

# CorporateGovernor

Providing vision and advice for management, boards of directors and audit committees Spring 2016

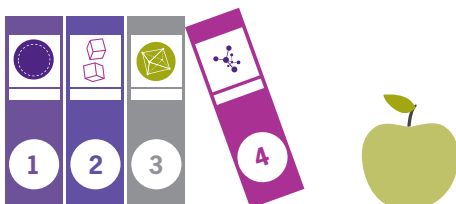
## Audit committee spotlight: The audit committee has a role in influencing data analytics usage

**Warren Stippich**, Partner and National Governance, Risk and Compliance Solution Leader  
**Matt Petrich**, Senior Manager, Forensic Technology Solutions

The audit committee can play a key role in influencing a chief audit executive (CAE) — and consequently an organization — about the importance of incorporating data analytics and data visualization into the internal audit function. Data analytics is the process whereby different types of data (enterprise, third-party, internal/external, etc.) are put into a format where analysis can be done with the goal of identifying useful information that better supports corporate decision-making. Data visualization is used to better understand the significance of those analytics by allowing the review of the data in a visual context. Data visualization can help the internal audit team identify key patterns, trends and correlations within the data that might otherwise go undetected.

The audit committee needs to fully understand its role in developing a “culture of analytics,” especially as Grant Thornton LLP and The Institute of Internal Auditors Research Foundation release their new book *Data Analytics: Elevating Internal Audit’s Value*.<sup>1</sup> Having an understanding of how data analytics and data visualization can help the CAE is the first step. When committee members meet with the CAE, questions to initiate a dialogue might include:

- Can you discuss your plan for using data analytics and data visualization?
- Are you employing a data analytics approach in audit testing?
- Are you hiring people with database and data analytics skills?
- How are you and the internal audit team working with IT to get quality data for analysis?
- Is IT open to working with you to have more comprehensive internal audit coverage using data analytics and data visualization?



<sup>1</sup> Available in The Institute of Internal Auditors’ bookstore March 2016. See [www.grantthornton.com/data-analytics](http://www.grantthornton.com/data-analytics) for more information.

These are salient points given the fact that companies face a continuous, ongoing regulatory burden and the need to manage the expectations of third-party stakeholders and other interested parties. Ultimately, integrating a data analytics approach into the internal audit function can offer greater risk coverage of the financial and operational transactions within an organization.

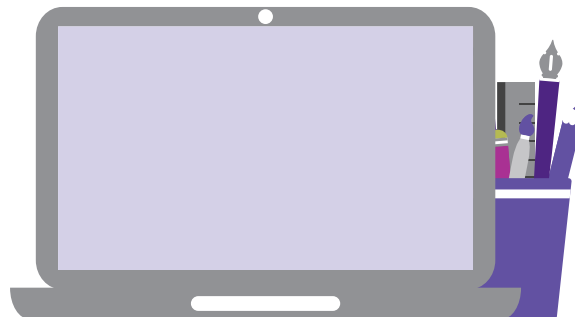
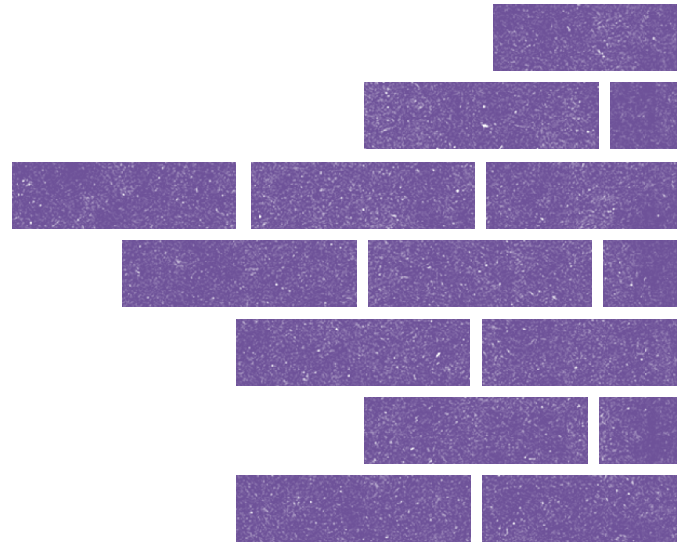
### What it is

Data analytics is an approach and a set of tools to help internal audit do more with less. Technology allows the internal audit team to gather and examine much more data than past manual processes have allowed. Internal audit can now examine an entire data population by using a data analytics approach and use only a fraction of the manual effort that was required when using statistical sampling of a stack of documents and “ticking” items off with a pencil. This change toward a data analytics culture for internal audit will increase internal audit’s relevance to the entire organization and the impact and effectiveness of internal audit effort and results.

Ideally, the internal audit function would have ready access to quality data from every department, geography, business line and function. Internal auditors would have deep knowledge of the organization, making it easier for the internal audit team to not only monitor activities and identify high-risk elements within the organization, but also identify opportunities for process improvement and overall risk reduction. This greater reach into corporate data extends the breadth and influence of internal audit, while creating greater collaboration between departments, such as audit, HR, IT and finance.

### Great expectations

The audit committee should set an expectation of how data analytics and data visualization should be used within the internal audit function. If a CAE indicates that the internal audit function is not using data analytics and doesn’t know much about it, for example, the audit committee should challenge him/her to research what other organizations’ internal audit groups are doing with data analytics or hire a professional services firm that has deep experience in the internal audit data analytics space that can provide that information and insight. This research will help the CAE begin to develop a strategy of how data analytics and data visualization could be embedded into the internal audit function. Once this strategy has been defined, the CAE can begin to hire the right staff with the right skill sets to make the transition happen. The audit committee should convey an expectation that at some level, the CAE will begin to incorporate data analytics into the internal audit function.



