Money Balling Internal Audit

The Houston IIA Conference

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THINK GREEN®





Audit Analytics

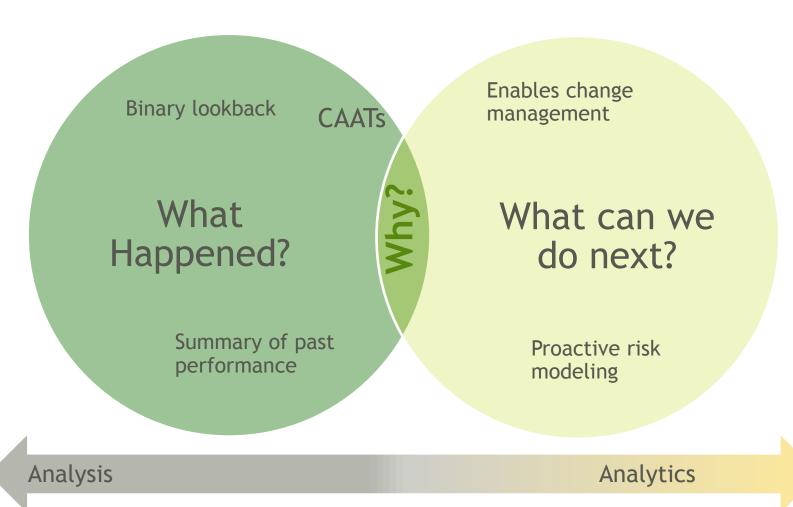
Application to Your Internal Audit Program

- What do you have on your Internal Audit Plan this year?
- Can you define success for those audits as succinctly? Can your staff/auditors?
- A little creativity in applying the same principles that make Analytic programs successful can yield Internal Audit results that garner respect, and drive tangible results to the bottom line.
 - Be a critical business partners with proactive solutions
 - Identify high value opportunities and enhance risk coverage
 - Provide assurance along with enhanced transparency to management
 - Share learnings applicable to improve compliance, enhance process & improve relationships with other business partners



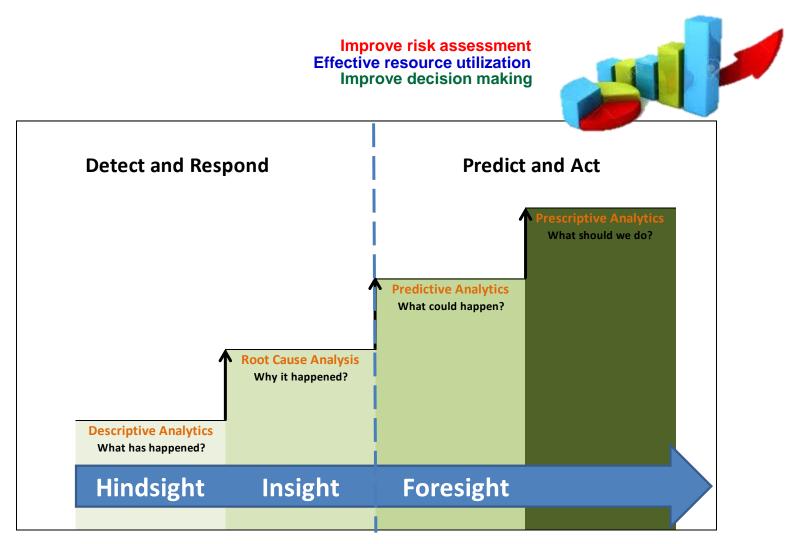
Analysis vs. Analytics

What's the Big Difference?





Shifting from Analysis to Analytics





Be a Critical Business Partner with Proactive Solutions

Your work, no matter how good, will not be regarded as such unless you partner with the business effectively. So what does that look like for Analytics?

- Providing information through Monthly or Quarterly Business Reviews to management that assists them in creating a more robust first line of defense
- Establishing a regular cadence of meetings with leaders to stay in touch with the changing environment and supportive of the strategy
- Soliciting feedback from the business on performance and projects to expand the benefit and the work
- Develop performance metrics to monitor success and adjust or sustain accordingly



Identify high value opportunities and enhance risk coverage

Enhancing efficiency and improving control infrastructure provide a foundation to expand the focus of the department and increase relevance. Tactics and Tips for your Analytics team to consider:

- Evaluate ROI in the audits you perform, the procedures you select, and how you perform them
- Utilize project prioritization in setting your Audit Plan or special projects
- Diagnose the problem, quantify impact and outline improvement opportunities
- "Quantify" events via examples and imagery (especially for regulatory, brand and reputational risks) lost sales, lost share value, etc.
- Deliver the value to the business
- Sustain or modify the analytic program to adapt to the changing risk environment



