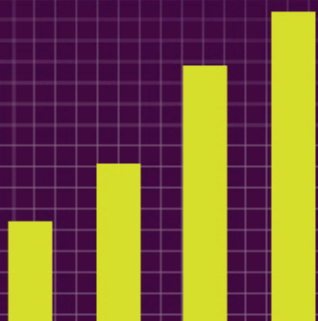


A Framework for Continuous Auditing and Continuous Controls Monitoring

Examples and references for diverse
implementations at large, global enterprises

Joe Oringel

Rutgers Continuous
Auditing Symposium



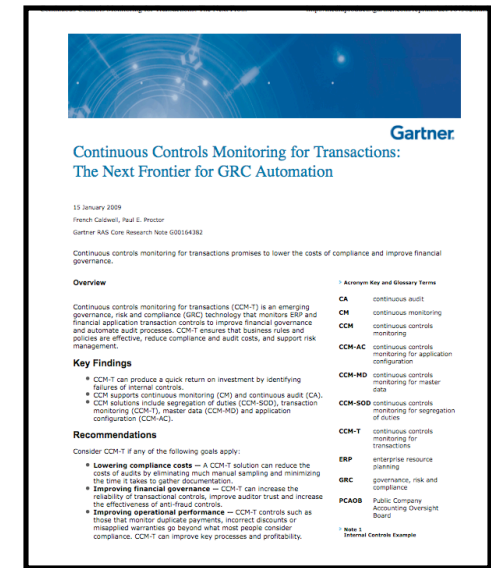
Opening thoughts on Continuous Auditing (CA) and Continuous Controls Monitoring (CCM)

- We are at the **19th** Annual CA Symposium, yet we're still in the early adoption stage of a maturity curve. Why?
- Many organizations have made considerable CA / CCM process, people, and technology investments. Often with excellent results.
- Not only is there not a “one size fits all,” there doesn't even seem to be a “one size fits many”
- A big challenge is vocabulary. CA / CCM means very different things to different people. We speak regularly with as many as we can.
- We have outlined a framework, with cross-references between public articles and conference presentations and the framework. The goal is to de-mystify CA and CCM, and to suggest practical first steps.



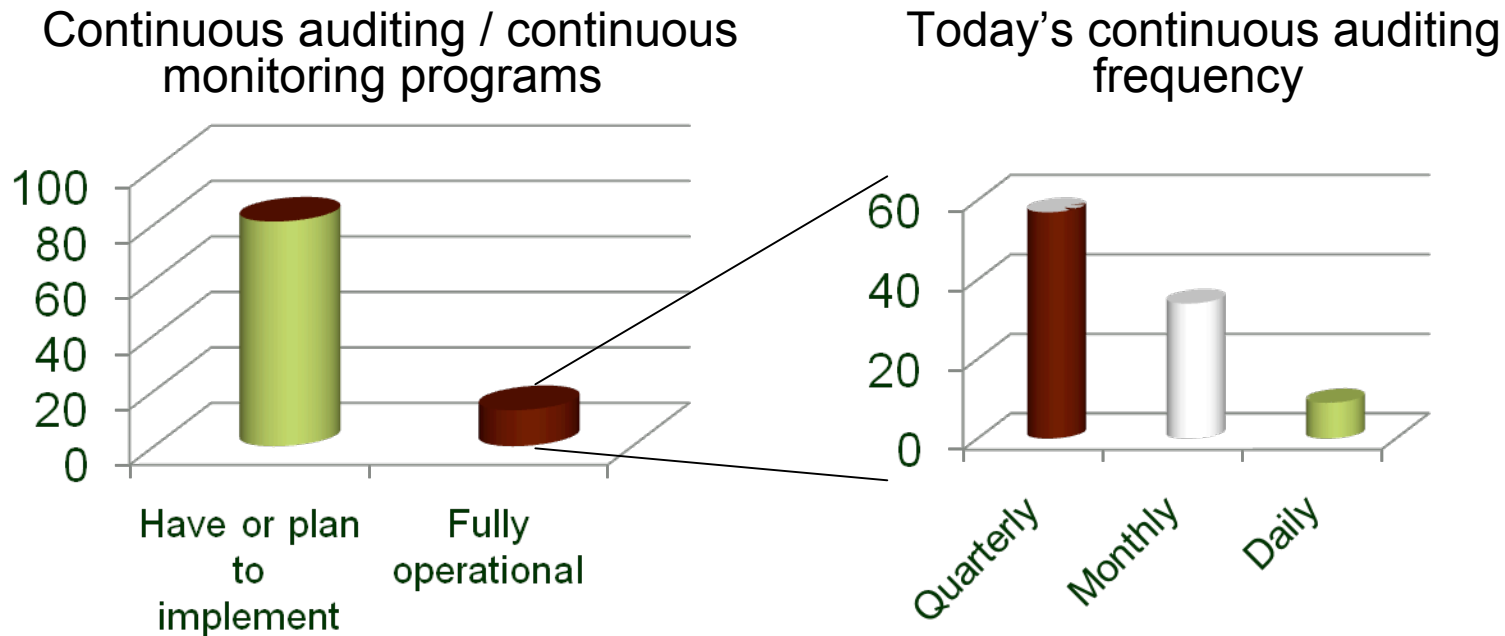
Research clarity is improving: January 2009 Gartner Report

