by nature, finance has trailed other functions like marketing, supply chain, operations, and even human resources in employing advanced analytics to make key decisions.

Some finance professionals may have experimented with an occasional regression model in a spreadsheet format. But for the finance function to make advanced analytics a core capability—on the same level as external reporting or the closing process—is quite rare.

Finance groups, of course, have long used descriptive analytics (also called business intelligence) to do their work, including reports, dashboards and scorecards, and online queries. But descriptive analytics doesn't tell the user anything about underlying patterns in the numbers, and it only describes the past.

More advanced approaches involve predictive analytics, which uses statistical models of past data to make predictions about the future, and prescriptive analytics, which uses data and analytics to recommend decisions and actions for workers.

We interviewed 10 organizations in which finance functions were already working with advanced analytics. CFOs of these companies are becoming champions of analytics, and a variety of finance and accounting-based analytical applications are being implemented.

There are two possible roles for finance organizations with respect to advanced analytics. One involves "sticking to their knitting" by building an advanced analytics competency to address finance problems and objectives. The other involves an even more ambitious role for finance: taking the lead for analytics within a company and becoming the primary provider of analytical insights for non-finance functions like sales and marketing, human resources, and operations.

While those functions may already have some advanced analytics capability, more companies are beginning to see the value of analytics that transcend functional boundaries.

For example, at Toyota Financial Services (TFS), finance traditionally focused on measuring financial performance. But in the past few years the company has built a comprehensive analytical capability by leveraging people, tools, and data, according to Amit Shroff, a TFS executive. Today the function plays a broader role in measuring and enhancing product profitability, sales effectiveness, and customer loyalty.

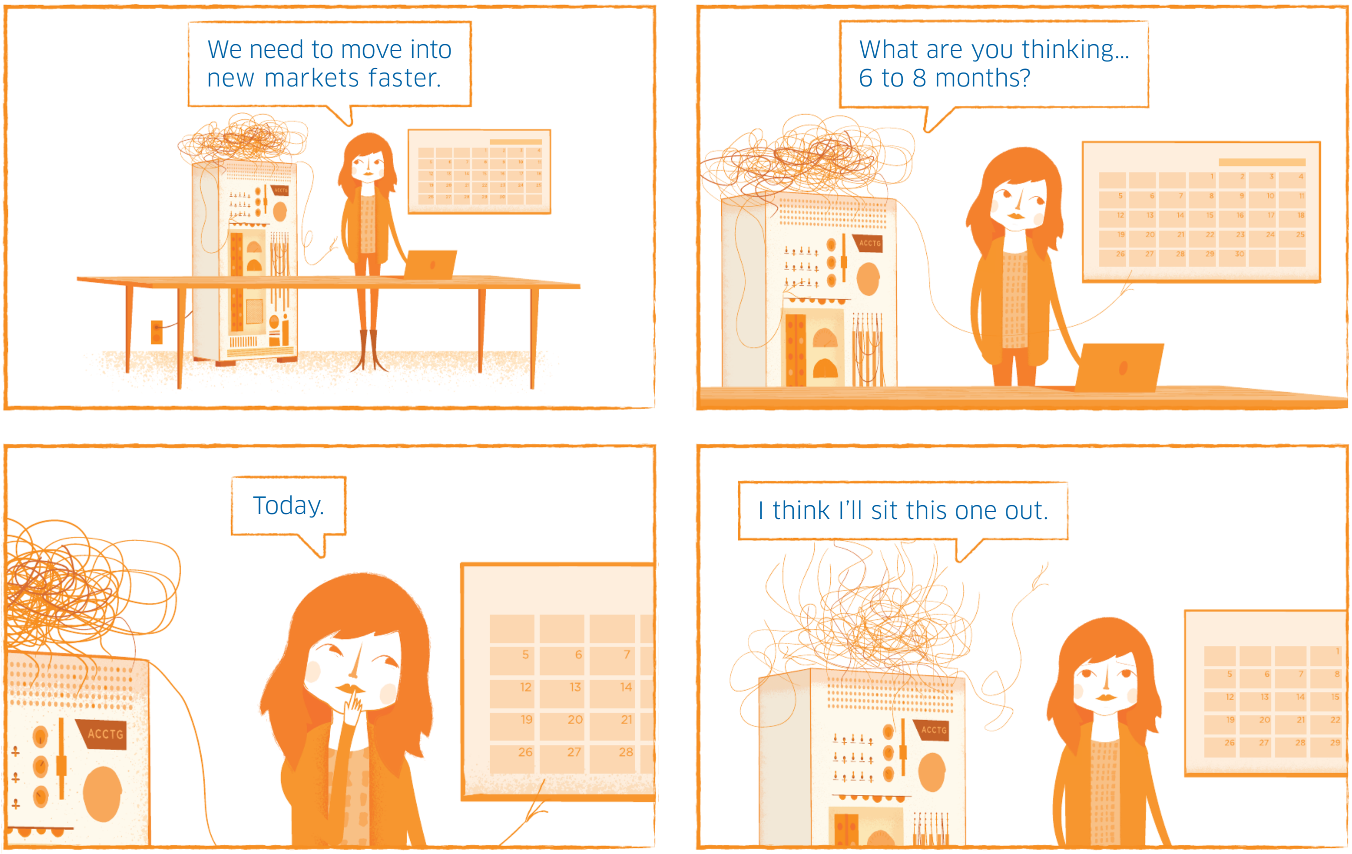
Finance works with the business to derive insights from volumes of loan and lease contract-level data to improve profitability by geography, product, and channel. Additionally, finance-developed analytical tools combined with sales' local market knowledge enable consultative relationships with car dealers.

For example, multi-dimensional correlation analysis of TFS insurance products sold and the corresponding positive impact generated for the dealership (e.g., service visits, parts sales) allow Toyota and Lexus dealers to receive critical insights into customer behavior and loyalty. Thus, the analytical capability contributes to sustainable growth for TFS and the overall Toyota ecosystem.

Advanced Analytics For Finance

One reasonable approach for analytically oriented finance leaders, of course, is

Thinkstock



When it's time to break up with your current finance and HR system, it's time.

Open up a world of possibilities. With Workday, your team gains the insights they need to make better decisions and create new growth opportunities. It's the perfect match for your business and the only system with a 97% customer satisfaction rating.

workday®

Built for the future.™

workday.com/financialmanagement

to focus on advanced analytics that relate specifically to finance. There is no shortage of possible applications here.

A finance organization might, for example, focus on understanding the drivers of financial performance, both financial and nonfinancial. It might assess whether capital investments are well spent (typically using a "design of experiments" approach, with test and control cases), or whether employees are likely to be participating in fraudulent activity. These kinds of applications can add significant value to the traditional activities performed by the finance function.


Adrian Tay

One company that is aggressively pursuing this approach is Intel. A small number of finance professionals began to advocate for greater use of analytics two years ago. They presented to the senior finance team the idea of building a generalized competency in advanced analytics, and the team was very supportive of the idea.

One early step was to compare Intel's finance analytics capabilities to those of leading firms in the area, and Intel found that some high-tech firms in Silicon Valley (which have strong analytical orientations in general) had more capabilities than its finance team had.

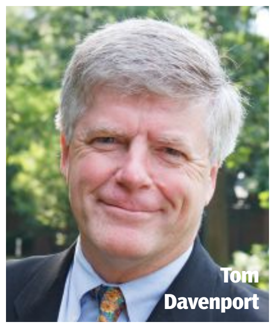
Intel's finance group started several new initiatives in the forecasting area, including statistical forecasts of revenue and inventory levels and prediction of impairments in Intel Capital's investments. Intel has also embarked upon a broad effort to educate finance professionals and managers about advanced analytics topics and is planning certification programs for them.

The Organizational Analytics Leader

Another role for finance that we have observed in some companies involves assuming leadership not only for financial analytics problems, but also for advanced analytics initiatives involving other business functions or units—and sometimes across the entire company.

In some cases, the justification for this preeminent role for finance is that financial investment and returns play a role in the initiatives. That might mean, for example, analytics projects to determine whether marketing investments really pay off, to assess what kinds of new hires provide the greatest economic benefit to the organization, or to identify ways to optimize inventory levels to reduce carrying costs.

Since finance is a department experienced at organization-wide collaboration, focusing on analytics-oriented services is a logical extension. Collaboration is, of course, required with the IT organization. But in roughly 40% to 70% of U.S. firms IT reports to the CFO, so this collaboration is likely easier to engender.


Tom Davenport

Several finance organizations have taken on this leadership role relative to advanced analytics. At a large automobile manufacturer, for example, a new "Global Data, Insight, and Analytics" organization was created in 2015 and reports to the CFO.

Within finance, the office is addressing broad capabilities like visual analytics, global reporting tools, and the optimization of risk and credit. Outside of finance, the new group is focusing on such analytics projects as connected vehicle data analysis, data-driven pricing, revenue optimization, and minimizing recall and warranty costs.

On the data side, the group is focused on topics like data governance and infrastructure, as well as cybersecurity (which is increasingly becoming more analytical itself).

Deloitte LLP, with which both authors of this article have a relationship, also has a finance organization that leads analytics for the U.S. firm for nonclient purposes. Frank Friedman, CFO of Deloitte LLP, established an analytics group in the finance function several years ago, but it works with advanced analytics throughout the organization.

In terms of financial analytics initiatives, the group has focused on optimizing receivables and reducing risk. Outside of finance, it has addressed such problems as employee attrition, the structure of profitable client engagements, and partner compensation.

Attributes of the Analytical

Finance leaders whose organizations have been successful at advanced analytics have several attributes in common.

These firms all have a finance leader with a passion for analytics. He or she sets the vision and drives his or her organization down that defined path. Successful finance leaders spend substantial time communicating the value of analytics; they play evangelist and persuade nonfinance functions to accept their analysis and conclusions.

These leaders are also not afraid to experiment. Our interviews suggested that they didn't spend a lot of time deliberating about which projects to take on, but rather experimented with projects they believed would add value. Finally, they are also democratic; they want their finance and even company-wide employees to use analytics daily on all of their tasks and decisions. CFO

Tom Davenport is the president's distinguished professor of information technology and management at Babson College. Adrian Tay is the U.S. managing director of Deloitte Consulting's finance practice.

Courtesy the authors


SAVE $200
WITH CODE
CFO200
CFO ie.
DELIVERING ROBUST FINANCIAL AND CORPORATE CONTROL
Controller Summit
Nov 30 & Dec 1 | Boston
Speakers include:
DANONE
L'ORÉAL
FERRERO
BOSE
CFO and Innovation Enterprise are Divisions of Argyle Executive Forum

Eyes on the Size

The best-performing companies need fewer employees to perform the general accounting function. Why? By Mary Driscoll

Last year was a record year for acquisitions, which were valued at $2.2 trillion in the United States alone. We're on a similar track so far this year, with more than $800 billion in deals as of July 31, including the planned $66 billion takeover of Monsanto by Bayer. ¶ Along with any new acquisition comes the challenge of how to integrate distinct corporate cultures, processes, technologies, and groups of people. And that includes the question of what to do with the acquired company's finance team, which comes with its own quirky ways of doing things.

The simple solution might be to tack the new people onto the existing department to handle the suddenly expanded workload. But that's a good way to end up with a lot of bodies in chairs doing work, but probably not as efficiently as they could be.

While there's no "right number" of full-time equivalents (FTEs) for every organization, research by APQC gives us a glimpse into how many people other organizations use to get specific types of work done.

Consider general accounting. Our metric for the number of general accounting employees comes from recent APQC benchmarking data from 1,209 companies in a variety of industries. It shows that the best performing companies need just 4.8 full-time equivalents per $1 billion in revenue to perform general accounting.

The worst performing companies need four times as much labor: 20.6 FTEs per billion in revenue. That's more than 100 FTEs for a $5 billion company doing nothing but general accounting. (See "Counting the Accountants," page 19.)

(The number of FTEs indicates the resources an organization needs to manage the general ledger and reconcile general ledger accounts. Activities involved with tax work, financial reporting, fixed-asset accounting, or internal audit are not included in this metric.)

