



Proactive monitoring for enterprise governance

**Transforming predictive data
analytics to mitigate fraud
and abuse**

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The government doesn't want to hear excuses; companies have the data to monitor and analyze fraud, and they need to use it.

"Whereas we are able to identify indicators and anomalies from market-wide data, companies have better and more immediate access to their own data," Deputy Assistant Attorney General Matthew S. Miner said at the 6th Annual Government Enforcement Institute in 2019. "For that reason, if misconduct does occur, our prosecutors are going to inquire about what the company has done to analyze or track its own data resources—both at the time of the misconduct, as well as at the time we are considering a potential resolution."¹

Yet, while 80 percent of governance and compliance professionals say they feel the pressure to use data analytics, less than 30 percent are incorporating detection or analytic techniques to monitor for potential fraud at their companies.

Many are understandably hesitant to begin putting such data- and technology-driven capabilities into place.

The prospect of standing up a robust data analytics program can seem overwhelming, especially when organizations are already working hard to maintain compliance standards with limited resources and internal data analytics experience, and little appetite to spend on enhancements with unclear returns.

Moving past these barriers first requires a deeper understanding of the value of data analytics in fraud detection and accountability, and how to begin building a proactive program that meets heightened government expectations. To help organizations think this through, in the following pages we discuss:

- Regulator expectations and enforcement sensitivity around fraud detection
- How organizations are using analytics to identify risk today
- The use of analytics within enterprise governance
- The steps organizations can take to prepare for the future

Survey results and discussions referenced throughout this paper are from a webcast, **"Proactive Monitoring: The Future of Analytics in Enterprise Governance,"** hosted by KPMG March 18, 2021. Survey results reflect more than 1,500 webcast participants.

Visit <https://advisory.kpmg.us/events/webcast-homepage/2021/proactive-monitoring.html> for more information and to access a replay of this event.

¹ The United States Department of Justice, "Deputy Assistant Attorney General Matthew S. Miner Delivers Remarks at the 6th Annual Government Enforcement Institute" (September 12, 2019)

The catalysts driving the compliance agenda

While data has become an indispensable asset to businesses across multiple functions, compliance leaders are ramping up their pursuit of more advanced analytics for enterprise governance. Data, like any other asset, needs to be actively harnessed to achieve its full potential and value. The immense power of data analytics to drastically improve compliance cannot be ignored in light of several emerging trends.

Compliance risk after-effects from COVID-19

As we touch on in our publication [Ten key regulatory challenges of 2021](#), disruptions caused by the emergence of the pandemic in 2020 put a strain on compliance staff and governance processes that continued into the new year.

Companies bypassed controls to meet immediate operational needs during shutdowns and redesigned processes to be completed at home with little to no oversight. At the same time, they reprioritized compliance activities due to resource constraints, delaying training, testing and auditing. Remote work, economic instability, and the rapid rollout of complex multi-government stimulus packages added to the challenges we still see today.

Executives are keenly aware of the economic impact of fraud, waste and abuse on their organizations, and the potential for even greater loss if they don't address the latest issues. As emerging risks are starting to render existing compliance assessments and processes less effective, companies need new ways to identify risk—particularly in real time. Many are turning to advanced data analytics.

"Based on the experiences we've had with our clients, it is very clear that companies are seeking ways to leverage data in the design, implementation and operationalizing

of their compliance initiatives," said Jose Claudio Trevino, KPMG Mexico and Central America Forensic Leader. "In that sense, data analytics is a very positive enhancement to a company's compliance program."

Regulators start to see data analytics as a "must have"

Of course, fraud not only costs companies money but invites regulatory scrutiny. Importantly, as access to data analytics and methodologies has become widespread, the U.S. Securities and Exchange Commission (SEC), the U.S. Department of Justice (DOJ), and other federal and state regulatory and enforcement agencies want to see companies maximize those tools to identify and mitigate risk across their organizations.

"Regulators know the power of data, and they expect companies to take data analysis seriously," said Ronald Machen, a partner in white collar investigations at WilmerHale. "How you operate your compliance program will play a critical role in how a department treats you if there has been a mishap and what sort of discretion they utilize in deciding how to handle your matter. They want to see the company make the same commitment and investment in data for compliance and prevention as it would make for some new marketing campaign that could unlock millions of dollars in revenue."