- Continuous Controls Monitoring for Transactions (CCM-T), the Next Frontier for GRC Automation
 - Published in January 2009
 - Segments CCM market into analysis tools for Segregations of Duties (SOD), Master Data (MD) and Application Configuration (AC), and Transactions (T)
- Updates 2007 Marketscope for CCM that combined SOD tools like Approva, Logical Apps, and SAP-GRC with Transaction-oriented tools like ACL and Oversight
 - Affirms quick-hit ROI opportunities for internal controls
 - Simultaneously finds operational improvement and lowers compliance costs



➡ Our experience is that CCM-T can produce an outstanding ROI for any application where more frequent or early assessment of data adds substantial value for operations or compliance

Continuous Auditing is a hot topic for today's Audit leader - but what is Continuous?



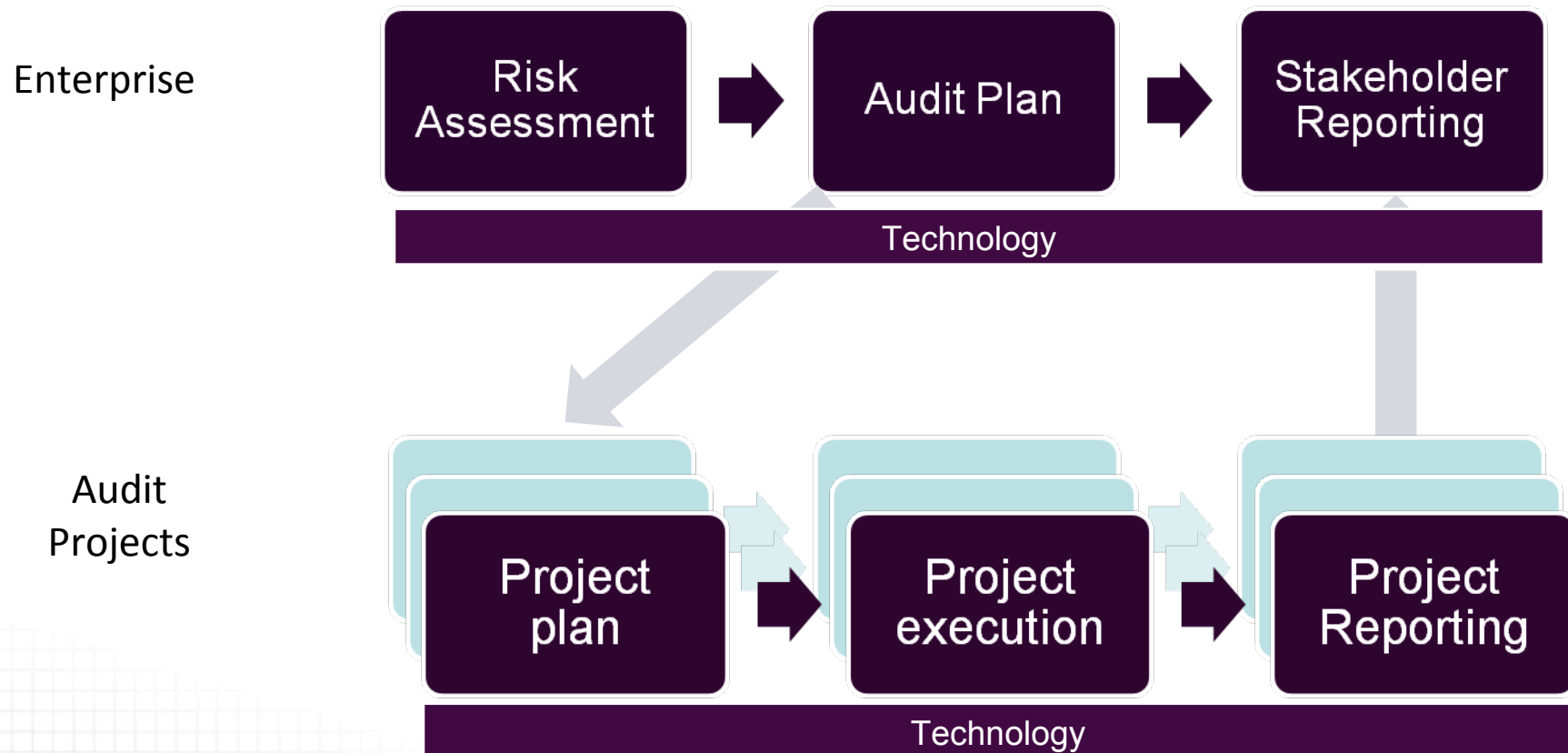
Continuous auditing and continuous monitoring become “right time” when the timing and frequency of evaluation matches business requirements. What frequency is right for your revenue transactions? Supply chain?