The results raise a question: How do the best performers do the same amount of work with one-fourth the labor? Clearly, the top performers have taken steps to increase labor productivity. When it takes a comparatively large number of people to work on a problem, chances are very good that they are doing the work inefficiently. Staff size often shines a spotlight on hidden process weakness within an organization.

We often talk about the toll that manual journal entry takes on time, accuracy, and the budget. We've talked a lot about the value of automating labor-intensive, repetitive processes to free employees to focus on higher-value tasks.

But another important consideration comes down to this age-old question: Do you have the right people in the right jobs? Especially if your company is an acquisitive one, this is a question the CFO will want to mull carefully.

Acquire Wisdom

It's the CEO's job to lead the company up one mountain, stand at the top looking for the next mountain to climb, and then lead the expedition on to the next peak. But it's also the CFO's job to lug the entire accounting infrastructure and supply lines up those steep routes. When the next mountain is an acquisition, that long uphill hike can also entail integrating two disparate accounting teams, technologies, and methods.

While you might assume that any company worth acquiring probably has an accounting team worth acquiring, it pays to think selectively about how you absorb new finance staff. Rather than quickly pulling from the new talent pool to fill your open accounting positions, take your time to fully assess the competencies of all incoming employees.

It's tempting to simply fill your empty seats with people who already know how to push buttons and run

Thinkstock

reports. But a deeper look into skills and capabilities may uncover valuable hidden talents or training that you can put to work. You may learn that your company has acquired star team members with specialized expertise who can analyze the drivers of cash-flow performance, segment customers effectively, understand the impact of global economic trends, or determine how collectable your outstanding balances really are.

In other words, know who you're acquiring, and be discerning about the brainpower you choose to absorb. By discovering their talents and making the most of them, you may find that you really can do a lot more in terms of business analysis and decision support.

An acquisition is also an excellent time to be honest with yourself about whether your way of doing things is really the best way. Rather than automatically seeking square pegs from the newly acquired team to fill your finance department's square holes, ask yourself whether the round holes at the other company might actually be a better solution.

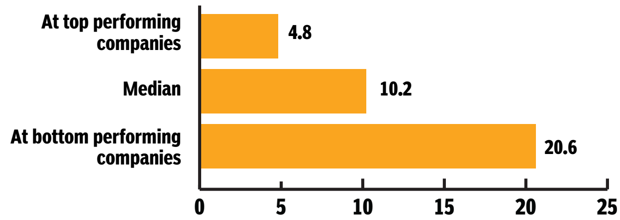
What technologies and automation has the acquired company been using, and why did it choose them? If you've been thinking about a new ERP system, you may just find that you now have an entire team of plug-and-play experts who already know one inside and out. How do their accounts payable processes compare to yours? What do they do better, faster, or smarter than your team, and how can you incorporate that know-how into your existing operation?

Rather than duplicating processes and expertise, take a hard look at the knowledge and technologies you are acquiring. You may just expose some cracks in your own foundation and find the resources to fix them at the same time. CFO

Mary Driscoll is a senior research fellow in financial management at APQC.

Counting the Accountants

Number of FTEs performing the general accounting function, per $1 billion in revenue*



*Based on benchmarking data from 1,209 companies in a variety of industries
Source: APQC

Spotlight: Intercompany Accounting

Regulators are targeting the historically lax process of accounting for intercompany transactions.

The days of lax accounting for intercompany transactions—those between separate legal entities under a single corporate umbrella—appear to be running out. Several new and pending regulatory initiatives promise to create more standardization for how companies perform intercompany accounting (ICA) and force them to do it on a timely and consistent basis. To date, the laxity in this area of accounting has created inefficiency, financial exposures, and reporting risk, according to Deloitte Advisory.

The primary role of ICA is to make sure legal entities don't show profits or losses on intercompany transactions that flow up into the parent company's consolidated financial statements, thereby making them inaccurate. All such transactions are supposed to be netted out pre-consolidation; accountants call the process "elimination."

But the potential for financial statement inaccuracies is significant, considering the massive number of intercompany transactions that must be recorded, tracked, and settled by companies with multiple subsidiaries or other independent affiliates.

"The sheer volume of transactions between these legal entities is many, many times what takes place with third parties like customers and vendors," says Tom Toppen, a managing director with Deloitte Advisory.

To improve their ICA processes, companies should create a multifunctional team to oversee it, given that accounting, tax, and treasury all must be involved, according to Deloitte.

However, in a poll of 3,800 accounting, finance, and other corporate professionals by Deloitte, only 24.4% said that such a multifunctional team leads ICA at their organization. More than half, 55.7%, said the accounting function runs ICA.

There are several key challenges in the implementation of a strong ICA framework. Chief among them is the presence of disparate software systems among legal entities.

"If the ERP used by one legal entity is different from the [ERP] used by another, it's a big challenge to ensure that, for example, when the two entities trade inventory the transaction is properly recorded on both sets of books," Toppen says. "When [it's not done correctly], the dominos start to fall."

At least, forced by the regulatory environment, companies are starting to make progress with ICA. "I'm a former auditor," says Toppen, "and traditionally you would look at these transactions and just cross your fingers that at the end of the day everything would net out." **DAVID McCANN**

The Longest Cash Cycle

Can the asset-backed security market cure wireless carriers' elongated cash cycles and mounting working capital requirements? By Vincent Ryan

In the last decade, Amazon's unusual cash cycle—the time between when it pays cash for inventory and when it receives cash from the customer—started appearing in corporate finance textbooks. While in many industries and companies a cash cycle can be one, two, three months or even more, Amazon's was noteworthy because it was negative—its customers' credit card payments hit its bank accounts before it had to lay out cash to suppliers.

The four largest U.S. wireless carriers have the opposite problem in one part of their business: a cash cycle that not only is positive but has expanded to extraordinary lengths. That's because with mobile phone installment plans, carriers pay device-makers up front and then carry the consumer for 18 to 24 months as he or she pays $10 to $15 a month toward the phone.

Wireless carriers are heavily pushing zero-interest mobile phone installment plans to gain or retain market share in a very competitive market, and consumers like them. They often provide greater flexibility for upgrading and generally come with lower fees for wireless service. AT&T's Mobility unit, for example, says that 90% of its new smartphone sales are bought under so-called equipment installment plans (EIPs). Previously, in the subsidy model, consumers had to cough up some cash for new premium phones. The rest of the phone's cost was included as part of a service contract.

"The 'no contract' phenomenon in the United States primarily started with T-Mobile looking for ways to shake up the industry," says Chetan Sharma, chief executive officer of Chetan Sharma Consulting, a mobile strategy firm. "The operators never really liked subsidizing the devices. It was considered a necessary evil to keep the churn low."

Use of Cash

But now that the majority of U.S. consumers buy devices using installment plans, working-capital requirements for wireless companies have ballooned.

Although, obviously, mobile carriers are service providers first and phone providers second, phone cost is not an insignificant use of cash. The four largest U.S. wireless companies, Moody's estimates, reported more than $14 billion of installment plan receivables and more than $4 billion of leased phones in the first three quarters of 2015.

Besides the heavy working capital requirements, the question arises: Are mobile phone carriers smart to be financing mobile phone purchases? Fran Shammo, CFO of Verizon, told a group of London investors in June 2016, "I don't want to be in the [handset] finance business." But for a couple of years now, Verizon has been, and it's done it using receivables securitization. It was the only solution to the working capital problem, and it wasn't ideal.

AT&T and Verizon employ an almost identical structure for their device receivables transactions, according to Moody's Investors Service. First, receivables are aggregated and sold to banks, with the carrier receiving about two-thirds of the amounts sold as cash (the advance rate) and retaining the balance as a deferred purchase price. The cash received is then recognized as an operating cash flow (i.e., a source of cash).

The carrier is the servicer of the receivable and for its troubles is paid a servicer fee. It also retains amounts collected above the outstanding balance on the securitized facility (i.e., above the advance rate).

Receivables securitization is not a bad deal for the wireless carriers—or any company. Indeed, the accounting treatment for receivables securitization boosts operating cash flow, as Moody's points out. "Cash proceeds from these facilities are reported as operating cash flow and can favorably sway credit metrics, most notably

Thinkstock

[the] free cash flow to debt ratio," the rating agency said in a report. (Even for a large carrier, handset financing can represent 20% of operating cash flow in a given quarter.)

In addition, although little cash may be collected at origination under EIPs compared with what can be collected under the subsidy model, "GAAP allows the carrier to book most of the device revenue up front, minus an estimate of the early-trade-in value, imputed interest, and bad debt," explains Moody's. "Combining the favorable effect of securitizations with revenue accounting for [EIPs], which boosts EBITDA, the investment required to finance devices is masked within reported financials."

Says Mark Stodden, a Moody's vice president and senior credit officer: "Accounting rules allow [the wireless carriers] to essentially smooth out the reported results, and GAAP doesn't capture the credit implications." (Moody's views the sale of a receivable as a secured debt obligation, similar to drawing on a line of credit.)

Moving to ABS

So why would carriers want to jettison receivables securitizations of this kind, and do it soon? Many reasons, it turns out.

Verizon CFO Shammo in London pointed out two reasons. He said the cash from securitization that flows through [Verizon's] operations, about $2 billion a quarter, "is generally at a little bit higher cost and it also kind of degrades our [credit] rating because the rating agencies take that securitization and add it back to our unsecured debt."

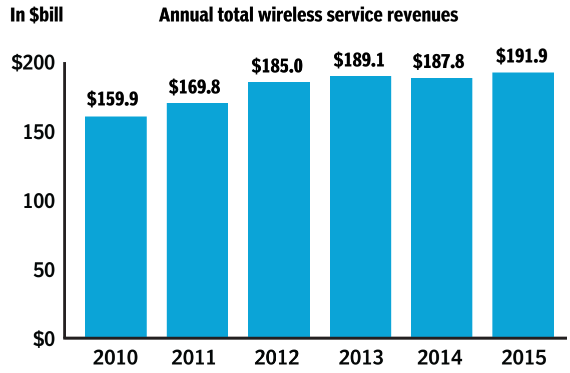
Verizon has been having discussions with the rating agencies for the past couple of years about financing handsets via the public asset-backed security (ABS) market. Such financing already exists in Japan, where since 2007 Moody's has rated more than 60 securitizations of consumer loans used for purchasing mobile phones.

Shammo told investors that both S&P and Fitch have said they would treat the use of the ABS market like captive financing (Moody's chose not to, says Stodden). That is similar to the way the credit raters treat financing of automobile purchases. It means the debt would not be added back to the carrier's unsecured debt.

"It will be treated as a separate pool of financing, short-term asset-backed security debt," said Shammo, who is retiring at the end of 2016. A lot of the debt will be rated triple-A, he added, "so there's a benefit to my borrowing cost." In addition, carriers would be shifting a significant portion of their credit risk to ABS investors.

Leveling Off?

Service revenue growth for U.S. wireless carriers is slowing, heightening the importance of defending market share.



Source: CTIA—The Wireless Association

The final reason carriers need to get out of securitization? "Receivables securitization accelerates future-period cash flows into the current period, creating a future headwind, because the receivables sold are no longer recognized in reported results," says Stodden. Financing via a public ABS market would solve the problem—the receivables would not be classified as a source of operating cash.

In July 2016, Verizon pulled the trigger on an asset-backed security of device payment plan receivables. It transferred $1.5 billion of such receivables to an ABS bankruptcy-remote entity that then issued senior and junior asset-backed notes.

In a February 2016 report, Moody's said the credit quality of mobile phone ABS would hinge on many of the same factors as other consumer-loan ABS, such as borrower creditworthiness, deal structures, and the strength of the economy.

Says Sanjay Wahi, a vice president in Moody's structured finance group, "Although borrowers' performance likely will be boosted by mobile phones being essential to Americans' lives, that performance has yet to be tested in a stressful economic environment."

Tapping the ABS market will be beneficial to Verizon (and the other carriers if they choose to do it) because it is a deep pool of capital that is larger than the bank market, says Moody's Stodden. And it will certainly provide the cash needed to finance handset purchases. In addition, because it is also secured debt, and wireless carriers are large issuers of unsecured debt, it could take some pressure off of carriers' unsecured borrowing costs.