The high price of fraud

Every year, fraud, waste and abuse are estimated to cost global organizations

**\$4.5 trillion, or
5% of revenue.** One out of five cases results in losses of more than
\$1 million.



Association of Certified Fraud Examiners, Report to the Nations 2020

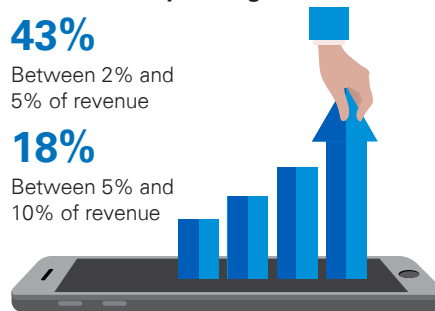
What amount of revenue do you believe is subject to fraud, waste and abuse at your organization?

43%

Between 2% and 5% of revenue

18%

Between 5% and 10% of revenue



KPMG survey, March 18, 2021

What is the primary pressure to use data and analytics within governance and compliance at your organization?

36%

Part of enterprise analytics strategy

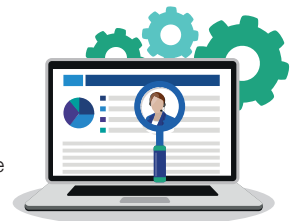
23%

Board of directors/ leadership directive

20%

Regulatory/enforcement-related

KPMG survey, March 18, 2021





The DOJ, for example, issued guidance in 2020 related to data analytics for compliance programs.² The DOJ has indicated it would review how companies track compliance policy implementation, including trainings and effectiveness.

Officials also are interested in company data related to their hotlines, from how well employees are aware that the hotline is available, to frequent targets of complaints and statistics on how compliance and management followed up. Such detailed analysis not only goes a long way in helping companies resolve specific incidents with officials, it can help support the company's reputation among regulators as an organization with a strong compliance program.

New administration, greater intensity

U.S. Attorney General Merrick Garland and SEC Chairman Gary Gensler are just two of the names in the Biden administration that suggest that the United States may increase white collar enforcement following the 2020 election, Machen said. Expect collaboration between the SEC and the DOJ in financial and securities enforcement, in particular. And, again related to the COVID-19 relief effort, the government will likely be active in making sure the massive amount of federal funds that have been earmarked for economic recovery is being distributed and used properly across industries, including airlines and healthcare.

"It's a very, very good time for companies to take this seriously," Machen said. "Take a step back, examine what they're doing well and what they need to improve on, and get their house in order."

Added Trevino, "Data analytics will continue to represent a critical factor in confirming that a company's compliance program is well designed; that the program is adequately resourced; and ultimately, that the compliance program actually works and is effective."

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"How you operate your compliance program will play a critical role in how [regulators] treat you if there has been a mishap and what sort of discretion they utilize in deciding how to handle your matter."

—Ronald Machen, Partner, White Collar Investigations, WilmerHale

² WilmerHale. "DOJ Issues Further Guidance on Evaluation of Corporate Compliance Programs." June 4, 2020.

The current state of internal governance, compliance and investigations

The pressure is on to improve data analytics, but resources are in short supply. Compliance and governance leaders are challenged to do more with less while overcoming several obstacles to developing more advanced data analysis capabilities.

From reactive to proactive

Companies today still depend on highly reactive fraud monitoring processes. In fact, less than 5 percent of survey respondents during our recent webcast said their organizations use predictive analytics to monitor for fraud prevention, compared to more than 50 percent that rely on tips from hotlines and other whistleblower mechanisms.

Furthermore, only about 11 percent of survey respondents said real-time data analytics are in place for enterprise governance. More than 7 percent don't use analytics for enterprise governance at all.

Trevino, a KPMG partner who works primarily with Latin American subsidiaries of U.S. and European multinationals, said most companies are somewhere between reactive and proactive on the data analytics maturity spectrum. Some very real challenges stand in the way of companies looking to elevate their use of data analysis for governance and achieve some level of predictive analytics.

Common struggles and pitfalls

Certainly, different companies have different priorities and strategic objectives, many of which were upended by COVID-19. "As I heard clients say to me recently, compliance is not the same in times of peace and in times of war," Trevino said.

But ultimately, many organizations get stuck trying to figure out where to begin the data analytics journey. What's the right frequency for risk assessments? Is data available to map identified risks, especially across multiple jurisdictions and third parties? Should data analytics efforts be focused on high-risk processes such as procurement, sales and distribution channels, or on specific risks such as fraud and corruption across the enterprise? These are just a few of the questions companies have.

Finding resources to focus on data quality and analysis is the other key issue, especially in challenging times when resources are limited or constrained and compliance and governance has to battle other functions for budget prioritization.