** Source: 2006 State of the Internal Auditing Profession Copyright PricewaterhouseCoopers LLP 2006

*** Numbers were not materially different in 2007. 2008 Survey - the question was not asked.

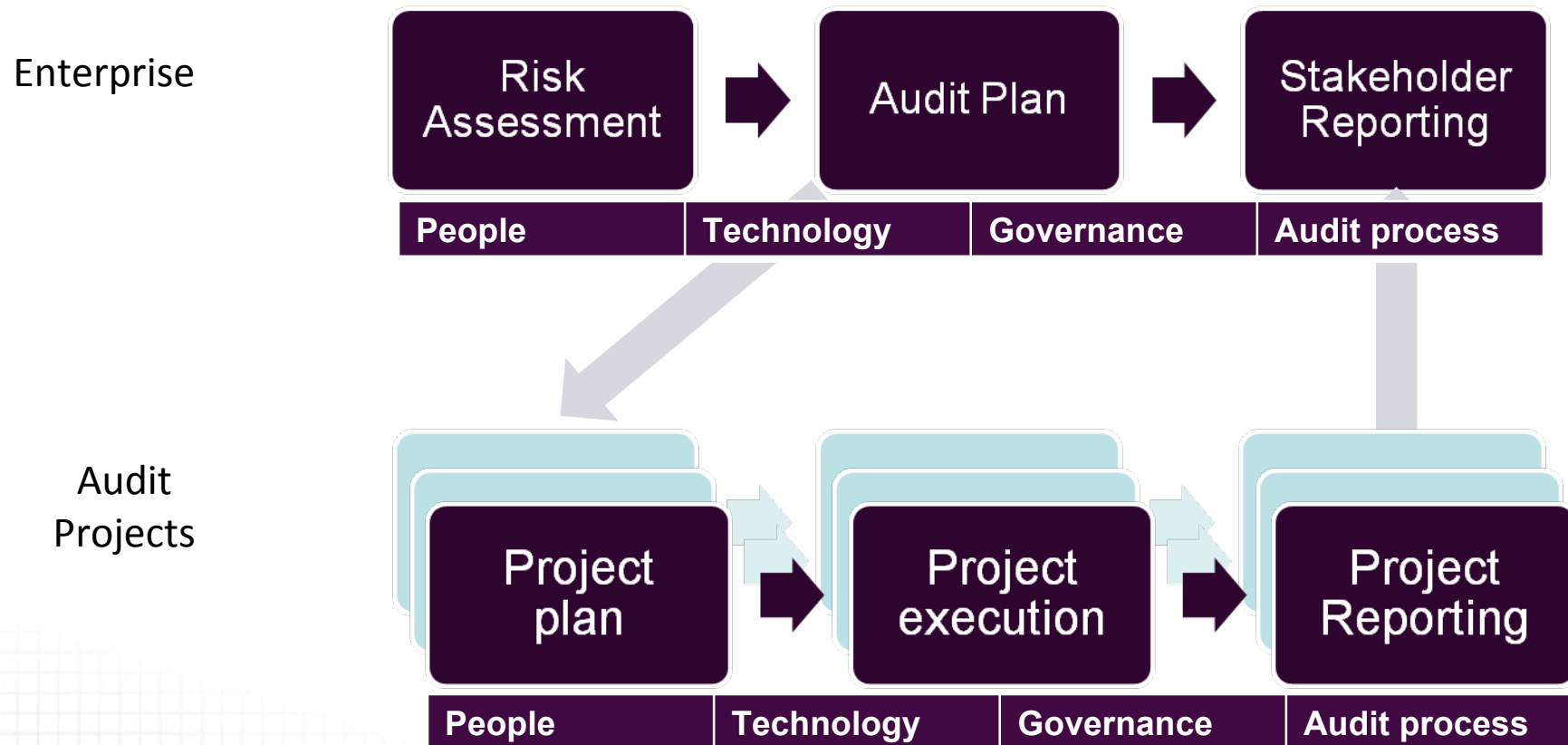
The audit process

Implementing continuous auditing across an internal audit methodology is not just about technology...



The audit process

...it's about a model that acknowledges the impact of People, Audit Process and Governance also.



Risk assessment should be the new centerpiece for the audit process



Enterprise

Audit Projects

Let's talk about some specific CA and CCM implementations

- Frequent risk assessment / Audit project selection
 - Wells Fargo (Conference Board Case)
 - McDonalds (Jones, IIA GAM 2007)
- Frequent controls assessment by Internal Audit
 - Hewlett Packard (Conference Board Case)
 - Harrah's, Siemens Financial (ACL Case write-ups)
 - Yahoo!, (Oversight Press Release)
- CCM-Application Configuration, Segregation of Duties
 - Honeywell, T-Mobile (Approva Cases)
- CCM-Transactions Monitoring
 - Talecris Biotherapeutics (ACL CCM Case write-up)
 - MD Anderson Cancer Center (Oversight Press Release)
 - McDonalds, Pfizer (Oversight Systems Case write-ups)