But the move will also cause some problems for Verizon and any other carriers that move to the ABS market. Most importantly, they will have to explain to investors why operating cash flow is deteriorating on a reported basis (since it is no longer inflated by the receivables securitizations). Instead, the cash from ABS sales will be characterized as financing. "It will make their financials look worse," says Stodden. In other words, an ABS market will solve some of the problems of bank-financed securitization, but it will also create new ones. CFO

Behind the Screens

In his new book, Lawrence Levy details his experience as CFO of Pixar, from before the release of *Toy Story* to the company's IPO. By David McCann

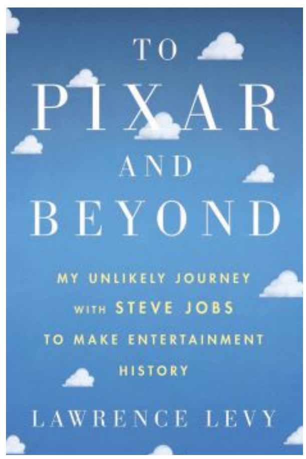
One day in late 1994, Steve Jobs called Lawrence Levy, finance chief of Electronics for Imaging, to ask about Levy's interest in taking the CFO post at Pixar Animation Studios, which Jobs owned. While the call had come out of the blue, Levy was interested in hearing about the opportunity. But as he learned about Pixar in the weeks that followed, Levy grew more than a little skeptical. He saw a company that had failed in its mission to create a high-end imaging computer and was now stuck in an identity crisis. It was dabbling in several businesses and being kept afloat by continued capital infusions from Jobs—almost $50 million worth, by that time. Levy also worried about working with the famously mercurial, hot-tempered Jobs. Friends asked, "Why would you want to do that?"

But, as described in Levy's new book, *To Pixar and Beyond: My Unlikely Journey with Steve Jobs to Make Entertainment History,* he immediately hit it off with Jobs. Also, he was amazed at the artistry of those working to create the world's first computer-animated feature film (*Toy Story*); by a culture that highly valued such creativity; and by Pixar executives' smarts. Fingers crossed, he took the job.

IPO Fantasy

As soon as he came aboard, Levy saw that Pixar's dire straits were worse than he'd thought—even as Jobs was pushing for an expeditious IPO. The company's biggest revenue generator was a graphical imaging software product for special effects houses, ad agencies, and production and film studios. The technology was great but the demand was modest, and raising the price wouldn't help because competing software, though inferior, was much cheaper.

"In a very good year, Pixar could sell a thousand copies of RenderMan," Levy wrote. "At $3,000 per copy, that was $3 million. To a company whose weekly payroll was being paid out of its owner's pocket, that was a lot of money. But to a company with aspirations for growth and a public offering, it was insignificant."



The same proved true for Pixar's computer-animated commercials: the business was tiny and had little hope for growth. Pixar also produced animated short films, which had no commercial value at all.

Double Trouble

It became clear to Levy that Pixar's only hope for a successful IPO lay in positioning the company strictly as a maker of computer-animated feature films. But there were problems with that.

Pixar was hamstrung by an onerous distribution agreement under which Walt Disney would pay production costs for three films—each of which would take years to produce—and pocket at least 90% of the profits. The contract also gave Disney the right to approve or reject Pixar's film ideas and prohibited Pixar from pitching ideas to other distributors.

Levy, aghast, was informed by Pixar's Hollywood attorney that such provisions were standard in the entertainment business for "unproven talent," a descriptor that applied to Pixar because computer-animated filmmaking was a new field and the company hadn't yet completed a film.

Indeed, there wasn't even a model available for projecting the revenue of computer-animated films. Levy thought he could start with existing models for other types of films and adapt them to computer animation, but he discovered that those in possession of such models held them close to the vest.

Disney had a model for the traditional type of animated films that it produced, and Pixar's Hollywood law firm had a model for live-action films. But, despite the business relationships among the parties, both were extremely reluctant to share their models.

Disney's stance on that never wavered, though it did agree to share some data from its model. The law firm, after much cajoling, agreed to show Pixar its model in exchange for Pixar agreeing to share the computer-animation model it would develop.

Four Pillars

Even after Levy created the new revenue model, much uncertainty remained. Pixar established four pillars for its future success.

First, it had to negotiate a new distribution deal that quadrupled its profit share, which meant Pixar would have to take over the financing for its films. Second, it had to release films more often than the four years it had taken to produce *Toy Story,* which would mean expanding staff and facilities.

Third, the company had to raise at least $75 million to cover the new costs and fund growth, and an IPO was the only practical way to do that. Finally, Pixar had to build itself into a worldwide brand. That also required negotiation, because under the existing distribution agreement the films were to be Disney-branded.

Negotiations didn't begin until some months later, though. Jobs and Levy had their hands full with preparations for the IPO and the coming release of *Toy Story*.

Two numbers, Levy explained, would largely determine Pixar's future: the opening-weekend box-office earnings for the film and the IPO share price. Jobs was hoping for opening-weekend sales of $20 million, which would translate to total domestic box office earnings of more than $100 million. Levy thought that was a stretch, given that only four animated films had ever reached those levels, and an opening weekend of $8 million was more realistic. The prospectus for the IPO, meanwhile, set a price range of $12 to $14 per share.

Triumph

All of those numbers proved to be wild underestimates. *Toy Story* opened in November 1995, and its first-weekend box office sales were $30 million. Interest among investors—already higher than expected after a successful road show—exploded.


Lawrence Levy

Levy found that creating a revenue model for computer-animated films was surprisingly challenging.

The IPO came a week later. The investment banks placed 6 million shares with investors at $22 per share, and by the end of the first trading day the stock was at $39. It was the hottest IPO of the year, and Jobs was now a billionaire.

The focus turned to negotiating with Disney. Trying to reach an agreement under which Pixar would assume production costs for its films in exchange for half of the profits and brand credit proved frustrating. Disney boss Michael Eisner dragged his feet, not wanting to give up brand supremacy to help Pixar develop into a company that could eventually threaten Disney.

At one point Pixar decided to walk away, ride out the existing deal, and start fresh a few years later. Jobs and Levy were surprised when Eisner suddenly offered to give Pixar the deal it wanted in exchange for rights to purchase Pixar stock. That did the trick. "Of all the deals I ever completed, I don't think I ever felt more elated," Levy wrote.

The postscript to the story, of course, is that Disney ended up acquiring Pixar for $7.4 billion in 2006, by which time Jobs, still the majority owner, was nine years into his second turn at the helm of Apple.

Getting Inspired

Why did Levy decide to write his book so many years after the fact? The biggest reason, he says, was that after Jobs' death in 2011, the ensuing massive coverage of his life in books, documentaries, and feature films made it appear that Pixar was little more than an after-thought for Jobs—if that.

That, Levy felt, was a major oversight for anyone hoping to understand Jobs' career. He wrote, "There were many aspects of Pixar that had a big influence on Steve: becoming a billionaire, experiencing a stellar comeback in the eyes of the public, learning the ins and outs of the entertainment industry, and bringing business and creative imperatives into harmony. Collectively, these influences were important catalysts in preparing Steve to jump into the vortex that awaited him at Apple." In fact, he added, "Without Pixar, one could make a case that the revolution ushered in by Steve's second act at Apple might never have occurred."

Levy left his full-time post at Pixar in 1999, sensing that something was missing from his life. He wrote that corporate life "was about products, profits, market share, and competition. These all matter a lot; I well knew that.... I could see, however, that these priorities also generated challenges around identity and meaning."

After a period of reading and deep inner searching, Levy became focused on the Buddhist concept of "The Middle Way." It's essentially about finding harmony between the need to function in society day to day and the desire to be a free spirit, living for joy, spontaneity, and creativity.

Levy believes there are great lessons for companies in The Middle Way. He wrote, "What we accomplished at Pixar was rare. Very rare perhaps. But it doesn't have to be. We can build extraordinary organizations that foster creativity, dignity, and humanity while respecting business disciplines.... This won't make us weak or soft.... As it did for Pixar, it will simply make us better." CFO

Christina Taccone

The Changing Face Of Retail

Can innovation by traditional retailers overcome the disruptive force of e-commerce?

BY DAVID M. KATZ

Scott Settersten is a retailing CFO to be envied. The company he works for, Ulta Beauty, has 907 stores and in August was on track to complete its 2016 plans to open 100 net new locations. The company's financial "overperformance" relative to other retailers stems largely from its exclusive focus on the particularly hot category of beauty products, says Settersten. Further, the company enjoys wider profit margins than other retailers because it features "prestige" skin-care preparations and perfumes typically priced higher than mass-market brands. ➜


please queue here

Ulta may seem an anomaly in a time when many big-name brick-and-mortar retailers are being hammered by the onslaught of online competitors. The difference may be that, unlike with those companies, the beauty retailer's consumers are more likely to sample makeup and other cosmetics in the store rather than order them directly from its website.

In contrast, because "of the ongoing migration of shoppers from stores to online, many retailers are making the tough choice to shutter doors," according to a September report by RBC Capital Markets. "Accelerated store closings [are] also not helping retail traffic."

Kohl's, JCPenney, Dillard's, Sears, and Macy's have closed a total of 700 stores since 2013, according to RBC. Next year, RBC predicts, Sears Holdings could close another 50 to 60 of its Kmart stores.

Most prominently, Macy's announced in August that it would close another 100 stores in early 2017. Many of the company's weaker stores "don't produce acceptable returns on investment and often don't represent a customer shopping experience that reflects our aspirations for the Macy's brand," said CFO Karen Hoguet during the company's second quarter earnings call, "and this country is over-stored given evolving customer shopping habits."

Besides pre-recession store overdevelopment, big retailers are also dealing with an inability to keep up with customers' surging desire to buy online. E-commerce's share of retail sales has increased rapidly in recent years, rising to 10% in 2015 from about 5% of sales in 2010, according to a September report by Fitch Ratings. Fitch expects online sales to burgeon to the 15% to 17% range by 2020. Retail sales data from RBC Capital Markets shows a similar trajectory in the spending shift from brick-and-mortar stores to online.

Say the Fitch study's authors: "This suggests half of retail sales growth is expected to come online, as opposed to [from] physical retail locations. Rapid online growth, particularly from value-oriented players such as Amazon.com, [has] pressured sales and pricing power at brick-and-mortar retailers."

Despite the massive number of stores being shuttered, the situation in brick-and-mortar retail is hardly as bleak as it is in some other industries. "Some of the pressures on the industry we are seeing are incremental relative to the shock of changes in energy prices" affecting oil companies, says Da-

In the Zone

One big factor determining whether a company is a winner or loser in retail is simply the subsector in which it operates. For instance, while plummeting gas prices have hit energy companies hard, they've been a godsend for AutoZone, which reported net sales of $3.4 billion for its fourth quarter ended August 27. That's an increase of 3.3% compared with the fourth quarter of fiscal 2015, resulting in a 6.4% jump in net income.

Speaking on AutoZone's September earnings call, CFO Bill Giles noted that "last year gas prices decreased $0.18 per gallon during the fourth quarter, starting at $2.69 and ending at $2.51 a gallon. We continue to believe gas prices have a real impact on our customers' ability to maintain their vehicles." Since cheaper prices at the pump are an incentive for more road trips and thus more wear and tear on cars, consumers will come to AutoZone stores to pick up the parts they'll increasingly need, the finance chief suggested.

Over a longer term, the "continued aging of the car population," spurred by an increase in miles driven in the United States, has helped produce 40 consecutive quarters of double-digit growth at the auto parts retailer, added Bill Rhodes, the company's chief executive.

Another well-placed retailer is Ulta Beauty. Operating in the beauty category provides Ulta's stores with some protection from loss of market share to online competitors, although Amazon has reportedly been making inroads in the space. The product offerings are a factor in this, since consumers are likely to want to come into the

"[We're] a little behind some major big-box guys who have been dealing more directly with the Amazon threat."
—Scott Settersten, CFO, Ulta Beauty

store to sample and buy luxury makeup and fragrances, perhaps after having their appetite for new offerings whetted by Ulta's website.