The human element

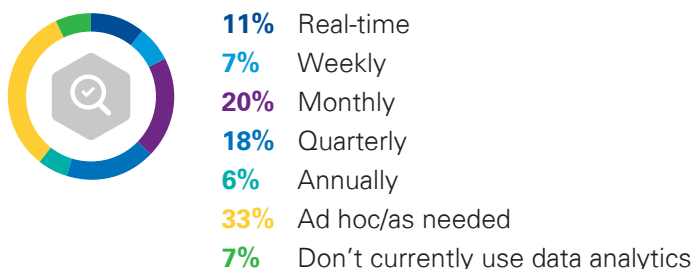
Employees simply can't crunch data at the same speed and accuracy as technology-driven programs, leaving companies open to missed risks and slower-than-desired identification and response.

Data analytics program implementation provides an opportunity to automate the most manual and time-consuming processes in a compliance organization. Models help identify high-risk transactions and relationships—or trends and patterns, in the case of predictive analytics—so that business owners and compliance teams can focus on those issues. Employees then have more time to resolve problems, returning greater value to the business.

How does your organization monitor for potential fraud today?

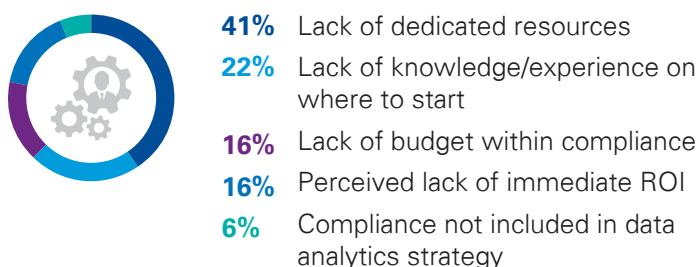


What is the most common frequency for analytics within Enterprise Governance at your organization?



KPMG survey of webcast participants, March 18, 2021

What is the greatest challenge to implementing proactive monitoring analytics at your organization?



KPMG survey of webcast participants, March 18, 2021



The culture component

Many of these most common failings are typical of nascent programs that don't yet have the technology in place to pull relevant data, especially if operations are spread around the globe.

However, Machen stressed the importance of employees and culture as complements to technology. Even larger companies with more mature data analytics programs can't succeed without the right tone from the top or the middle.

In fact, many of the compliance issues Machen comes across are directly related to culture. Companies looking to address compliance issues arising from cultural challenges may wish to establish consistent and frequent management discussion about the value of compliance in the organization or to tie compensation and incentives to compliance and governance metrics.

"More and more, you're going to want to be able to demonstrate that there's a legitimate interest in what's going on around the company with respect to compliance," he said. "And the culture is something that's really hard to get your arms around, but it's really critical."



Compliance leaders see the opportunity and priority

"Sixty-seven percent of respondents indicated that their compliance function planned to enhance the use of automation and technology in the next one to three years."

"Respondents overwhelmingly identified "data analytics" as both the greatest opportunity for automation and the greatest priority."

"...the vast majority of respondents (more than 75 percent) expect their technology budgets specifically to increase over the next three years...many firms are looking to investments in machine learning and artificial intelligence abilities."

—KPMG 2021 CCO Survey

Start building better analytics for enterprise governance

As with many initiatives, companies currently operate on a broad spectrum of data analytics approaches for enterprise governance. However, we see a clear evolution of technologies and practices as organizations start to embed analytics within and across governance functions in control environments, ultimately working toward a proactive monitoring environment.

More than managing risk—capturing value

Many organizations have started to advance beyond basic compliance reporting, introducing business rules and anomaly detection into their compliance processes. However, organizations should go a step further—incorporating predictive models, leveraging third-party data and evaluating connections and relationships—in order to realize greater benefits and cost savings that can only be achieved through more sophisticated analytics and capabilities.