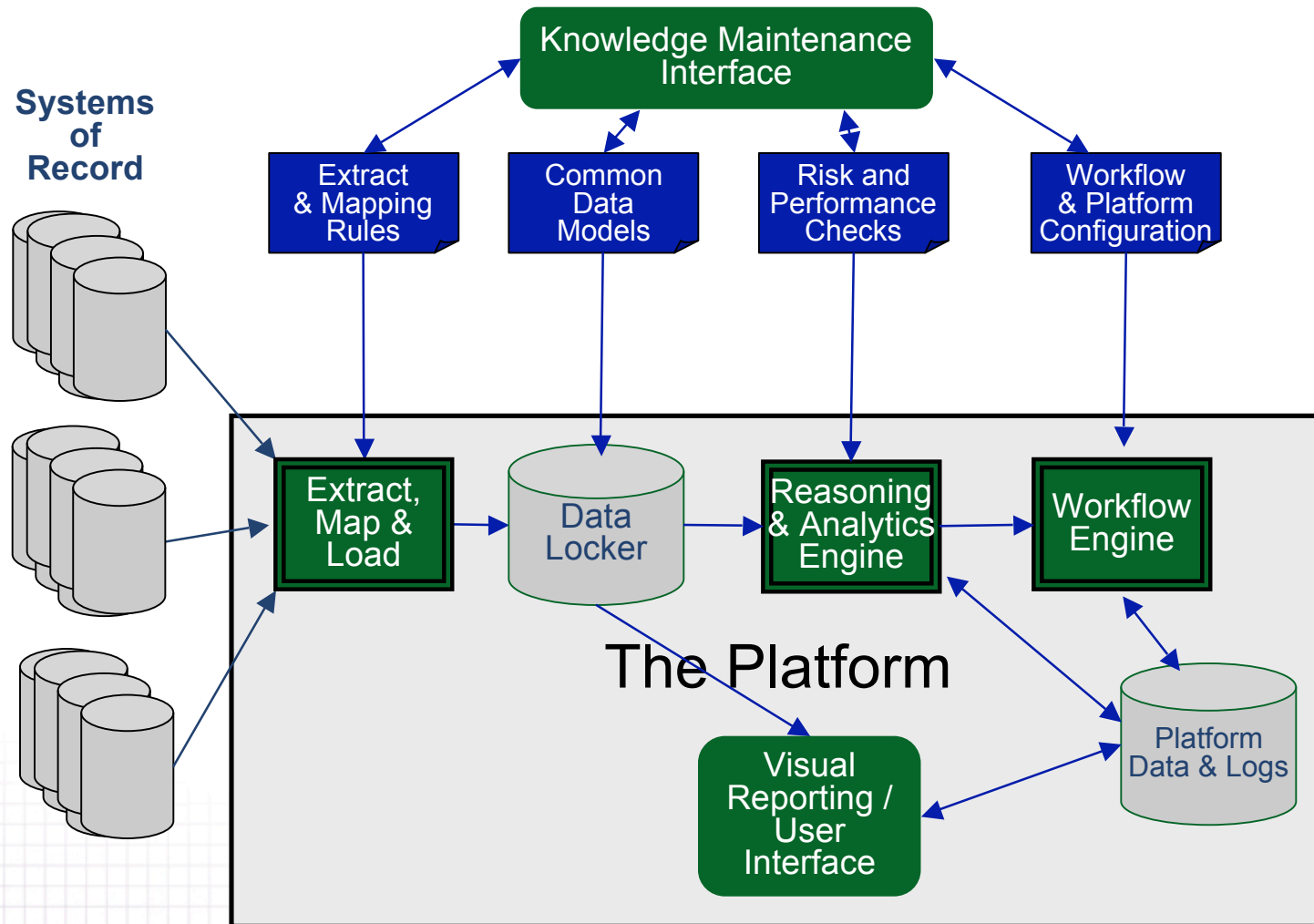
What does CCM-T look like? How does it work?

A good continuous controls monitoring platform

visual risk IQ.

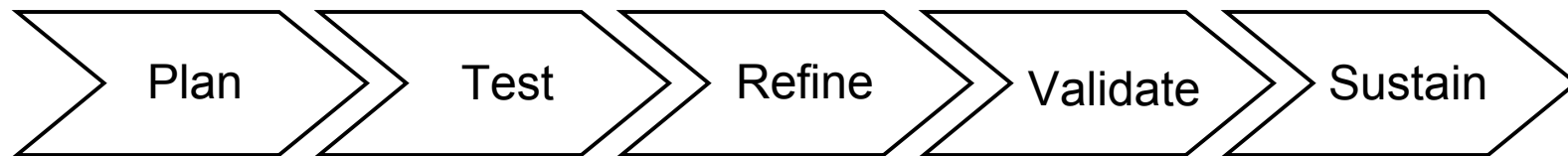
See. Analyze. Act.

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Our methodology features quick wins and minimal disruption

Phased approach delivers results



- First several risk and performance checks are live in 30 days
 - Duplicate pay / overpay
 - Excluded Party List / Watchlist Vendor Match / Similar
 - Employee to Vendor Name & Address Match
- Second wave of risk and performance checks are live in 60 days
 - Grant cost timing exception
 - Grant overcommitment warning or error
 - Grant milestone exception
- Subsequent waves based on client-specific priorities
 - GL, HR, or more risk and performance checks in AP, Grants, Billing

What can someone do on Monday?

- Assess where your audit team is on the maturity curve. Assess where you want to be? And then find a small win opportunity and get started.
- Begin with more frequent risk assessment. What questions should we ask in Q2 that will tell us whether our Q4 assessment is still on target?
- Identify an audit where we can be more in-depth and data driven. Do you use CAATs now? In fieldwork and in planning / scoping?
- Assess what management information audit relies on to gauge company financial or operational performance? How often is it available?
- Identify potential redundancies in control and performance checking. Are there areas where we can “Ask Once, Satisfy Many”
- Think about ways that our internal audit functions can be the R&D lab for potential innovations in continuous monitoring

Thank you!