In terms of e-commerce, the company's "a little behind some major big-box guys who have been dealing more directly with the Amazon threat," acknowledges Settersten, noting that online sales represents only about 6% of Ulta's overall revenue. "Specialty retailers have not been involved as much [in e-commerce], so we're playing catch-up a little bit," he says.

One benefit of slower online development, however, is that Ulta and similar retailers can learn "from the big guys' missteps," the CFO observes. Thus, they can "see how some folks have over-invested in some areas where there's no payback," resulting in losses on the income statement, he adds. **D.M.K.**

vid Silverman, a senior director at Fitch specializing in retail. "There will be winners and losers in the space, rather than the overall industry losing. There continues to be growth in consumer spending and in the sale of all retail products."

The question now for retail CFOs, though, is how to profitably align their companies with the powerful structural changes spawned by e-commerce and the changing buying habits of consumers. To accomplish that they must face a series of tough decisions in resource allocation, inventory management, pricing, and product delivery.

Unlike many retailers that are shuttering stores, Ulta Beauty expects to open 100 new locations in 2016. The company's performance stems largely from its exclusive focus on the hot beauty products industry.

CLOSING THE SEAMS

The headwinds hitting brick-and-mortar retailers have been gathering force for years, but significant tailwinds have mustered strength of late. Lucky retailers find themselves in a hot industry such as running shoes or auto parts or, as with Ulta, beauty products. (See "In the Zone," facing page.) But for less fortunate companies, the most oft-cited key to success is finding a way to coordinate in-store selling and various e-commerce vehicles into an "omnichannel" approach. In such a strategy, a retailer deploys all the company's sales, marketing, and distribution tools to mutually support rather than cannibalize each other.

A second frequently mentioned approach is to focus on the "customer experience," bringing shoppers into stores and keeping them there by encouraging them to try out fascinating new gizmos, take part in classes and special events, or simply hang out for an afternoon with family and friends.

Brick-and-mortar stores are facing "a series of changes in how the customer engages with, or wants to engage with," retailers, says Holly Etlin, a managing director at AlixPartners, a management consultancy.

Previously, when their companies were serving primarily baby boomers, the only thing retail CFOs had to worry about was how to put stores in great locations and keep them well stocked. But with many boomers retiring or nearing retirement, millennials are becoming retailers' core customers. "They want what they want when they want it. They do not feel constrained by store hours or locations or anything else," says Etlin, who served as interim CFO at RadioShack prior to its 2015 bankruptcy.

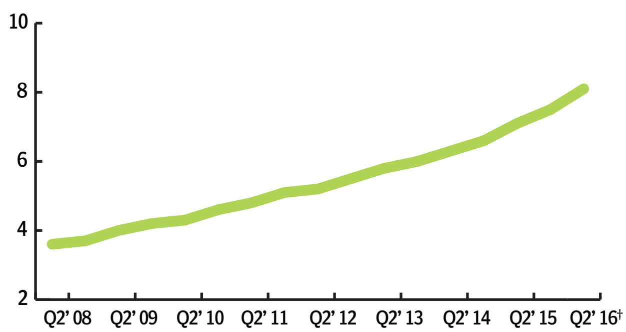
"A CFO has to be looking at how a retailer allocates its capital" in order to balance spending among stores, e-commerce, and customer-engagement activities, she added. In fact, the ability to close the seams among stores, e-commerce (via mobile phones, tablets, and computers), in-store kiosks, and social media with an omnichannel strategy will be a big determinant of success in retail going forward.

Indeed, technology-oriented finance chiefs like Valen Tong don't see online and in-store shopping experiences as necessarily opposed to each other. "I am a techie myself, and I shop a lot online," she says. "The rise of the online experience makes it much easier for the customer: You can shop online, anywhere and anytime you want," says Tong, the CFO of Brookstone, a specialty retailer selling frequently quirky products like electronic corkscrews, headphones resembling cat's ears, and toy drones.

Changing Channels

Online migration of retail sales is nothing new, but the shift from brick-and-mortar stores to e-commerce has accelerated.

% of total retail sales from e-commerce



†preliminary
Source: RBC Capital Markets and U.S. Census Bureau

Emerging from bankruptcy in 2014 after being purchased by the Chinese conglomerate Sanpower and the Chinese investment firm Sailing Capital for about $173 million, Brookstone now owns 250 U.S. stores and takes in $400 million a year in revenue. Noting that 25% of Brookstone's business is online, Tong says that "e-commerce is our largest store."

Moving to an omnichannel approach is "a huge opportunity because we're increasing the number of touchpoints we have with our customers," she says. But the move will also involve big changes for the company. The growth of e-commerce in the retail industry will result in a loosening of the current glut of per capita shopping space, Tong predicts, forcing Brookstone to be more discriminating about where to place its stores. The chain will likely have to "re-pivot" to locations in high-sales areas like airports and high-traffic malls.

ADDING TO INVENTORY

Another problem brick-and-mortar retailers must handle is how to manage inventory in the face of increasingly complex consumer buying habits. The pressure to offer their products through a variety of channels has driven many companies into an "extended aisle," also called an "endless aisle," of inventory, says Joel Alden, a partner in the retail practice of management consultancy A.T. Kearney.

The idea involves retailers placing kiosks in stores to enable shoppers to order out-of-stock merchandise or goods not sold in the store. The product is then shipped to customers' homes or offices.

By operating that way, retailers add a great many products to their core assortment, which means they have to hold much more inventory at distribution centers. "Often that extended aisle isn't within the core assortment because

Liquidation: The End of the Road

In a retailing environment where capital allocation can mean the difference between survival and failure, a fair number of companies just haven't been able to cut it. Indeed, failing retailers have been much more prone to slide from bankruptcy to liquidation than the rest of corporate America, according to an August Fitch study, which analyzed 30 retail bankruptcies dating from the early 2000s to the present that collectively had $10.5 billion of debt. Half of the retail bankruptcies (15 of 30 cases) were resolved as liquidations, compared with the 17% rate seen across all corporates.

Retailer defaults since the early 2000s have "resulted from shifts in consumer spending toward services and experiences, increased discounter and online penetration, and declining mall traffic, all of which have created a highly competitive environment," says Fitch. The result? "Negative comparable store sales (comps) and fixed-cost deleverage [lead] to negative cash flow, tight liquidity, and unsustainable capital structures."

Moreover, retailers are often inhibited from continuing operations after a Chapter 11 filing due to "heightened competition yielding permanent traffic decline, an inability to improve positioning due to negative free cash flow, and a somewhat weak position in bankruptcy proceedings relative to landlords and vendors," says Fitch.

Which retailers may be headed down that path? Fitch screened the high-yield bond and leveraged loan universe as of Aug. 31, 2016, to identify seven U.S. retailers with significant default risk within the next 12 to 24 months. Those at-risk retailers included Sears Holdings, Claire's Stores (which has completed a debt exchange), True Religion Apparel, 99 Cents Only Stores, Nebraska Book Company, Nine West Holdings, and Rue21. **D.M.K.**

Big Retailers in Chapter 11

These large retailers had filed for bankruptcy and had yet to emerge as of mid-October 2016.

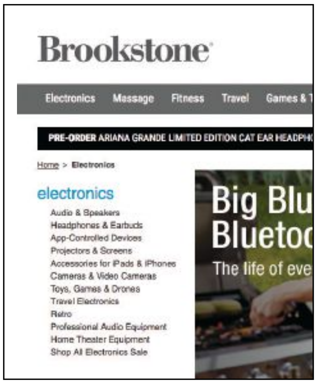
Company	Retail type	Bankruptcy filing date
Golfsmith International Holdings	Golf specialty	9/14/16
Aeropostale	Teen apparel	5/4/16
Pacific Sunwear of California	Sports and fashion	4/7/16
Sports Authority	Sporting goods and apparel	3/2/16
A&P	Grocery	7/19/15

Source: Company reports, Fitch Ratings

it doesn't move fast," adds Alden. "It's slow-moving inventory, so it drives up my working capital" requirements.

At traditional brick-and-mortar companies that feel pressured to keep up with online competitors, it's easy to feel forced into misguided capital allocation decisions in this area. "There is a massive move to technology investments to support inventory, channel investments, [and] supply chain," says Alden. "But often those changes are made at the expense of investments in the store: training of associates, tools they use to keep up with the customers," he adds. "Those investments are often undervalued."

Brookstone owns 250 U.S. retail locations and operates a website that offers many more products than are available in its stores.



Brick-and-mortar stores with an online presence also must grapple with competitive pressures to offer lower prices and free shipping. "We expect dotcom sales growth will continue to outpace our brick-and-mortar sales, and elements such as free shipping will put pressure on our gross margin as those sales become a greater portion of our mix," J.C. Penney CFO Edward Record noted on the struggling retailer's August earnings call.

In turn, offering free delivery and cheaper prices online can lead to "poor customer experiences," as in-store shoppers demand the better deals they see on their mobile phones, Alden says. CFOs contemplating the issue might thus find themselves in a dilemma. If, on the one hand, a company's rivals are offering better deals online, it's going to lose customers if it doesn't offer comparable prices in its stores, the consultant adds. But if the in-store retailer cuts its prices to match online sellers, that could slash its profit margin severely.

SELLING THE EXPERIENCE

To boost store traffic and get customers to pay full prices, retailers are allocating resources to improving the quality of the customer experience. "In technology, we're on a path to modernize our platform and increase the productivity of delivering features that will improve the customer experience," Nordstrom CFO Michael Koppel said during the department store chain's second quarter earnings call. Among the changes: tech solutions to support its expanded customer-loyalty program and improve its online search engine.

In a contrasting approach to making customers happy, Best Buy slated an experience catered to its edgiest gaming shoppers. Seeking to position itself as "the home of the latest in virtual reality," the consumer tech retailer scheduled about 350 stores to open a minute after midnight on Oct. 13. By doing so gamers could get their hands on PlayStation VR, a virtual reality headset, the minute the product was released.

"Moving to an omnichannel approach is a huge opportunity because we're increasing the number of touchpoints we have with our customers."
—Valen Tong, CFO, Brookstone

Ulta Beauty is also working hard to entice shoppers to its stores. "The guest experience is number one," says CFO Settersten, whose company's outlets feature beauty parlors and "brow bars" where customers can get their eyebrows trimmed and woven. "And it has to be fun, or you might rather stay at home and order online."

But the best way to lure customers into stores and keep them there may have been under retailers' noses all along. "One question I love to ask myself is: What has not really changed?" about the retail business, says Brookstone's Tong. She sees an example of an enduringly successful mode of selling in the centuries-old, brightly lit outdoor Christmas markets in most of the major cities in Germany.

"What do you see? You see people. They enjoy the lights, they spend time with the family, they smell the great food, hear the carols. Everything is so much fun, so much more about the experience," she says. "People cannot get that kind of experience online."

And while the visitors to the Christmas markets are spending quality time with their families, sniffing roasting chestnuts and enjoying the music, they're doing a whole lot of shopping. "What has not really changed is that people are still looking for quality, looking for great value, and looking for experiences that they cannot find in other places. I think that's the future of retail," Tong adds. CFO


REMAIN
ON
I'M IN
strongeri .co.uk

A TIME OF DISRUPTION

Political scenarios aplenty threaten global growth and the fortunes of multinationals.

By Ed Zwirn

The U.S. presidential election and all of its attendant ugliness and divisiveness may soon be an unhappy memory, but political developments around the world continue to cloud the risk profiles of global companies.

Whether they're vulnerable to Brexit fallout, terrorism, or the latest rumblings from China or Latin America, multinationals are increasingly aware of the need to pay close attention not only to business plans and bottom lines, but also to cross-border threats in a politically volatile world.

Where's the evidence multinationals feel threatened by global perils? Above and beyond protective hedging and diversification strategies, U.S.-based companies currently pay about $1.5 billion in annual premiums to specifically insure themselves against political risk, according to Stephen Kay, Marsh's practice leader for structured credit and political risk insurance. That affords them some $150 billion to $200 billion of protection, he says.

"In the last two or three years we've seen a pickup in demand for this type of coverage from companies, banks, and commodity traders," says Kay. "Everybody's watching to see where the next train wreck will happen."