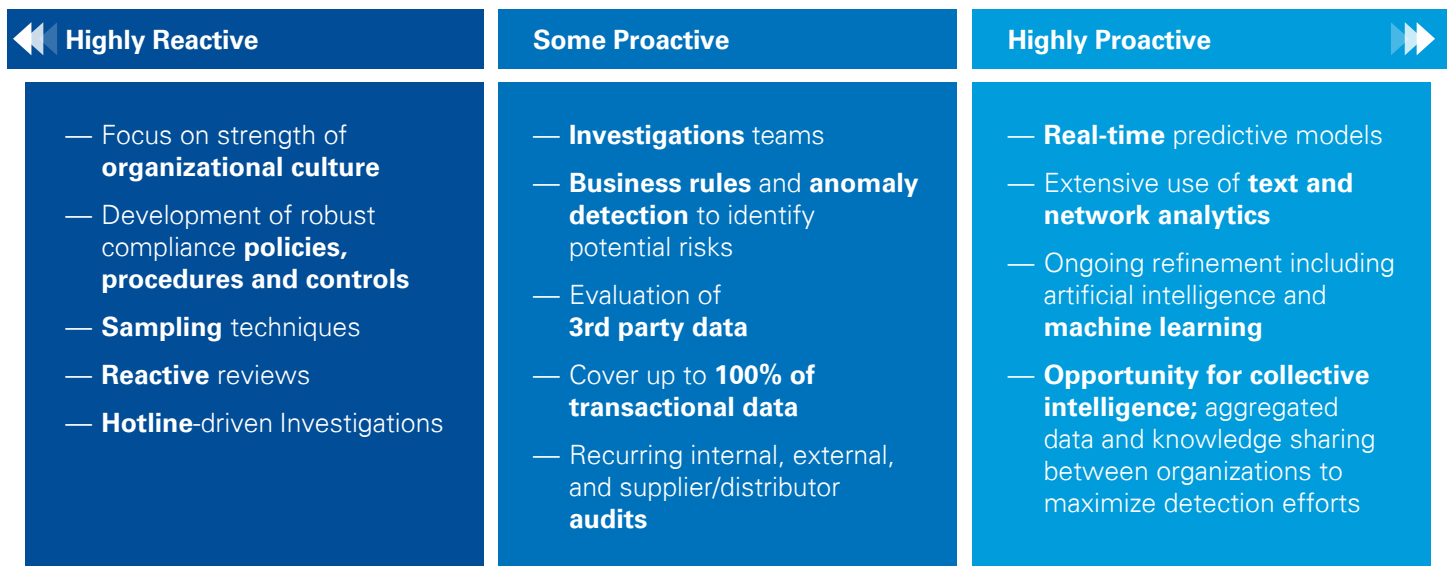
“The key lies in reaching a level of conviction that the data analytics are no longer a fad or something that is ‘nice to have,’ but rather that data analytics have demonstrated a return on investment and they play a critical role in the success of preventing and detecting risks,” Trevino said. “Harnessing the power of data analytics to improve a company’s ability to prevent and detect fraud will, by far, be a much more productive exercise than spending

thousands of dollars in consultants and attorneys to respond to a case of fraud and to try to recover the assets that were misappropriated.”

Armed with data analytics, compliance officers bring even greater value to their organizations. Not only can they leverage data to detect, remediate and prevent fraud, waste and abuse, they can provide a lens into operational inefficiencies, redundant processes, controls gaps, and data quality issues. Once identified and mitigated, these changes provide tangible cost savings and increased operating effectiveness which translate to higher profitability.

Ultimately, compliance officers focused on data analysis are developing a wider perspective and can see and understand the pervasive risks affecting the business. The use of data analysis is providing the business insights into potential issues that they otherwise were unaware of, allowing compliance officers to become true partners.

