

How data is transforming Internal Audit's role in the organization

April IIA Meeting

April 2017



This proposal does not constitute a contract to perform services. Final acceptance of this engagement by PricewaterhouseCoopers is contingent upon successful completion of PricewaterhouseCoopers' acceptance procedures.

Any engagement arising out of this proposal will be subject to the execution of our formal engagement contract, including our standard terms and conditions and fees and billing rates established therein.



Session Agenda

Getting to Know You	5 mins
Why Analytics	5 mins
Analytics Strategy & Common Pitfalls	15 mins
Audit Lifecycle & Demonstrations	35 mins
Putting It Into Practice	20 mins
Final Thoughts & Questions	5 mins

Getting to Know PwC



Shane Kenney

Manager, Advanced Risk and Compliance Analytics (ARCA)

Contact Details:

Phone: (313) 394-3259 (office), (703) 395-2648 (mobile)

E-mail: shane.r.kenney@pwc.com

Background:

Shane Kenney is a Manager within the Advanced Risk and Compliance Analytics practice of PricewaterhouseCoopers (PwC). He has over 15 years of experience in both internal audit and analytics-enabled projects supporting a wide degree issues and industries.

Shane helps his clients embed technology and analytics into critical business processes and transforms underlying data to mitigate risk, optimize controls, and improve overall operations and compliance efforts. He also assists organizations in developing their strategy for embedding the use of data in audit and compliance procedures.

Education and Certifications:

- B.S (Accounting) from Michigan State University, E. Lansing, MI
- M.S. (Accounting) from Michigan State University, E. Lansing, MI

Industry Experience

- Automotive
- Financial Services

Getting to Know You

How many of you use analytics in your audit process?

What challenges have you overcome and how?

What are some of your best lessons learned?

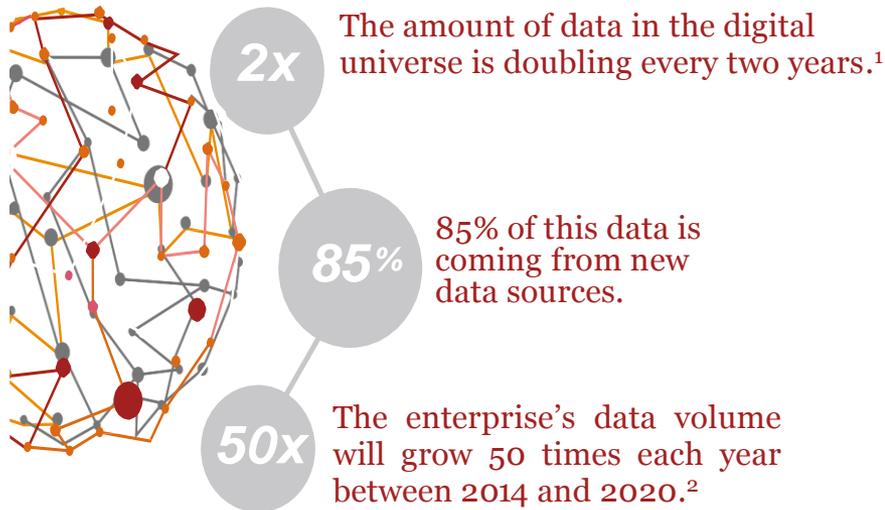
Are there specifics you want to cover today?

Why Analytics?

Impact of the Changing Data Landscape

All industries and professions are impacted

The data explosion



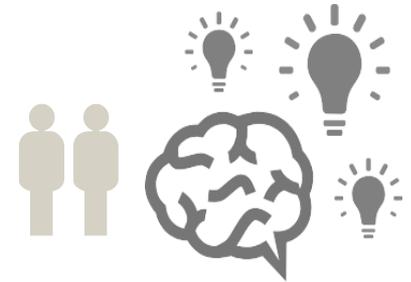
Tangible benefits

CEOs see **greater operational efficiency** (90%) and the **enhanced customer experience** (82%) as key benefits of leveraging data and analytics.³