PERILS IN THE WEST

Of course, fear mongering is hardly constructive. But 2016 has presented companies with a number of challenges in marketplaces outside the United States. →

Getty Images

According to Aon Risk Solutions' 2016 Political Risk map, this year has been defined by "weak global growth, shifting trade patterns, and slow interest-rate normalization." Aon's analysis highlights a multitude of regional or country-specific disruptions, like greater use of capital controls in Africa, high levels of political violence and terrorism across the globe, and an increase in the flow of refugees to developed nations.

As pernicious as any regional or country-specific political threat is, there is also a broader trend evidenced by the UK's vote to leave the European Union and the outcomes of other recent political contests, according to Cameron Brandt, an analyst at EPFR Global, which tracks institutional investor fund flows.

"We may be seeing the reversal of globalization," he predicts. "Sometimes countries go into phases where they adopt more-restrictive policies on trade and immigration and set themselves up for slower growth."

Much of the political risk that companies face is in emerging markets, but developed countries have been sources of risk as well and can't be overlooked. During and shortly after the Great Recession, many companies focused first on surviving and then on recovering. Only after several years of steady recovery did demand for political risk insurance coverage begin to pick up in the United States.

A key trigger for that demand came courtesy of the Federal Reserve System, according to analysts. In mid-2013 the Fed started throttling back its quantitative easing program, which had helped to prompt the economic recovery. At the time, the program was pumping $85 billion monthly into the U.S. and world economies.

With the knowledge that quantitative easing was being gradually eliminated, investors in riskier venues became more skittish, and volatile emerging market investments began receiving more scrutiny in early 2014, analysts say.

This past year the major disruptive force, at least in the West, has been Brexit. Beyond the initial shock to securities markets, worries over Brexit have devastated the pound sterling, sending it to multiyear lows against other major currencies. In addition, "the fact that an EU member nation is invoking the right to secede raises fundamental questions about the viability of the EU federation going forward," according to Christopher Whalen, senior managing director for Kroll Bond Rating Agency.

Says Brandt: "In the case of Europe, even though growth hasn't been all that horrible and countries have benefited from the tailwind of cheap energy prices and European Central Bank policies, there's political risk almost everywhere you look."

DANGER ZONES

The following countries have a medium-to-high overall political risk rating from Aon. Businesses are particularly susceptible to the risks listed for each country.

COUNTRY	RISKS
Armenia	Political violence, legal & regulatory, supply chain
Bangladesh	Political violence, legal & regulatory, supply chain, political interference
Guatemala	Political violence, legal & regulatory, supply chain, political interference
Honduras	Political violence, legal & regulatory, supply chain, political interference
Jordan	Political violence, legal & regulatory, political interference, sovereign non-payment
Kazakhstan	Legal & regulatory, political interference, exchange transfer
Russia	Political violence, legal & regulatory, political interference, sovereign non-payment

Source: Aon Political Risk Solutions

TROUBLE SPOTS

But the threats in emerging markets, at least in recent years, are much more destabilizing, persistent, and hostile to the conduct of business. In some developing nations, political strife, economic volatility, corruption, and regulatory upheaval are a fact of life and continue to wreak havoc on entire economies and industries. Here are some examples of noteworthy political risks across the globe:

TURKEY. Until fairly recently, the Republic of Turkey was on track to join the European Union and its economy was doing well, notes Marsh's Kay. "Now, a near coup has spooked investors, the balance of payments is in the red, and growth numbers are in decline," he says.

The failed military coup against President Tayyip Erdogan resulted in "mass arrests of military officers, academics, and politically active business leaders; and a further crackdown on all media outlets," said A.M. Best in an August risk assessment. AMB says the relationship between Erdogan's KP party and rival group the PKK "is unlikely to improve in the near term. Erdogan is trying to get the PKK characterized as a terror group and removed from parliament."

On the economic front, "high external debt levels and low foreign exchange reserves make Turkey vulnerable to global economic shocks and exchange rate volatility," says AMB.

BRAZIL. In Brazil, the senate ousted president Dilma Rousseff from office following an August impeachment vote that charged her with manipulating the country's federal budget in an effort to hide mounting economic problems.

“Whenever we, as brokers, bring a new Brazil [insurance] deal to the market, it gets scrutinized more now than it did before,” says Kay.

While Brazil has moderate levels of economic and financial system risk, according to AMB, it has high levels of political risk. “Corruption, continued political uncertainty, lower commodity prices, and on-going social unrest will all drag on economic growth near-term,” AMB’s report says. Gross domestic product is expected to shrink -3.8% in 2016 and again slightly in 2017.

Brazil’s ongoing corruption scandals, particularly the one involving state-run oil firm Petrobras, “have caused great political uncertainty and policy paralysis” at a time when “fiscal consolidation efforts are needed to stabilize government accounts,” says AMB.

John Chambers, global sector leader for sovereigns and supranationals at S&P Global Ratings, is taking a wait-and-see attitude toward Brazil. “The judiciary in Brazil has shown its independence, and in the long term that is a sign of institutional strength,” he says. “In terms of geopolitical risks there, I’m not necessarily sure they are higher now than in the past.”

MAPPING THREATS

Since Aon’s 2015 Political Risk Map was released, there have been 12 changes in country risk ratings.

▲ Countries upgraded (reduced political risk)
China
Ethiopia
Haiti
Iran
Jamaica
Nepal
Pakistan
Serbia

▼ Countries downgraded (increased political risk)
Cape Verde
Micronesia
Philippines
Suriname

Source: Aon Political Risk Solutions

CHINA. China’s newfound military assertiveness in the South China Sea comes even as the country reports economic growth numbers that “we would die for,” observes Kay. “The question is whether we can believe the numbers and whether China is at risk of a financial bubble, a credit bubble, or a real estate bubble like [the U.S.] had in 2007.”

Politically, the problem in China is not instability. Actually, it’s the opposite. “How committed are the Chinese to reforms?” says EPFR Global’s Brandt. “When push comes to shove, the fear is that China is going to choose political stability.”

Says Aon in its 2016 political risk map, “Despite the fact that a number of corrupt officials have been removed from office, there remain relatively high legal and regulatory risks and obstacles to doing business, thanks to the interventionist tendencies of the ruling Communist Party.”

In addition, according to Aon, “there remains a large degree of uncertainty around the ability of the government to manage a slowdown in growth and the economic transition to more consumption-driven growth.”

RUSSIA. Both Brazil and Russia are suffering from sustained low oil prices, and Russia added to global instability and oil price volatility in 2014 with the invasion of Crimea, which was viewed as a violation of international law.

“Military involvement in numerous conflicts including the civil war in Syria ... and conflicts resulting in sanctions with Egypt and Turkey have contributed to potential instability,” says AMB.

Economically, Russia faces “numerous potential headwinds that include declining investment, volatility in currency markets, shrinking fiscal reserves, and interest rate movements,” says AMB, which forecasts a GDP contraction of -1.8% in 2016. Meanwhile, inflation continues to run above the Russian central bank’s target of 4%, “largely due to capital flight and a weaker ruble,” says AMB.

Finally, Russia’s business climate is, as it has been for years, unfriendly. “Continued intervention in the private sector has led to opaque regulations and an inefficient and corrupt legal system which suffers from political interference,” says AMB.

Protesters march in support of Dilma Rousseff, Brazil’s president. Unfortunately, her ouster will not solve the nation’s economic ills: GDP is projected to fall -3.8% in 2016.

Getty Images

PAYMENTS PROBLEMS

Events and government actions that bring political unrest and uncertainty aren’t just headlines. They can cause any number of real problems for U.S.-based companies.

Global political risk constitutes “a continuous challenge for a business like ours,” says Richard Verasamy, CFO of Associated Foreign Exchange (AFEX). The California-based nonbank payments processor, which processes some $15 billion of international payments annually, does business in the United States, Australia, Europe, the Middle East, and Asia.

A survey of more than 500 companies (about 200 from North America), for which AFEX released results in October, showed 46% of respondents projected that their international payments will be up this year over last.

But political risks could dim the bright outlook for AFEX. How Brexit plays out, as well as the outcome of the U.S. election, "are prominent concerns [and could trigger] increased volatility and barriers to trade and payments," Verasamy says. "International payments may be reduced in such circumstances, as companies locally source goods to avoid currency volatility impacts."

The UK's departure from the EU, a process scheduled to commence in 2017, "has many payment companies thinking about the way forward," Verasamy says. "Also, many of our customers were surprised by the outcome of the vote and have been talking to us [about how] they can protect their business from a risk management perspective."

While "global business is here to stay and international payments are an integral part of it," the CFO says, many AFEX clients may face cost and organizational challenges. "Brexit means a lot of companies will have to restructure where they are domiciled, as being based in the U.K. will no longer give access to a single market."

Terrorism also is posing a big risk to the global payments business—not simply because of the fear it generates, which hampers business, but also because of the controls governments are placing on payments transactions as they try to cut off funding to terrorist groups.

"Brexit means a lot of companies will have to restructure where they are domiciled, as being based in the U.K. will no longer give access to a single market."

—RICHARD VERASAMY, CFO of Associated Foreign Exchange

"There is more stringent oversight of certain types of payments given this current climate," Verasamy says. "Regulations are becoming stricter to stop any terrorist funding. Given these changes, our compliance program is continuously reviewed and strengthened, which pushes up the costs of being in the payments business."

FEW SAFE HAVENS

The impact of world politics on commodities markets is of primary concern for Pat Obara, who serves simultaneously as CFO of Canada-based Brazil Resources and of Texas-based Uranium Energy, both mining companies engaged in acquisitions in Latin America.

French citizens created a makeshift memorial in Paris after the terrorist attacks last year. Incidents in Paris and Nice have caused millions in lost tourism revenues since November 2015.

Brazil Resources, as its name suggests, has assets in Brazil but recently completed a transaction in Colombia.

Obara points to recent unexpected events like Colombia's rejection of a peace deal with the Revolutionary Armed Forces of Colombia, which was a bid to end a decades-long civil war. While the vote "may be a bit of a setback for Colombian miners," Obara says, he's keeping hope that the situation will remain manageable.

"We recently sent a team of experts and prospectors there, and they didn't need guns or anything like that," he says. Referring to Brazil's turbulent presidential politics he adds, "You get that all over the world, and we have our own issues in the United States. There's risk here too."

For LightPath Technologies, a manufacturer and distributor of optical components and assemblies, China is where political risk is particularly acute, says CFO Dorothy Cipolla.

Much of LightPath's production facilities are in China, she explains, and the $17 million company was forced to take a $380,000 write-down on the value of its assets after currency moves by the Chinese government. "China's central control over its economy is a political risk for us," Cipolla says.

How China's political situation sorts itself out may become clearer as soon as next year, which is expected to bring "a renewal in the leadership in the politburo and within that the standing committee of the politburo," notes Chambers. But that's no reason to expect a change in China's interventionist policies. Or is it?

Unfortunately, assessing existing political volatility in China or any other country—including the United States — is worlds easier than predicting what may come next. "We don't really have a forecast for the unforecastable," Kay says. CFO

ED ZWIRN IS A FREELANCE WRITER BASED IN BETHEL, NEW YORK.

CFO Research: Intelligence for Smarter Decision Making

WE PRODUCE THE **INSIGHTS THAT CFOs NEED** TO MAKE BETTER DECISIONS.

CFO Research discovers what Fortune 1000 finance executives think about the most important topics.

What you get with CFO Research:

A dedicated team of finance-focused research experts that will help guide your program to success. We do it all — from crafting survey questions which lead to the best answer, to providing a finance-only distribution channel that delivers the highest-quality leads from your research-driven content.

A robust audience of finance decision-makers in print, online, and in-person. We reach senior finance executives with responsibility for identifying and purchasing solutions that support finance and enterprise needs.

Decades of experience serving many of the largest companies in the corporate finance space, as well as measuring the needs of senior finance executives.

For more information, contact:

Katie Brennan
SVP of Sales
CFO Publishing
646-277-6476
KatieBrennan@cfo.com

CFO research

AUTHORITATIVE.
INDEPENDENT.
FINANCE-DRIVEN.
JUST LIKE YOU.