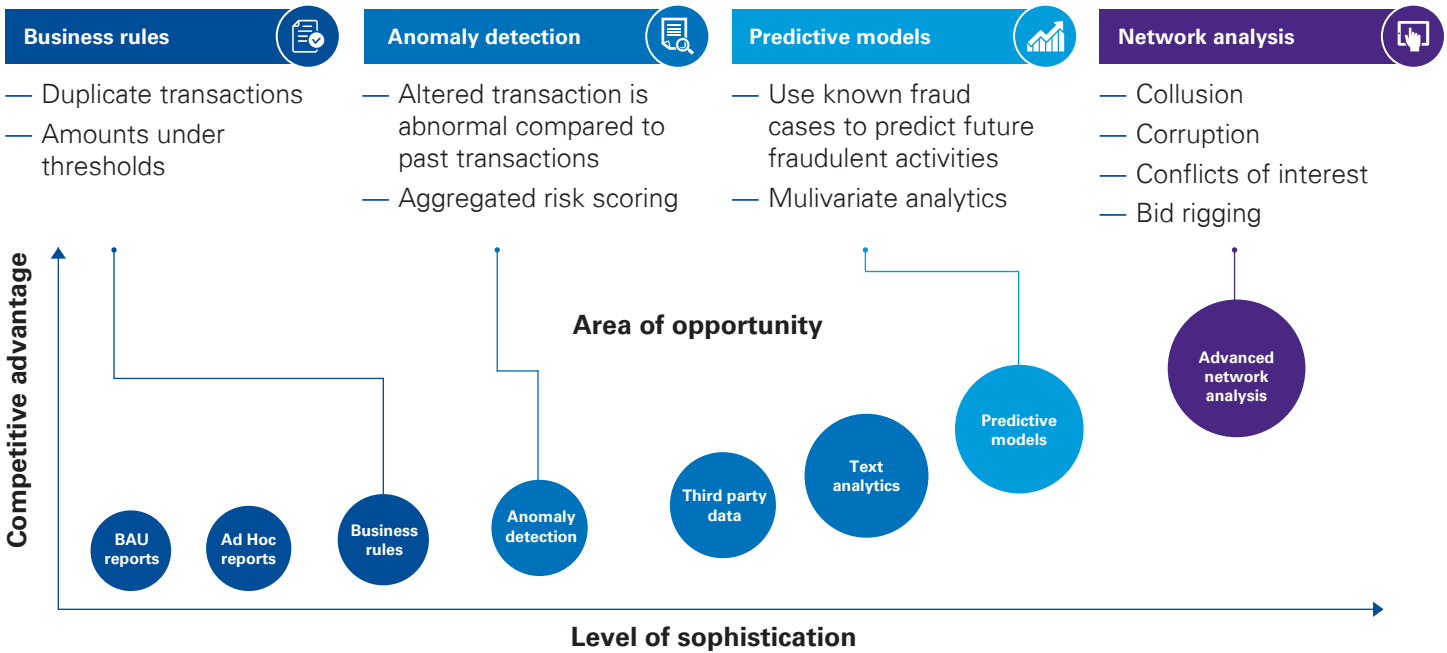
The sliding scale of data analytics capabilities



The compliance data analytic evolution

Data analytics sophistication is an evolving continuum. Nearly all compliance organizations seek to expand their programs from current states that are all over the board. The goal for every company should not be one end point, but continuous improvement.

Many organizations start with basic business rules and dashboards, eventually advancing toward anomaly investigations and predictive models that use trends and patterns to improve analysis. Organizations start by using business rules to evaluate known risks, but then can begin using the predictive models and outside data sources to identify unknown or future risks. These more advanced capabilities position organizations to prevent incidents before they occur by identifying trends that lead to or provide an opportunity for fraudulent behaviors.



Examples of proactive analytics at work

- **Company A** sought a more proactive approach to its compliance activities and control review process. Incorporating data analytics into its assessment of procurement card, expenses, payroll, and fleet activity identified an actionable population that then allowed the company to perform internal reviews and further investigations into potential misconduct, as well as noncompliance with corporate policies.
- **Company B** utilized enhanced analytics (including anomaly detection and network analysis) to monitor supplier risk in its procurement process, leading to the identification of employees with undisclosed ownership interest in vendors. Furthermore, the company’s ongoing analytics and monitoring led to decreased audit and investigation costs through automation, risk prioritization and a reduced burden on transaction oversight.

The target state

The end goal is to implement advanced analytical tools and techniques that integrate, resolve and network complex data to perform transaction-level analysis using adaptive artificial intelligence (AI) models and interactive visual dashboards to diagnose risk. These approaches enhance control environments, automate compliance and prevent fraud, waste, and abuse by allowing organizations to:

- Perform real-time, ongoing monitoring at scale
- Improve audit quality and oversight
- Reduce the burden of transaction oversight and investigation cost
- Identify and prioritize high-risk issues
- Enhance enterprise-wide transparency and reporting metrics

Implementing business rules and anomaly detection data analytics into governance programs takes time. While many are moving in that direction, only