Provide assurance along with enhanced transparency

At its fullest extent, Audit Analytics can not only allow for enhanced risk monitoring, but insight into behavioral or business process changes that need to be addressed. Effective and comprehensive assurance through mature analytics should

- Provide a risk scored, data driven audit plan
- Identify and measure attributes that drive certain behaviors and causes
- Focus the audits and isolate outlying behaviors
- Increase the reliability and credibility of your program by reducing sampling & extrapolation
- Help the organization visualize enterprise level risks and inform ERM



Share learnings applicable to improve compliance, enhance process & improve relationships with other business partners

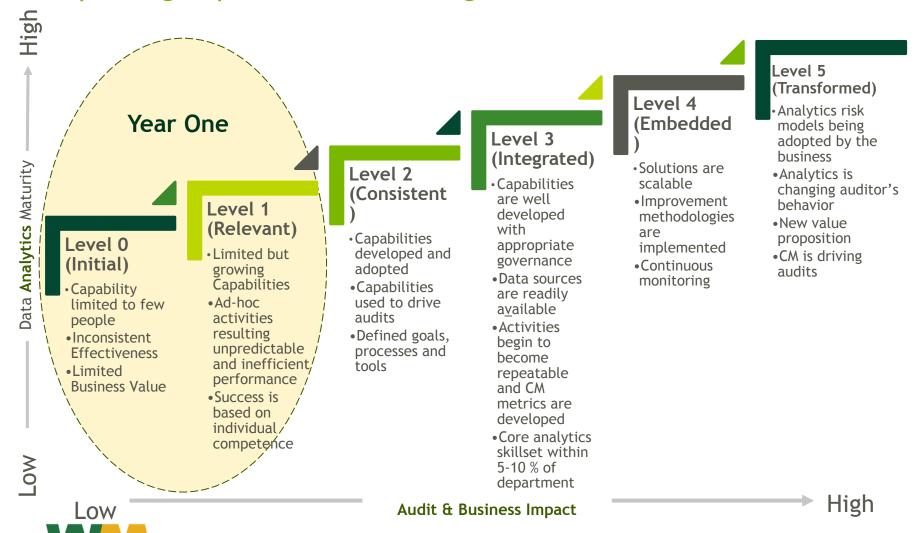
When used collaboratively, Analytics can drive the conversation to shift from compliance to broader risk management. Sharing appropriate better practices helps to:

- Provide a mechanism for ongoing monitoring and continuous improvement
- Identify all facets of risk (financial, operational, IT, forensic) to comprehensively improve the process
- Isolate the problem or gap that needs to be addressed
- Fully vet the root cause and further "quantify" the impact
- Promote collaboration throughout the business by identifying the touchpoints of risks, dependencies, and information flow
- Facilitate data driven decision making



Analytics Maturity Model

Improving Impact while Maturing the Function



Analytics Maturity Model

Improving Impact while Maturing the Function Level 5 Year 2 (Transformed) Level 4 Analytics risk (Embedded models being Level 3 adopted by the business (Integrated) Solutions are Level 2 Analytics is **Capabilities** scalable changing auditor's (Consistent are well Improvement behavior Level 1 developed methodologies New value (Relevant) with are Capabilities proposition Level 0 appropriate implemented ·Limited but developed and •CM is driving governance (Initial) Continuous growing adopted audits Data sources monitoring Capabilities Capabilities Capability are readily used to drive Ad-hoc limited to few available audits activities people Activities resulting Defined goals, Inconsistent begin to unpredictable processes and Effectiveness become and inefficient tools Limited repeatable performance **Business Value** and CM Success is metrics are based on developed individual Core analytics competence skillset/within 5-10% of department

Audit & Business Impact



High

Data Analytics Maturity

High

Analytics Maturity Model

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department

Audit & Business Impact

High

Data Analytics Maturity

Level 0 (Initial)

- Capability limited to few people
- Inconsistent Effectiveness
- Limited **Business Value**

Level 1 (Relevant)

- ·Limited but growing Capabilities
- Ad-hoc activities resulting unpredictable and inefficient performance
- Success is based on individual competence

Level 2 (Consistent

- Capabilities developed and adopted
- Capabilities used to drive audits
- Defined goals, processes and tools

Level 3 (Integrated)

- Capabilities are well developed with appropriate governance
- Data sources are readily available
- Activities begin to become repeatable and CM metrics are developed
- Core analytics skillset within 5-10 % of department