The Power to Predict

What can predictive analytics really accomplish? Here are six examples of how firms are forecasting future probabilities and trends. By Keith Button

More and more CFOs—and companies—are applying predictive analytics to boost planning and forecasting accuracy and solve an ever-increasing range of business problems. ¶ One reason: The barriers to using predictive analytics tools, which employ statistical models to make forecasts and projections and uncover key business drivers, are being lowered. Falling costs and improved technology mean the tools are gaining wider acceptance as more companies experience success with them.

Many predictive analytics methods have been available for years, but only for companies with the resources—like a staff of data scientists, statisticians, and programmers. The time to commit to a considerable project was another prerequisite, says George Mathew, president and chief operating officer of Alteryx, a self-service data analytics firm. But software developers are now selling predictive analytics tools that are accessible to finance executives, as well as other company managers and staff who aren't programmers or data scientists but understand the problems that analytics can solve.

"Many of the users understand the quantitative analytics surrounding this work, but they're not programmers, so they're not going to necessarily program in Python or whatever it might be to create an accurate predictive model," Mathew says.

More Robust Models

Finance executives are using predictive analytics for planning and forecasting, risk management, and compliance and controls, like detecting anomalies such as possible money laundering by supply chain partners, Mathew says.

With the increasing availability of predictive analytics techniques, such as machine learning, CFOs can also build more robust models to forecast revenues or P&L, says Anshuman Mitra, data scientist in financial services at Alpine Data. The models can inject more dependencies into the analysis, factoring in changes in financial market indices, cost of capital, or inventory pricing. The models can also extract data from pubic company 10-Ks and bankruptcy filings.

"You get access to much more nuanced data, nuanced analysis, when you apply machine learning," Mitra says.

Better technology is making the barrier to entry for running machine learning models on very large volumes of data quite easy, says Josh Lewis, Alpine Data's vice president of products. Today's data storage platforms, such as massively parallel processing databases, allow much more sophisticated computing than earlier databases that didn't allow such manipulation.

"Storing large amounts of data has always been pretty feasible, and now we're getting really good as an industry at sophisticated computing on top of large amounts of data," Lewis says. "Companies like ours are creating tools to distance the end user from the complexities of those computations and make it something that's really visual and enables citizen data scientists."

While costs currently restrict full machine learning initiatives to big projects with high-value cases, there are opportunities as those costs come down, thanks to open-source technologies and more nimble tools, Lewis says.

"Those lower-value use cases that might be moving the needle by tens or hundreds of thousands of dollars, instead of millions of dollars, are now cost effective from an effort and return-on-investment standpoint," he says. In the world he foresees, instead of two dozen use cases for machine learning, the landscape will be unlimited, including use cases that were never thought of before.

How are companies deploying predictive analytics? The following stories demonstrate the power of predictive analytics to boost bottom lines.

Birst Mode

A *Fortune* 500 financial services company with about 1,500 directly employed agents selling annuities, life insurance, and related products used predictive analytics to determine the common traits displayed by its best custom-

Thinkstock

ers. The company was a customer of Birst—a cloud-based business intelligence and analytics provider—which did not identify the client. The customer's goal was to target its sales efforts toward prospective customers with the same traits, says Pedro Arellano, vice president of product strategy at Birst.

Birst helped the company launch its first predictive analytics application— a classification analysis, sifting through client data to find out the best targets to call, along with which specific products each prospect was most likely to buy and the dollar value of that opportunity.

The results: Revenue from the sales agents increased 20% in the first year and 10% to 15% per year in the following years. The success ratio for sales calls doubled, from one sale per 10 calls to two sales per 10. Client retention rates also improved.

The success with the project opened doors to other areas of the insurance company that wanted to see how they could apply predictive analytics, such as the company's human resources division.

Corralling Claims

EviCore, a medical benefits management company with $1.5 billion in annual revenue, used machine-learning software from Alpine Data to improve the efficiency of its claims pre-approval processing. EviCore processes about 2.5 million patient transactions per month on behalf of its insurance company clients.

Before employing the predictive analytics software, eviCore would rely on its army of about 800 nurses and doctors to decide on claims preapprovals, says Josh Lewis of Alpine Data. The staff sifted through a large volume of data, ranging from patient records and details on the medical procedures ordered to insurance provider requirements and codes.

The machine learning software took the large data set of prior claims pre-approved or denied by humans, deduced general rules that would lead to those classifications, and applied those classification rules to new claims. It also incorporated the new claims outcomes into the ever-growing data set and continually updated its rules for pre-approvals, Lewis says.

When the software scored claims as extremely likely to be approved, those claims skipped the human processing step. That allowed eviCore to increase its ratio of claims processed to headcount as the business expanded, so it didn't need to hire as many new employees to sustain the business.

Expansion Plans

A third example: The family-owned Oberweis Dairy used SAS predictive analytics software to solve problems with customer attrition and identify expansion locations.

Bruce Bedford, an Oberweis vice president who heads its analytics initiatives, says the first challenge the Illinois-based company attacked with predictive analytics was a customer attrition problem in its milk and dairy products home delivery business, which is about one third of the company's overall sales.

Oberweis used SAS analytics software to run a "survival analysis" of transaction data from the week-to-week home delivery orders. (A sur-

THE ANALYTICS OF ICE CREAM

How was weather affecting Oberweis Dairy's store sales?

Another issue Oberweis Dairy uncovered through its predictive analytics was the weather driver for ice cream sales from its convenience stores. Prior to incorporating analytics about seven years ago, the company would document the prior day's precipitation and temperature on its daily sales reports for the dairy stores, but the correlation was unknown.

"The problem was, nobody could tell you what it meant," says Bruce Bedford, an Oberweis vice president. "Nobody could tell you whether changing temperature by one degree had some impact or no impact on the prior day's sales. They knew that sales were related to weather and they knew weather was somehow important in affecting sales, but they just didn't understand what it meant."

One of the first issues Bedford tackled with predictive analytics, with the help of Protiviti, was to create a model that allowed the company to relate historical weather patterns to historical sales data.

The analysis revealed that sales weren't linked just to temperature and rain, but more significantly driven by dew point, which reflects the comfort level at a given temperature. Scientifically, the dew point is defined as the temperature below which water droplets begin to condense and dew can form.

The dew point connection led Bedford to do more modeling based on dew point, and now bonus-pay plans for employees are based not just on same-store sales measures, but weather-adjusted same-store sales.

"Dew point is a factor in ultimately compensating people for the performance of stores, so it really went from a very unsophisticated look to a very sophisticated look," he says. K.B.

Thinkstock

vival analysis is a set of methods for analyzing data where the outcome variable is the time until the occurrence of an event.)

The analytics determined that a promotional effort for home delivery service to new customers—which included free delivery for six months—had a substantial impact on customer retention. Waiving the $2.99-per-week delivery fee for six months turned out to be a bad idea, because customers often dropped the service once the fee appeared on their bill after 27 free deliveries. Oberweis changed the promotion from six months free to a reduced fee for a longer period, and the sharp attrition rate at six months vanished. Retention rates for those new customers also improved 30%.

"That's a counterintuitive idea, and many people were extraordinarily resistant to doing it, because they thought 'My God, how can you charge more and get a better result?'" Bedford says.

Oberweis also applied predictive analytics to a geographic expansion issue with its home delivery service. The company has eight distribution points—three in the Chicago area and one each in Milwaukee, St. Louis, Detroit, Indianapolis, and Virginia—and plans to add two more sites in the next three to six months. Oberweis wants to expand where customers are most likely to sign up and stick with the service. The closer home delivery customers are to their distribution point, the more likely they are to remain loyal.

The company had used the analytics software to maximize the cost effectiveness of direct mail marketing to sign up new home delivery customers for its existing distribution points, drawing on demographic data for tens of millions of families on U.S Postal Service carrier routes to determine which ones should be targeted.

The direct mail model was effective enough that the company could buy a two million-piece mailing and know with a high degree of certainty what kind of return it would bring and when, Bedford says. So Oberweis took the direct mail model that was working for the markets it was already serving and applied it to potential new markets.

"CFOs have to bring more sophisticated, predictive, prescriptive, and descriptive analytics into the fold, because that's what their compatriots—the CEOs and the boards of directors—are expecting."

›› **George Mathew, Alteryx**

"The CFO cares about this decision because the minute you tell him you need to go to a new market, he's seeing all kinds of capital expenses," Bedford says. Those include buying or leasing property, buildings, trucks, and equipment, and hiring and training staff. "There's a lot of expense tied to that decision, so immediately the question is: 'If we're going to expand, where do we put a building?'"

The analytics model is driving the ongoing expansion process, including where to put in bids for properties, where to recruit from, and where to locate trucks for delivery, Bedford says.

What's Driving Losses?

Finally, a large insurance carrier was losing market share to local insurance companies, and its backward-looking descriptive analytics wasn't finding the drivers behind those losses. The company hired Protiviti, a business consultancy, to help it understand the customer loyalty issues using predictive analytics modeling.

The analysis started with 5.4 million rows of data, including customer product, revenue, and distribution data, and 69 variables. Techniques for eliminating irrelevant data then cut the total to 1.2 million rows and 21 predictors, says Shaheen Dil, head of Protiviti's advanced analytics practice. Protiviti did not reveal the name of the insurance company.

With additional regression and machine learning techniques used to test the performance of various models and identify the top five predictors, the analysis generated a management dashboard that allowed executives to make decisions in real time, Dil says. The model could predict with 81% accuracy whether customers would leave or not, identifying 14 key predictors in product, customer, and distributor categories.

Protiviti also developed recommendations for improvements, like focusing on the correct age groups; refining distribution and cross selling; and reviewing pricing.

"Every now and then we'll find something that the client had not thought of, and they wouldn't have known about it without looking at the big data," she says. "The results are not always what you would expect."

Two factors seem to be driving the recent examples of CFOs using predictive analytics, says Mathew of Alteryx. One is the technology available that allows companies to draw from multiple outside sources of data, not just internal sources. The second factor is the increasingly strategic demands on the CFO, who now is expected to understand the future as well as report on the past.

"CFOs have to bring more sophisticated, predictive, prescriptive, and descriptive analytics into the fold, because that's what their compatriots—the CEOs and the boards of directors—are expecting," Mathew says. "Because of that, I think there's a much more focused CFO function that has higher-level capabilities, particularly on the analytics side, than we've ever seen before." CFO

2016 *CFO* Commercial Banking Survey

WANTED:
A Flexible, Attentive Bank

Corporate clients know what they want in a commercial bank, according to our third annual banking survey, but they rarely get it.

BY VINCENT RYAN

What makes a bank earn the respect and loyalty of its corporate customers? In the middle of and just after the financial crisis, many CFOs would have said "a bank with a relatively low-risk balance sheet that won't pull my line of credit without warning." But with U.S. financial institutions having built larger capital buffers and de-risked their portfolios, the answer has changed. For the third year in a row, the results of the *CFO* Commercial Banking Survey showed that there's no secret to being a top-notch bank: it's all about the service.

2016 *CFO* Commercial Banking Survey

The survey, conducted by CFO Research in September 2016, garnered 325 responses that recorded 516 bank rankings. Participants were asked to score their current commercial banks on strategic partnership, customer relationship, lending/availability of capital, transaction/payments processing, and internal reporting/connectivity.

Notable in the results this year were high-scoring super-regional or regional banks, including Silicon Valley Bank and Compass Bank. (See "Service Minded," below.) They did particularly well in the "strategic partnership" and "customer relationship" categories.

Generally, finance executives think banks are doing a fairly good job. The average overall score for all service attributes was 7.43 on a scale of 1 to 10; that's more than half a point higher than in last year's survey. In addition, 56% of respondents said they would strongly recommend their commercial bank to another senior finance executive.

When asked to explain what makes a bank recommendable, one respondent cited relatively simple criteria: "Wells Fargo, aside from its recent debacle, has always treated me and my company with great deference and made few (very few) errors. I don't think you can ask much more from a bank than that. The few times I've asked the bank to rush a deposit, it's been willing to do so, even at its own risk."

Indeed, banks largely earn client recommendations based on the actions of their account or relationship managers, signs of a market in which the products are commoditized. "Our account managers are in our business all the time, are easily accessible on their cellphones, and our requests and issues get dealt with promptly," said one finance executive.