### Why invest in data analytics?

By investing in data analytics, internal audit can become more efficient, have greater coverage of the organization, and take greater comfort in knowing that processes and procedures are in place to help the internal audit team identify high-risk corporate elements — what's wrong, what's a risk, a trigger, an outlier, a smoking gun — on an almost real-time basis. These high-risk elements can be an indicator of fraudulent behavior or can identify the lack of controls that can negatively affect margins. If internal audit is only looking at a data sample that contains five or 25 items from a large pool of data, that analysis may miss the identification of high-risk elements within the organization. If internal audit analyzes the complete data pool, they have a much better chance to identify trends and outliers that can guide them to potentially fraudulent activity or other problematic transactions.

Incorporating data analytics into the internal audit function makes tremendous sense given the increased regulation on businesses, especially in banking, health care, insurance and financial services organizations. An investment in the right training, skills and/or technology that support the data analytics process can lead to much more thorough reviews of data and a decrease in corporate risk. This becomes a value proposition for CEOs and CFOs: Why not, for the same amount of ongoing investment, get greater coverage?

More and more business schools and audit firms are teaching the skills necessary to employ data analytics within internal audit. Audit committee members and CAEs may not have all the specific skills of a data scientist, but they should know enough to ask smart questions, to hire and train people to do the work and to ask for and interpret a report based on the findings. Service providers are available as well to jump-start this process for an audit department.

### The future: predictive analytics

One of the most exciting uses of analytics for the CEO is the predictive component, or the art of trying to predict outcomes based on a population of historical data. The mainstream use of predictive analytics represents the evolution of data analytics that has occurred over the past few years. The U.S. government, for example, uses predictive analytics to determine where the next terrorist attack might occur, when the stock market might crash or when the next economic downturn will begin.

An organization that strategically uses predictive analytics requires a change in thinking at all management levels. A business strategy approach must be used where the output of the predictive analysis can help management make data-driven decisions.



#### 5 things to ask a CAE

1. Are you using data analytics? If no, what's the barrier? Resources, tools, training? If you are using data analytics, in what areas are you using them: financial, operations, other?
2. How successful have you been with your data analytics initiatives?
3. How much of your audit plan incorporates the use of analytics and visualization?
4. How are you able to interpret the data to make an impact in your audit methodology and results?
5. Have you considered using data analytics to predict risk indicators in the future?

## Audit committee spotlight: The audit committee has a role in influencing data analytics usage

The audit committee can take a lead on the use of predictive analytics within the organization by asking intelligent questions centered on the benefits of predictive analytics, especially related to internal controls and financial reporting. This type of questioning is clearly in the purview of the audit committee. Ultimately, if designed and implemented properly, an organization can use predictive analytics to better understand key business drivers and use that information to help increase profitability or to reduce risk.

Predictive analytics can significantly increase the internal audit function's relevance and value to the organization. Typically, internal audit is not the only business function that will use predictive analytics, but many times internal audit is the driver that helps move predictive analytics into other corporate areas such as finance, operations, compliance, legal and IT.

### Contacts

#### Warren Stippich

Partner and National  
Governance, Risk and  
Compliance Solution Leader  
T +1 312 602 8499  
E [warren.stippich@us.gt.com](mailto:warren.stippich@us.gt.com)

#### Matt Petrich

Senior Manager, Forensic  
Technology Solutions  
T +1 312 602 8648  
E [matt.petrich@us.gt.com](mailto:matt.petrich@us.gt.com)

### Editor

#### Evangeline Umali

T +1 312 602 8161  
E [evangeline.umali@us.gt.com](mailto:evangeline.umali@us.gt.com)



### About the newsletter

*CorporateGovernor* is published by Grant Thornton LLP. Founded in Chicago in 1924, Grant Thornton LLP (Grant Thornton) is the U.S. member firm of Grant Thornton International Ltd, one of the world's leading organizations of independent audit, tax and advisory firms. In the United States, Grant Thornton has revenue in excess of \$1.3 billion and operates 57 offices with more than 500 partners and 6,000 employees. Grant Thornton works with a broad range of dynamic publicly and privately held companies, government agencies, financial institutions, and civic and religious organizations.

This content is not intended to answer specific questions or suggest suitability of action in a particular case. For additional information about the issues discussed, contact a Grant Thornton LLP professional.



**Grant Thornton**  
An instinct for growth™

### Connect with us

 [grantthornton.com](http://grantthornton.com)

 [@granthorntonus](https://twitter.com/granthorntonus)

 [linkd.in/granthorntonus](https://www.linkedin.com/company/granthorntonus)

"Grant Thornton" refers to Grant Thornton LLP, the U.S. member firm of Grant Thornton International Ltd (GTIL), and/or refers to the brand under which the GTIL member firms provide audit, tax and advisory services to their clients, as the context requires. GTIL and each of its member firms are separate legal entities and are not a worldwide partnership. GTIL does not provide services to clients. Services are delivered by the member firms in their respective countries. GTIL and its member firms are not agents of, and do not obligate, one another and are not liable for one another's acts or omissions. In the United States, visit [grantthornton.com](http://grantthornton.com) for details.