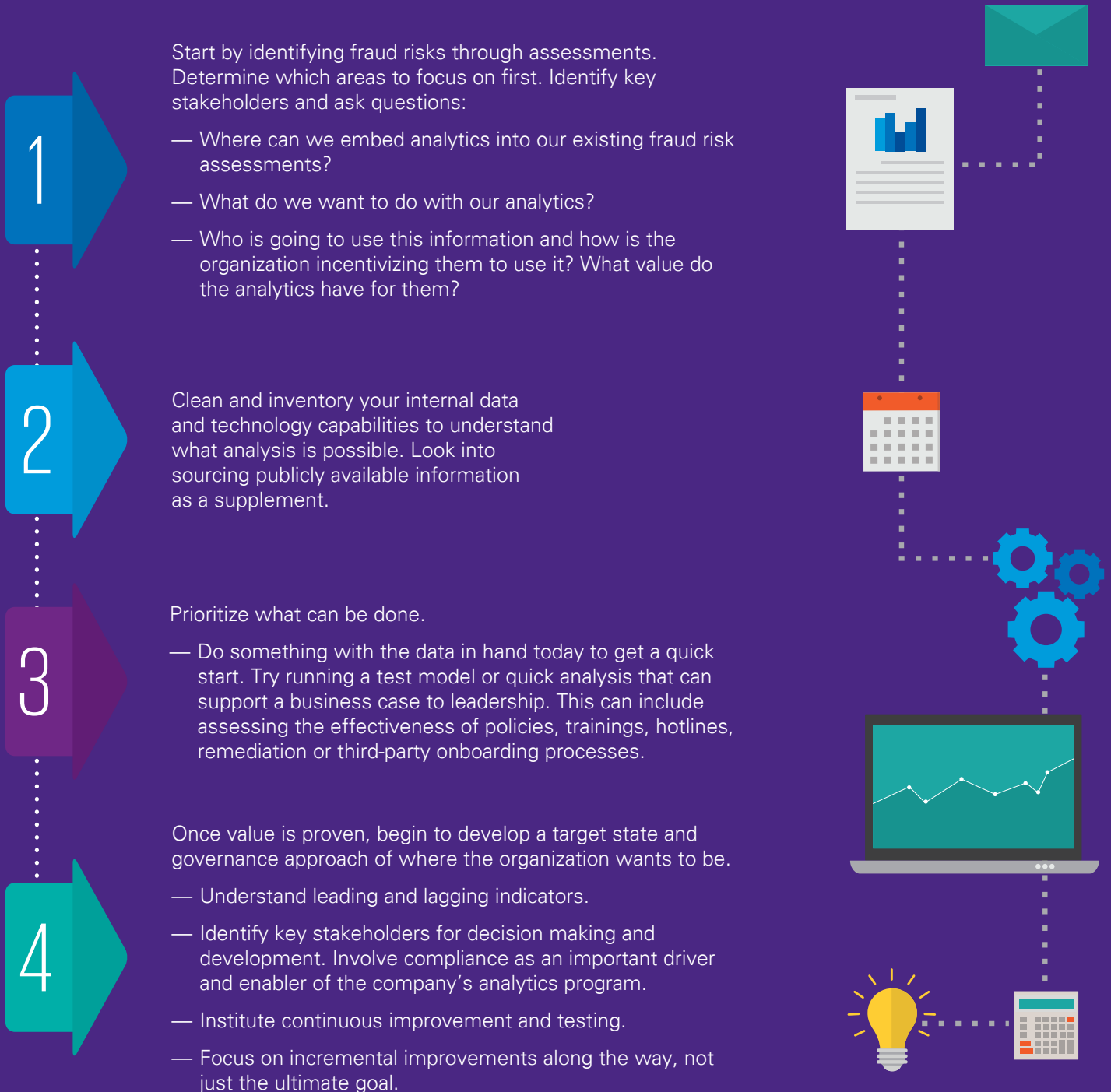
19% of companies surveyed said they have such capabilities in place today.

— KPMG survey of webcast participants, March 18, 2021



Most companies today are in the first stages of data analytics development using information to determine what happened and why, but they are not yet leveraging predictive or prescriptive analyses to learn lessons and take action before adverse events occur. Some industries tend to be a little further ahead in the data analytics journey, particularly those that are highly regulated or involved in combatting financial crime, such as the financial services, oil and gas, and pharmaceuticals industries.

Initial steps for establishing a future-ready enterprise governance program



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“The incorporation of data analytics capabilities in governance is an evolving continuum, so there’s really no start and stop, it’s about continually trying to get better. A roadmap is important for making progress.”

—Dave Anderson,
Proactive Analytics Leader at KPMG.

A brief look into the near future

The landscape of data analytics for governance is quickly evolving. Our professionals see three developments on the horizon.

- Data sharing will become critical across business units and in negotiations with third parties to provide relevant and timely data.
- Predictive analytics will enable continuous monitoring of nearly all organizational activities, yielding a more proactive governance to detect and prevent fraud, waste and abuse.
- Regulators will increasingly reject “we didn’t know” as a defense.