New opportunities require new skills

8 of 10

CEOs are looking to hire people with a much broader range of skills than in the past.³



+50%

The global data and analytics services market will grow over 50% between 2014–2016.¹



78%

of accountancy professionals expect widespread adoption of data and analytics by 2015.⁴

Drivers of Analytics Within Internal Audit

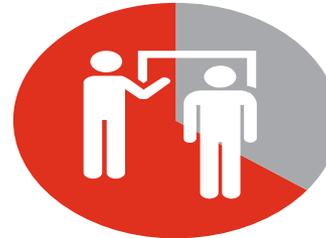
Stats from PwC's State of the Internal Audit Profession Surveys



40%

of internal audit functions have increased their investment in data analytics in the last three years

¹ 2016 State of the Internal Audit Profession Study



65%

of CAEs report they have some data skills on their team either in-house or through third parties

² 2015 State of the Internal Audit Profession Study

Changing system landscape and company expectations

Potential fraudulent activity, increased risk and regulations and growing data sources lead to changing expectations of audit

Audit-Business partnership

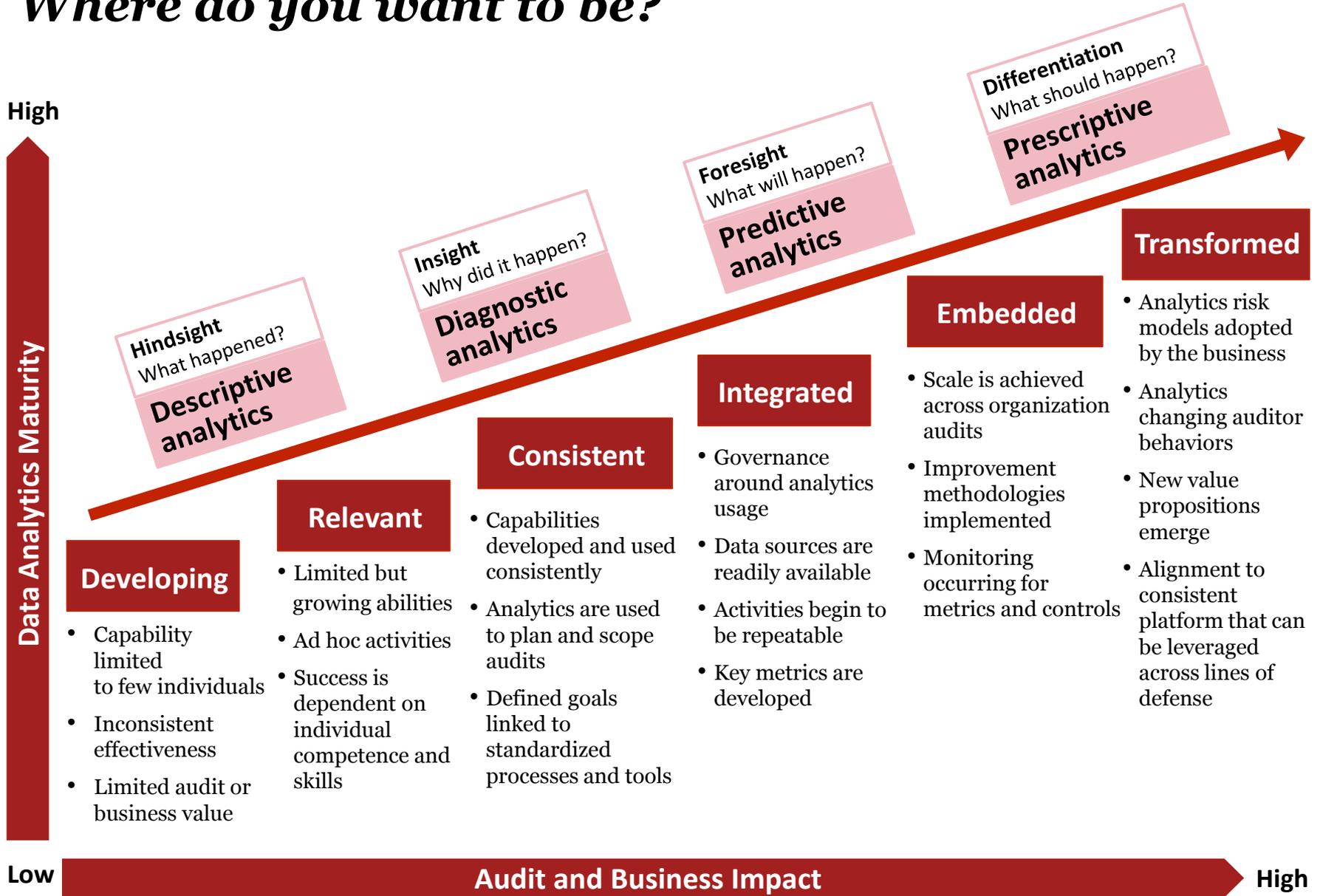
Insight, root cause investigation and resulting tools could be transitioned to the business, creating sustainable value