Future

Level 5 (Transformed)

- Analytics risk models being adopted by the business
- Analytics is changing auditor's behavior
- New value proposition
- •CM is driving audits

Audit & Business Impact





Level 4

(Embedded

Solutions are

Improvement

implemented

Continuous

monitoring

methodologies

scalable

are

Where We Are Headed . . . Improved Visibility

Accounts
Payable
T&E
Expense
Scale House
Fraud
Compliance
Regulatory
Compliance





Business Case Examples

Expense Reimbursement Monitoring

Journey from limited visibility to comprehensive transparency

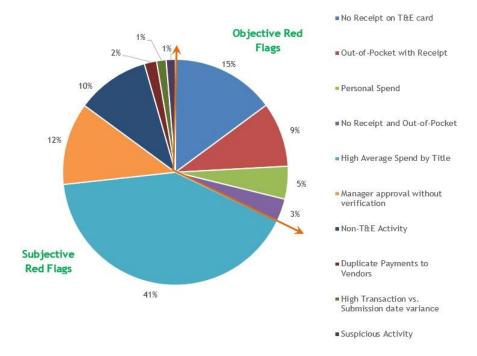
Background	Benefits
 WM pays \$57 MM through Expense Reimbursements annually Limited manual controls in place to oversee spend IA manually audited all SLT's and Board expense reports with no significant findings for several years Biggest risk exists in the rest of the employee population, which was not addressed 	 Process optimization opportunities range from reducing discretionary spend to Fraud reduction Improves visibility to Area Controllers Identifies non-compliant behavior and catalyzes a change in culture Audits 100% of expense reports
Solution	Next Steps
 Analytics identifies non-compliant T&E spend through the use of objective and subjective red flags Escalation procedure invoked for non-compliant employees 	 Continue the monitoring of all employees Partner with business owners to implement process improvement solutions Deploy Training across the enterprise Create P-card monitoring program



Expense Reimbursement Monitoring

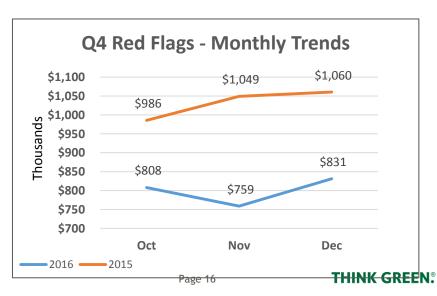
Journey from limited visibility to comprehensive transparency

To achieve more impactful results we utilized a red flag methodology:



Through utilizing this instead of a spending pattern, we have:

- Reduced out of compliance activities by 30% in one Area of the business
- Discovered \$150K in fraudulent expenditures
- Appropriately reclassified \$194K in improper spend





Scale House Monitoring

Journey from manual to automation

Background	Benefits
 WM landfills and transfer stations generate \$4B or 30% of total annual revenue. WM installed security cameras in our scale houses to monitor the personnel performing these transactions and receiving the payments. The former audit process was a manual process, performed quarterly that consumed over 320 hours a month across the organization Due to random sampling, the results were arbitrary/ subjective and there was a lack of oversight of the review process 	 Reports and follow-up are now conducted monthly reducing the risk of increase \$ exposure The automated report has reduced the level of effort to 187 hrs. month a decrease of 42% This review has focus the activity on specific high-risk transactions and reduced subjectivity considerably We now analyze 100% of transactions
Solution	Next Steps
 Implemented red flag coding to isolate out of compliance transactions Established review protocols for each Developed continuous monitoring / feedback loop with stakeholders Modified policy to provide guidance 	 Continue to evolve the program by leveraging stakeholder feedback Expand to facilitate the capture of broader compliance concerns

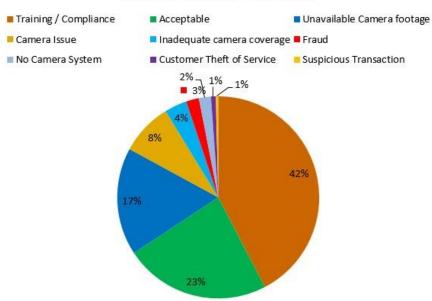


Scale House Monitoring

Journey from manual to automation

We deployed a red flag activity detection by reviewing data and validating it against the specific camera footage. (Pilot phase)

Transaction by Category



To date, we have achieved:

- Improved detection of fraud (\$250k)
- A 42% reduction in red flag activities due to improved training (Jan 2017)
- Complete visibility to all transactions at all of our facilities