Jamie L. Martin
Vice President
Chief Procurement Officer
Pacific Gas and Electric
Company

Procurement

“Procurement plays a leading role in promoting and enabling compliance analytics,” according to Jamie Martin, vice president and chief procurement officer at Pacific Gas and Electric Company (PG&E). “It’s really an opportunity for procurement leaders—potentially in partnership with their IT, audit, finance, and compliance and ethics colleagues—to either elevate or further strengthen their procurement functions’ role in the governance, oversight, and execution of the procure-to-pay process.”

The DOJ’s establishment of a Procurement Collusion Strike Force (PCSF)³ and other recent activities focused on enforcement are positive developments for procurement functions, Martin said. The DOJ’s actions underscore the need for organizations to establish a well-led, highly controlled, process-focused and technology-enabled procurement function, a common target for fraud schemes from both external and internal threats.

According to Martin, PG&E continues to improve data quality and enhance analytics integral to the procurement function. Broadly speaking, it is looking more closely at activities inside of the purchasing system itself, such as high concentrations of spend associated with a single or small set of suppliers or internal users. PG&E also looks at activity around purchases that could be sized to potentially skirt or just fly under the radar of spend approval delegation levels. Changes in spend patterns, such as rapid increases or fluctuations that don’t mirror expectations given the type of work that’s being performed, are also red flags.

Taking it a step further, PG&E seeks to marry data from activities in the purchasing system to external and other data from the compliance and ethics teams, including feedback during the bidding process. Finally, all the input can be used to shape and grow the types of analytics that PG&E uses, with the goal of porting it to the front end of the procure-to-pay process, using analytics and supplier screening and ongoing monitoring.

“We want to monitor the supplier environment and get that proactive analytic focus to identify risks and mitigate them *before* issues happen,” Martin said.

Going forward, procurement leaders should anticipate more questions from their company boards, internal compliance and audit teams, and even external parties related to processes such as documented bidding, scoring and evaluation, participant screening, and recordkeeping of evaluations and contract awards. These stakeholders will want to understand how just how proactive the procurement function is.

Rooting out fraud and misconduct is unquestionably a valuable activity, but it’s just the beginning, Martin said. “We see opportunities to optimize spend, streamline processes and eliminate waste while improving our compliance environment. The value that data analytics drives to the company is real.”

³ The United States Department of Justice. “Justice Department Announces Procurement Collusion Strike Force: a Coordinated National Response to Combat Antitrust Crimes and Related Schemes in Government Procurement, Grant and Program Funding.” November 5, 2019.



Michael Macdonald
Executive Director
Internal Control and
Compliance Consumers
Energy and CMS Energy

Controls and compliance

Consumers Energy and CMS Energy started down the path of enhancing governance data analytics after struggling to answer a few simple questions, said Michael Macdonald, executive director of Internal Control and Compliance.

To kick off the effort, the utility's compliance team brainstormed with risk management and IT to target one area with good, clean data. After producing usable results, the company expanded the scope and continues to make data analytics a growing component of the risk management process. Macdonald also said his team keep tabs on other functions using data analytics, from forecasting sales to resolving power outages, to find additional data sources that can inform compliance.