Talent development and appeal

Integration of analytics will strengthen the skills and business acumen of auditors and provide more rewarding experiences

Analytics Strategy & Common Pitfalls

Where do you want to be?



Building an Analytics Strategy



Barriers to Success: Avoiding the Pitfalls

As internal audit builds or revisits its data analytics strategy, our experience shows that there are common points of breakdown that can ultimately hold internal audit back from realizing the analytics promise.



Embarking on the journey without a defined strategy or in isolation



The barrier:

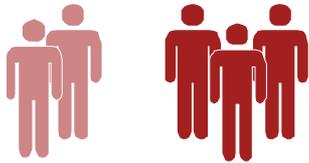
- Beginning an analytics function without a fully defined strategy or plan
- Not positioning analytics as a serious initiative that warrants funding or support
- Failure to leverage connection points (such as IT, compliance, or operations)

What to do:

- Formalize or review your strategy, inclusive of the components to the right
- Establish realistic milestones and align your activities on a roadmap
- Combine resources and knowledge across teams and departments
- Establish a communication plan, and assess progress against success criteria



Positioning the analytics team members in an isolated manner

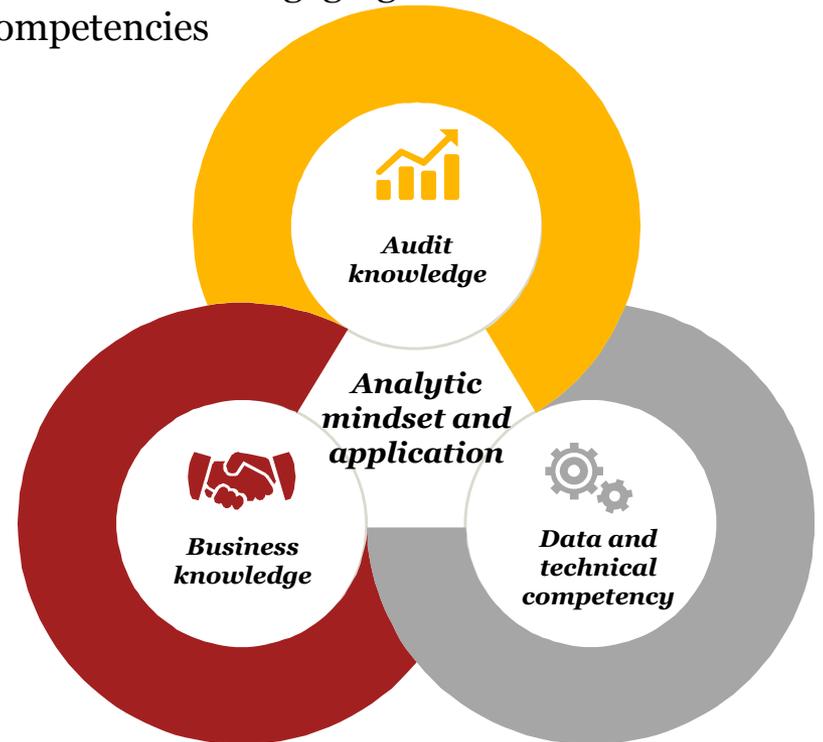


The barrier:

- Separating the analytics team from the traditional auditor team members
- Creating an analytics delivery center
- Discouraging technical analytics resources from engaging with the broader team, which prevents transfer of competencies

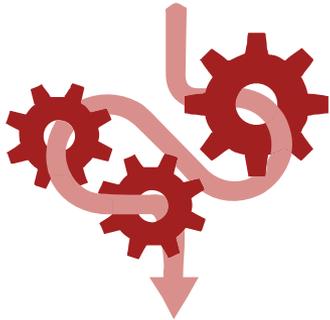
What to do:

- Establish analytics mindset and acumen as an expectation for all team members
- Raise the analytics IQ of everyone on the team
- Team analytics specialists with analysts staffed on audits for delivery
- Define clear roles and responsibilities for each team members



Falling into the automation trap

The barrier:



- Focusing only on audit efficiency through automating fieldwork or workprograms
- Limiting use of analytics to a traditional CAAT capacity
- Prohibiting the team from exploring data through profiling or allowing creativity to identify additional risk areas within an audit plan

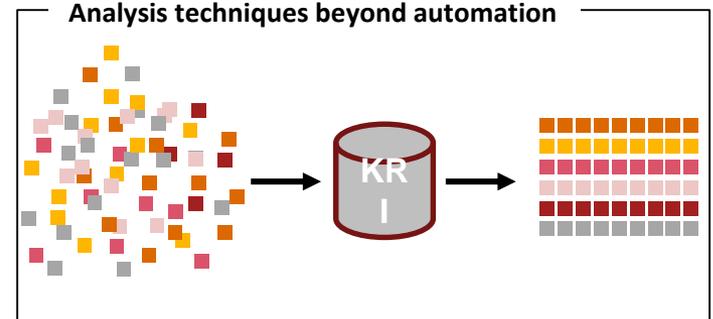
What to do:

- Focus on analytics as a catalyst for audit transformation
- Identify audits to pilot using analytics throughout the audit life cycle from planning to reporting
- Develop an analytics methodology that enables you to align resources to areas of risk, based on results of a risk assessment or data profiling

Data discovery enables ability to ask questions beyond risk areas within the workprogram.

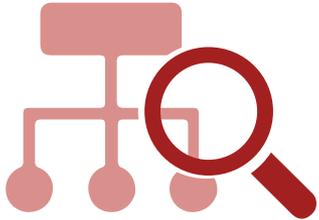


Analysis techniques beyond automation



Seeing analytics as just a bolt-on to existing procedures

The barrier:



- Analytics that are not embedded within the audit methodology
- Not modifying the analytics methodology to standardize processes for using results of analytics

What to do:

- Revisit and modify your end-to-end audit methodology
- Standardize the analytics-enabled audit methodology and train end users on the process
- Gain momentum through pilot audits

01

Risk assessment

- Enterprise risk management
- Annual internal audit risk assessment
- Risk monitoring
- Business unit or site-level profiling



02

Audit planning

- Project-level risk assessment
- Audit pre-planning
- Audit scoping and planning
- Risk attribute sampling

Embedded and sustainable analytics

04

Reporting

- Audit and executive reports
- Issues dashboard
- Compliance metrics
- Analytics validation review



03

Fieldwork and execution

- Multi-unit auditing
- Data-driven testing
- 100% coverage
- Root cause identification

Underestimating the power of organizational culture



The barrier:

- Overlooking people and organizational change management
- Not considering the impacts that a modified analytics-enabled audit approach has on every aspect of the department (from resource scheduling to documentation)

What to do:

- Consider the impact of your unique corporate culture on your data analytics strategy and roadmap
- Find incentives to motivate employees to change
- Create a safe environment for learning, wherein people feel empowered and unafraid to ask questions or try something different

Communication

Incentives and recognition

Value, career path and growth

Culture trumps strategy

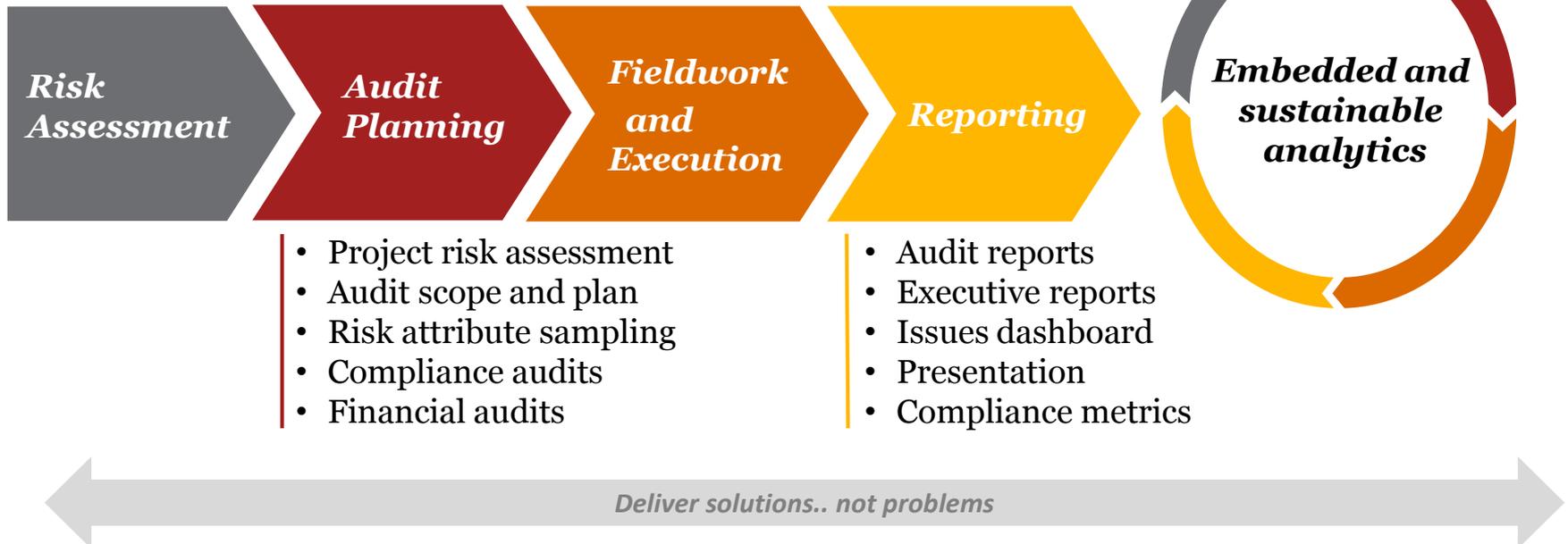
Audit Lifecycle and Demonstrations

The Internal Audit analytics opportunity

- Compliance analysis
- Enterprise risk assessment
- Risk monitoring
- Business profiling
- Strategic plan

- Multi-unit auditing
- Data testing
- 100% coverage
- Process/control validation (end to end testing)
- Root cause identification
- Scenario modeling

When fully integrated, data analytics is not a program; rather, the techniques are fully embedded into all elements of the audit lifecycle.



Key Thoughts & Questions

- *Start small, think big, evolve over time*
- *Don't underestimate the complexity of the data*
- *Analytics is an iterative process*
- *Collaborate to show the value to the business*
- *Don't underestimate change*



Contacts

Shane Kenney

Office: (703) 395-2648

Email: shane.r.kenney@pwc.com

This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, PricewaterhouseCoopers LLP US, its members, employees and agents do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.