"The secret is in the relationship manager," echoed another. "I happen to have 'hit' with a couple of managers who have taken the time to understand the strategic requirements of the business and provide the capital to fund those."

In terms of overall satisfaction with their individual banks, on a scale of 1 to 100, finance executives that bank with Silicon Valley Bank rated it the highest at 89.9. Compass

DELIVERING SATISFACTION

The top 10 U.S.-chartered commercial banks ranked by perceived customer satisfaction

1. JPMorgan Chase Bank
2. Wells Fargo Bank
3. Bank of America
4. Citibank
5. PNC Bank
6. U.S. Bank
7. Capital One
8. TD Bank
9. Bank of New York Mellon
10. State Street Bank & Trust

Service Minded

Asked to score their commercial banks on five key service attributes, finance executives ranked these institutions the highest in each category.*

Service attribute	Highest scorers	Bank's avg. score
STRATEGIC PARTNERSHIP: Understands my company and industry; helps my company identify and prepare for changes in the business landscape; offers key expertise on critical issues; fills my company's skills gaps when necessary.	Silicon Valley Bank Compass Bank Comerica Bank	9.1 8.4 7.6
CUSTOMER RELATIONSHIP: Is customer-centric; provides stability via strong relationship manager; is responsive to requests; has strong client service organization.	Silicon Valley Bank Compass Bank BB&T	9.3 8.9 8.0
LENDING/AVAILABILITY OF CAPITAL: Offers favorable rates/terms; offers a range of lending solutions; offers custom lending solutions; assists with regulatory requirements.	BB&T Silicon Valley Bank Compass Bank	9.0 9.0 8.7
TRANSACTION/PAYMENTS PROCESSING: Provides fast, accurate, efficient services; delivers strong value for fees charged; supports new technologies; offers full range of transaction services.	Silicon Valley Bank Compass Bank BB&T	8.8 8.6 8.3
INTERNAL REPORTING/CONNECTIVITY: Integrates with my financial systems; aggregates financial information across my subsidiaries, geographies, and accounts; provides clear and consistent alerts, confirmations, and exception reporting; supports new reporting technologies and customization of reports.	Compass Bank BB&T SunTrust	8.7 8.0 7.7

*Attributes ranked on a scale of 1 to 10, with 1=poor and 10=excellent.

Bank earned the second-highest satisfaction score (87.1), followed by Regions Bank (81.4), SunTrust (80.3), and BB&T (80.1). Among the systemically important, largest banks, U.S. Bank had the top overall satisfaction score among its clients at 78.2; Citibank had the lowest (61.1).

A few banks were rated very highly on individual service attributes, overall customer satisfaction, or both, but lacked a sufficient number of responses to be named as aggregate higher scorers. They included City National Bank, Frost Bank, and M&T Bank.

Delivering Satisfaction

In addition to their own banking relationships, finance executives ranked the largest U.S. commercial banks in terms of perceived customer satisfaction. From a list of the top 10 U.S.-chartered commercial banks, measured by consolidated assets, respondents selected the 4 (in order) they think are best at satisfying customers. Then, a weighted scoring system was applied to the survey results to create an overall numerical ranking, from 1 through 100.

Why a perception ranking? It allows the survey to reflect not just first-hand customer experiences, but also the wide range of additional information that CFOs use to form an impression of a bank.

The resulting ranking (see "Delivering Satisfaction," facing page) closely resembled that of 2015. JPMorgan Chase beat out Wells Fargo once again in a close race for the top spot. Bank of America held onto the third spot, and Citibank, despite poor marks from some of its own customers, came in fourth. PNC Bank inched ahead of U.S. Bank for fifth, and State Street fell to last place this year (after beating out Bank of New York Mellon and placing ninth in 2015).

What CFOs Want

Which characteristics are most important to finance executives working with a commercial bank? The survey results were almost exactly the same as 2015's: good account management and customer service; values for fees charged; and ease of use. (See "Winning Qualities," above.) Simple to achieve, right? Not necessarily.

If we had to sum up in one word the many complaints from finance executives about banks' service, that word would be "inflexibility." Wrote one finance executive, "The customer seems to have to fit into a preconceived methodology of transacting business instead of the other way around, and there is great lack of flexibility on the part of most major banking institutions."

Said another, about access to capital: "When I have requested to borrow money they make a decision based on elementary financial ratios rather than actual cash flow and profitability. They do not take the time to understand my industry or specific financials."

But what really seemed to irk finance executives was when banks appeared unaccommodating at enforcing regu-

Winning Qualities

Which characteristics are most important in choosing a commercial bank?

Note: multiple responses allowed

lations. "Bank [X] seems to be becoming more and more rule-driven and inflexible in dealing with day-to-day transactions," commented one unhappy customer. "They recently rejected a completely legitimate deposit because someone at the branch did not like the endorsements."

Another executive switched banks because their financial institution "insisted that our Canadian executives travel back to the U.S. to change signers on our bank accounts, in person at a branch, even though they had already verified their identities through corporate documents, social security numbers, driver's licenses, and passports. None of our other banks insisted on this."

Of course, the open-ended responses weren't all negative. More than a few went like this: "My banking institution understands the value of customer service and good communication skills. They will to work to make a deal come together for the benefit of all parties."

Do financial institutions emphasize the quality of client service as much as clients do? We see much evidence to the contrary. Those banks that don't emphasize service may want to rethink their strategies: 28% of respondents said they have added or ended a commercial banking relationship in the last two years. In addition, 25% said they expect the nature of their organization's relationship with their commercial bank to become "somewhat" or "much more" difficult in the next two years. With many banks failing to earn their respect and loyalty, some corporate clients are clearly up for grabs. CFO

Is Breaking Up Always Hard?

In the latest Duke University/*CFO* Global Business Outlook Survey, finance executives reveal few concerns about the UK's Brexit decision. By Josh Hyatt

It's tempting to analyze the global economy by scanning two separate snapshots: what it looked like before the Brexit vote and how it has performed in the months since the United Kingdom's shocking decision to leave the European Union. But so far, it's tough to detect many differences between the two portraits.

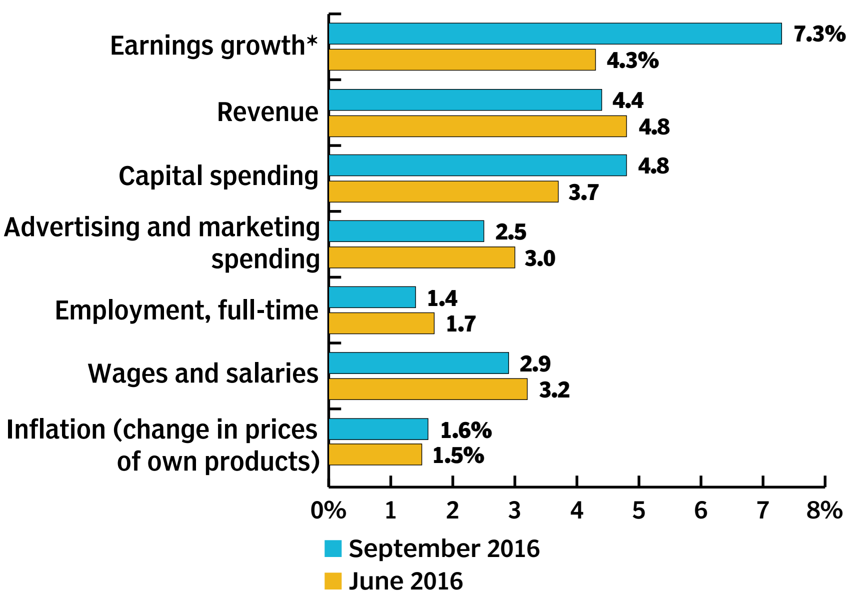
Last June, when a slender majority (52%) of British voters decided in favor of exiting the world's largest trading bloc, the short-term impact could be summed up in a word: cataclysmic. How so? The Dow Jones plummeted more than 600 points in a day, UK Prime Minister David Cameron fell on his sword, and experts clung to a poorly named phenomenon known as" bregret" (or synonyms like "regrexit" or "bremorse"). Those terms suggested that those who voted in favor of leaving were guilt-ridden as they began to comprehend the political and economic chaos brought on by their woefully misinformed choice. Pre-Brexit, immigration so dominated the debate that the possible financial repercussions of abandoning the single market seemed hardly to register.

But the 17 million who voted in favor of Brexit—older, poorer, and less educated than citizens who gave it a thumbs-down—were also viewed as harbingers of a larger movement: a populist revolt, fueled by fury over globalization and technological change, that would stuff its seething wrath into every available ballot box.

Such high-level drama hasn't yet unfolded. Granted it's only been a few months since the British breakup. And it's true that the British pound has subsequently taken, well, a pounding and remains far below its pre-Brexit levels. But in the quarterly Duke/*CFO* Business Outlook Survey, which collected responses from more than 1,200 senior finance executives in September 2016, it's difficult to find any trace of Brexit-induced panic. In some cases, the impact may involve certain events that *didn't* transpire because of the vote—it played a role, for instance, in the Federal Reserve's decision to delay an interest-rate increase.

Growing Ahead

U.S. firms have high hopes for improved earnings.



*Public firms only. All other numbers are for all survey respondents (including private).
Note: The reported averages are weighted by revenue or number of employees, so that large firms are weighted more heavily.

SETTING A DATE

In the survey, U.S. CFOs see an economic path ahead that is free of turbulence, with earnings growth predicted at 7.3% and revenue rising at an estimated 4.4% rate (see "Growing Ahead"). Their optimism about the economy, as rated on a scale from zero to 100, weighed in at 60.6, a slight rise over the quarter before. Asked specifically about how big an effect Brexit's pace would have on their companies, most respondents expressed neutrality. Only 12% say they would prefer that the UK proceed slowly. It's unlikely, of course, that the withdrawal of Britain, which ranks as the world's fifth-largest economy, would happen at anything other than a prudent pace. Britain needs time, after all; it hasn't conducted its own international trade

Thinkstock

for more than 40 years.

Among European CFOs, 31% of those surveyed prefer that Britain make a slow exit from the EU. Similar numbers of respondents predict that Britain will complete its withdrawal by the end of 2019; 54% put that date a year later. It's understandable that neighboring CFOs would want Britain to proceed gingerly: 27% of CFOs at European firms say they expect their UK-based revenue to drop after the Brexit divorce is sealed.

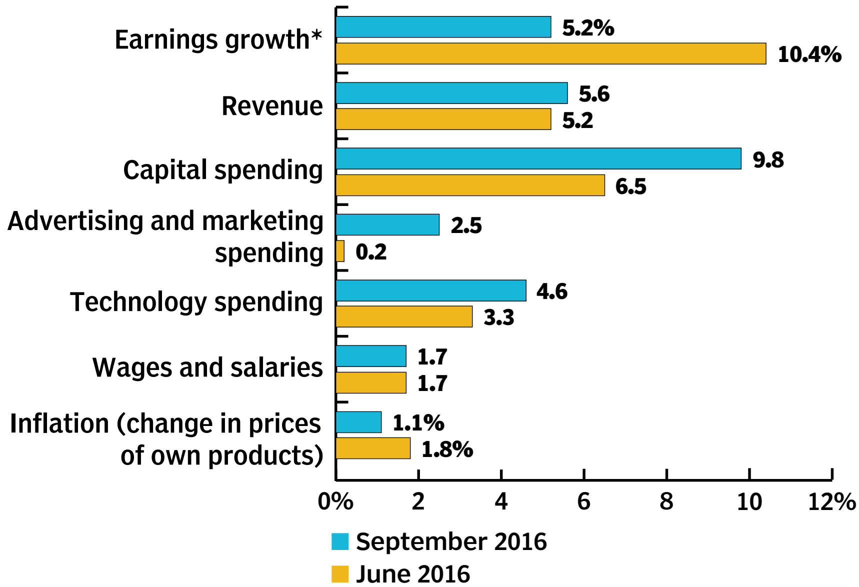
Those firms also expect that the proportion of revenues coming from the UK will fall by more than one third, from 22% to 14%. For the next 12 months, however, Europe's CFOs say that they expect earnings to grow by 5.2%, a precipitous drop from the 10.4% they foresaw in June (see "Slowing Ahead").