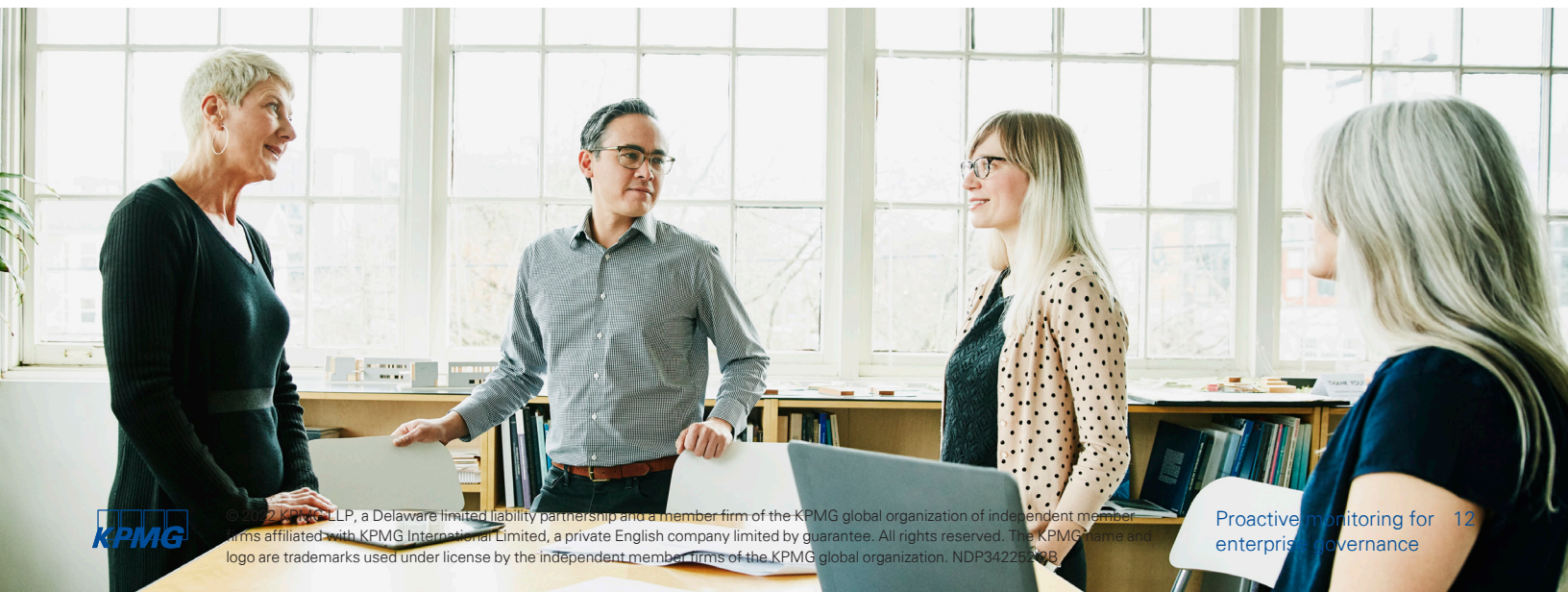
"My advice would be just start somewhere you're comfortable that you understand the data that you have, maybe your expense reporting processes and systems," Macdonald said. "It doesn't have to be an enterprise-wide starting point. That was our experience, it worked well, and we've grown the program from there."

The close working relationship in the utility industry between regulators and companies gives executives important insight into where governments will focus next, Macdonald said. And the word from the authorities is that they will increasingly look for companies to use data analytics in their fraud prevention.

"Regulators will often expect the company to use 'reasonably available technology' in their activities to be compliant with regulations. So, as data and analytics become easier to use, there will be a higher expectation from regulators that it *will* be used. It's just a matter of time."

Given that it's not "if" but "when," companies have to think about the cleanliness of their data and existing analytics capabilities and then how well those capabilities be applied to governance, Macdonald said. CMS is building its analytics capabilities, he added, but the exceptions uncovered by the effort are important input into the company's investigation process, just like a call to the hotline or an email to compliance.

"Governance and compliance often gets a bit brushed off as paperwork to follow up with at the end of the process. But at CMS, on our journey to have world-class operations, we're finding that it's beneficial to engage throughout the entire business cycle. That means using governance and compliance really as a key enabler of achieving the company's objectives, and not just a component of risk management."





In summary

Compliance leaders understand the great value a proactive data analytics program can bring to their organizations and companies but are often frustrated by the complexity of the project and the limited resources available to dedicate to the effort. They also feel the pressure of increasing regulator expectations that data analytics is a required component of a robust compliance program.

We believe that aiming for continual improvement rather than a perfect end goal, and scoring some quick wins to demonstrate the business case for data analytics investment, counter the inertia that can keep organizations from enhancing their programs. Moving step by step to understand where to start, assess the external and internal factors including data, set goals, and implement data analytics improvements turns a daunting project into an achievable effort with real results.

How KPMG can help

KPMG helps companies across multiple sectors understand, develop and integrate analytics into governance and compliance programs that not only address risks, but differentiate compliance and audit teams as true business partners providing valuable insight across the organization.

Our strategic scope of services allow our clients identify their unique value drivers and functional applications, helping them to define an operating model, understand data requirements and sourcing, and consider technology applications and infrastructure to support the program while driving continual improvement across the organization. This sustainable approach has allowed our clients to expand the reach and impact of their governance and compliance programs with measurable improvement and tangible value generation for the business.

In addition to our strategic offerings, KPMG provides specialized knowledge, tactical experience and targeted assistance in the following areas:

- Data inventory and mapping
- Value driver and requirement identification
- Use case development acceleration
- AI/ML model development and maintenance
- Stakeholder business case development
- Technology assessment and roadmap development
- Enterprise governance structure
- Integrated risk management
- Compliance transformation
- Outsourced or co-sourced compliance monitoring (technology enabled)
- Alert triage and investigations

Contact us

We look forward to connecting with you.



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