Still, the UK—and maybe the rest of the world—would be wise to brace for the full impact of Brexit. The IMF predicts that the UK economy will grow at a 1.7% rate this year, having trimmed its forecast, post-Brexit, by 0.2%. Next year's growth rate, according to the IMF, will shrivel to an anemic 1.3%. Given the abundant uncertainty regarding Britain's trading relationship with the EU, it's likely that business investment will drop. It's only natural for big investors—and there is no bigger UK investor than the U.S.—to act guardedly as the UK comes closer to wrapping up negotiations over its departure. Trade with the UK constitutes just 0.5% of U.S. economic activity, but the oft-proclaimed "special relationship" between the two countries is unquantifiable.

Certainly, some industries will feel the heat sooner than others. In financial services, U.S. firms have typically used London as a gateway to the rest of Europe; needing a new regional hub, those companies will have to move elsewhere, perhaps to Frankfurt.

Slowing Ahead

Europe's CFOs have dialed down their profit outlook.



*Public firms only. All other numbers are for all survey respondents (including private).

WATCHING AND WAITING

There is, in fact, a set timetable for how the Brexit will be executed—which may be what's keeping uncertainty at bay and helping to prop up consumer confidence. Such predictability, whether or not it ends up reflecting reality, helps create the impression that the unprecedented process will nonetheless progress smoothly. A few months into 2017, the UK government is expected to invoke Article 50, formally kicking off a two-year negotiating period during which Britain and the EU will wrangle over the details of the exit terms.

The complexity of the negotiation is hard to fathom, encompassing everything from budgets to immigration policy to any new trade agreement that the UK can reach with the EU. Whether that range of issues can be settled in two years is an open question—one of many, including: Can that period be extended, if necessary? Is it acceptable for the parties to reach a transition agreement, acting on that even as they work on bringing a final agreement into focus?

This much seems certain: the longer and more drawn out the negotiations are, the more time foreign investors are likely to spend watching and waiting. As their uncertainty festers and grows through a long and grinding negotiation, it could very well trigger more visible negative events, including market see-sawing.

Britain's economy only represents a sliver of the world's gross domestic product, roughly 2.4%. But the EU, for example, is a major trading partner with both China and the U.S., which means those deals will have to be restructured. In any case, Brexit's global impact will ultimately extend far beyond its trading footprint.

What lesson will the rest of the world take away from the Brexit decision? In the survey, 20% of European CFOs say that another country will opt to leave the EU within two years. And there are concerns that the spirit underlying the vote will spread, leading to widespread distrust of business leaders, politicians, and the status quo.

It can all sound quite dire. But in the preferred parlance that dominated so many discussions of the post-Brexit world—there was a bravalanche of them—only this much is sure: the full impact bremains to be seen. CFO

New and Improving

Finance executives rethink their role in cultivating innovation. By Josh Hyatt

16%

Percentage of finance executives who classify their companies as "highly successful" at innovation

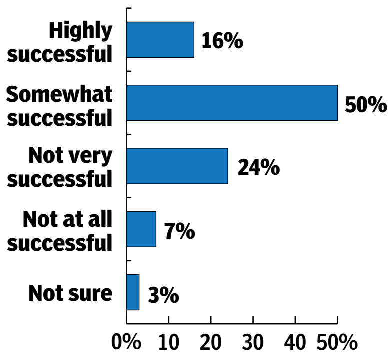
Having already reinvented their corporate roles, CFOs are prepared to take on a much broader challenge: spreading the impulse to innovate throughout the business.

In a fiercely competitive atmosphere, driven by increasing globalization and unceasing technological change, companies need to find ways to foster creative thinking throughout their organizations, balancing the requirement for structure with the imperative to experiment. In a recent survey conducted by CFO Research, in collaboration with CPA firm Cherry Bekaert, finance executives expressed a keen awareness of both the central role that innovation will play in fueling company growth and how far short of that goal their companies remain.

The survey explores the views of finance executives at middle-market companies—90% of them posted annual sales of between $10 million and $500 million—regarding the role of innovation. Among the 161 survey-takers, only 16% classify their companies as "highly successful" at innovation, while 3 out of 10 don't regard themselves as successful at it. A plurality of middle-market finance chiefs rank their companies as no better than middling when it comes to innovation, labeling them as "somewhat successful" (see Figure 1).

FIGURE 1

How would you characterize your company in terms of how successful it is at innovation?



A NECESSITY FOR GROWTH

Survey respondents have become acutely aware of the critical role innovation will play in creating value. Assessing the past 12 months, about a third of respondents attribute at least half of their revenues to innovation. In their written comments, survey-takers indicate that their businesses need to push harder to, as one puts it, "look beyond traditional boundaries." Another respondent cites the necessity of "being bold, [and] taking a large financial risk."

Staying competitive means embracing risk-taking on an entirely new level. It's no longer enough for companies to rely on incremental innovation—a new feature here or there—to hold on to customers. Middle-market companies need to build a culture of innovation, treating it like a tool to meet changing customer needs and outpace rivals.

In the survey, respondents convey a sense of urgency about nurturing breakthroughs. Nearly 9 out of 10 (88%) say that innovation is more important to their companies now than it was 5 years ago. Roughly the same percentage expects that successful innovation will be more important for their companies in 5 years' time. Even 9 out of 10 companies which attribute less than half of their revenues to innovation expect the ability to transform ideas into sellable products or processes to become more important in the next 5 years.

But respondents are not naïve about the scale of the organizational change required, and are realistic regarding the obstacles they face. One respondent wrote that his company must "acknowledge that innovation is a requirement to remain competitive and that expected returns won't always be sustained as competitors match our effort."

In addition to re-aligning their expectations, companies may have to overhaul their organizational structures, especially if they are hindered by overly dense and slow-moving systems for decision-making. To support innovation-driven risks, finance executives at middle-market companies will need to allocate resources to capabilities that boost flexibility, such as technology for fast prototyping. While enthusiasm and energy may abound, companies will need processes for refining and exploring new ideas to ef-

Thinkstock

ficiently assess whether they deserve further development.

Sir Isaac Newton notwithstanding, most bright ideas do not materialize in a flash of insight. The path to game-changing breakthroughs can meander through a series of inconspicuous advances. And it's unlikely to emerge from a marathon brainstorming session conducted in a stuffy conference room. Nor are employees, despite being directed by their superiors to do so, likely to emerge from their cubicles with fully formed blockbuster ideas in tow.

Innovation, to filch a phrase, takes a village. In the corporate context, that may mean starting by assigning cross-functional groups of employees to come up with solutions to specific problems. Yes, there will inevitably be failures, but from a cultural point of view what's crucial is that management communicates its earnestness about identifying and supporting promising ideas. Even if such ideas never make it to market, they are useful vehicles for reinforcing the company's thirst for creative thinking.

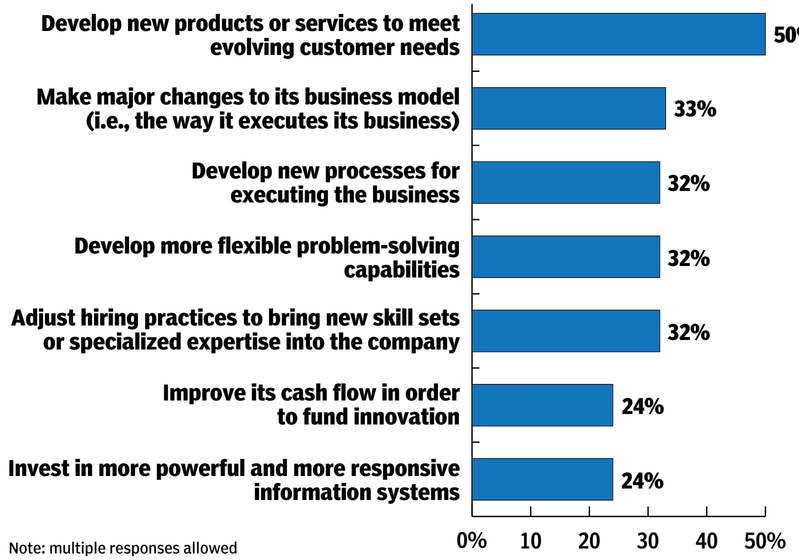
DRIVEN BY CUSTOMER NEEDS

As enigmatic as the entire innovation process may seem, middle-market finance executives have clear ideas about where such efforts should start. Among survey-takers, half of respondents say that future innovation will largely be driven by customers' evolving needs (see Figure 2). Similarly, answering a different survey question, 47% of respondents rank customer need as the biggest impetus for becoming more innovative, far more than those who chose advances in production technology, equipment, or materials (38%); advances in information technology and data analysis (38%); or even the fact that markets are maturing or saturated (31%).

At a time when big data analytics is often touted as the salvation for

FIGURE 2

Over the next five years, which of the following actions will be most important for your company to take in order to be successful at innovation?



Note: multiple responses allowed

companies in search of a sustainable competitive edge, survey-takers still perceive customer behavior as central when it comes to successful innovation. As valuable as following streams of data may be in finding hidden patterns and helpful correlations, such discoveries will not automatically capture value in the real world. One respondent writes of the "need to sometimes look beyond traditional boundaries for different perspectives on how customers interact with your products."

Such customer-centric thinking has not typically been the domain of finance executives, who tend to be more comfortable with spreadsheets. But to evaluate the investment allocations that underlie the transformation into an innovation-driven enterprise, finance leaders need to understand how customers are changing.

Successful finance executives understand innovation from the inside out. They've had to reinvent themselves in recent years, emerging as strategic decision-makers, rather than keepers of the quarterly reports. A host of organizational shifts, ranging from the elimination of the chief operating officer title to the availability of advanced analytics tools, has required finance leaders to take on some of the responsibility for helping the business transform.

The increasing responsibility finance executives now accept for helping shape an innovative organization is documented in the survey, where just over half say that their corporate leadership (such as the CEO or owner) is the driving force behind innovation. Finance executives primarily view themselves as an equal partner with others (24%) or as an adviser to others (28%).

By demonstrating their own creative thinking, finance executives can become the embodiment of what needs to happen—namely that innovative ideas expand beyond any single function, such as product development, and permeate the entire business. It's now part of the finance function's mission to monitor the organization's innovation efforts, making sure that the company has access to the resources it needs. At a time when innovative ideas—almost as much as capital—serve as the fuel that energizes corporate expansion, it falls to finance executives to make sure those resources are managed effectively. CFO

THE QUIZ

Money Machine

The National Football League has become the nation's most watched pastime and also the most lucrative. Projected to gross billions of dollars from television rights alone in 2016, the NFL is now the most valuable sports league in the world. But how much do you really know about this corporate juggernaut? Take our quiz to find out.

1 Having signed a six-year, $140 million contract in June, who is the NFL's highest paid player?

A. Joe Flacco
B. Tom Brady
C. Eli Manning
D. Andrew Luck

2 Which football stadium cost a record $1.6 billion to build in 2010?

A. Soldier Field (Chicago)
B. MetLife Stadium (New York)
C. AT&T Stadium (Dallas)
D. Levi's Stadium (San Francisco)

3 With an average ticket price of $132, which NFL stadium is the most expensive for spectators?

A. Gillette Stadium (New England)
B. Soldier Field (Chicago)
C. FedEx Field (Washington)
D. Hard Rock Stadium (Miami)

4 Which NFL franchise is valued at a record $4 billion?

A. New York Giants
B. Seattle Seahawks
C. Dallas Cowboys
D. New England Patriots

5 The NFL's least valuable franchise is the Buffalo Bills. How much were they bought for in 2014?

A. $2.2 billion
B. $955 million
C. $2.9 billion
D. $1.4 billion

6 How many NFL games ranked in the top 50 most-watched TV programs in 2015?

A. 45
B. 6
C. 22
D. 13

7 How much revenue is the NFL estimated to earn during the 2016 season?

A. $2.2 billion
B. $5 billion
C. $13 billion
D. $22 billion

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

Sources: Fundrise, Bankrate, ESPN

Thinkstock