For more information or discussion, please contact

Joe Oringel
(704) 752-6403
joe.oringel@visualriskiq.com

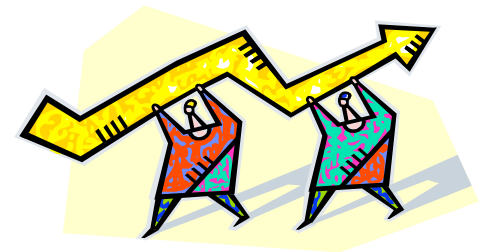
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Follow us on Twitter at @VisualRiskIQ

Visual Risk IQ

Points of distinction

- We focus solely on emerging enablers for continuous auditing and monitoring
 - Educating the market
 - Rapid, low-cost, value-focused pilot projects
- Our clients' business objectives and current state of maturity drive our recommendations and projects
- People and process changes are primary, supported, as appropriate, with enabling technologies
- We maintain an in depth, up-to-date knowledge of all software and process solutions within the categories
- Key to our success are alliance relationships with leading software providers and a broad array of complementary professional service firms



Extra slides start here...

What does Wall Street guidance look like? How are economic conditions affecting you?

- Lowered guidance
- New SG&A expense control initiatives
- “Suspending our 401K match...”
- “Staff reductions of 10%...”
- “Hiring (travel, salary) freeze”



- 
- Think about the Fraud Triangle
 - Financial pressure and rationalization are on the rise
 - What are we doing about Opportunity

Continuous Auditing Maturity Model (simple view)

	Basic practices	Repeatable CAATs	Frequent CAATs	Continuous auditing
People	Staff has some basic data literacy. Knows how to ask IT for digital information	Some IT- and data-specific specialists are accessible, either in-house or as consultants	Audit staff and leaders are IT- and data-literate. Little distinction between IT audit and financial / operational audit people	No need for ad hoc data acquisition - CA and CCM systems are well-integrated into finance, operations, and Enterprise Risk Management (ERM)
Technology	Basic data capture and analysis using MS-Office or ERP Query tools. Heavy reliance on Corporate IT	Some re-usable scripts exist and are used on-demand for relevant audit projects. Prevalent use of CAAT tools like IDEA and/or ACL	ACL and IDEA scripts are stored, scheduled, and run at appropriate intervals in support of audit projects	Continuous auditing and monitoring technologies contribute to all audit steps at project and department level
Governance	Business is reactive to requests from Internal Audit and usually helps in a timely way	Audit department can and does access enterprise data directly at the source	IT consults with IA prior to making system changes that are known to affect IA.	Data driven early warning / risk alerts include both business and controls / audit implications.
Audit methodology	Risk assessments are conducted annually	Updates to risk assessments are conducted more frequently than annually	Risk assessments are scheduled at regular intervals and updated based on internal and external data points.	Risk assessments consider objective and subjective data. Gaps between objective and subjective assessments are highlighted

The audit process – a maturity model approach

Moving up the curve can rarely be done in large steps

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Data life cycle influences the maturity model

- Further granularity in the maturity model is meaningful when you consider the life cycle of data from an internal audit perspective
- Different skills and resources are needed to acquire data, write scripts and programs, analyze results, and report findings
- When assessing an audit department's use of data through their audit process, we consider where data life cycle skills should be augmented, either from internal IT or elsewhere

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Leading practices in Data Acquisition

- Store replica copies of audit data on Enterprise file servers, not auditor laptops. Use repeating scripts for data extraction
- Establish notifications so that Audit Department is alerted if changes to source data or programs would affect auditor scripts
- Data is acquired in time to influence risk assessment, audit project selection, and prioritization of tests within control assessment

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Leading practices in Writing Scripts and Programs

- Scripts and programs are written to assist with risk assessment and control assessment activities
- Query scripts may be written by a dedicated team or resource, but the entire audit team is literate in data validation and can change thresholds
- The importance of data analysis is understood and considered, so that there is time in the audit budget for non-project or in-between audits to write or modify scripts and programs

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Leading practices in Analyzing Results

- Though scripts and programs may be written by data-literate specialists, the entire audit team is comfortable evaluating and interpreting results
- Relationships between audit findings and root cause is understood and supported by data-driven analysis, interpretation and recommendations
- Time spent on analyzing results begins to exceed time spent on data acquisition and writing scripts and programs

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Leading practices in Reporting Findings

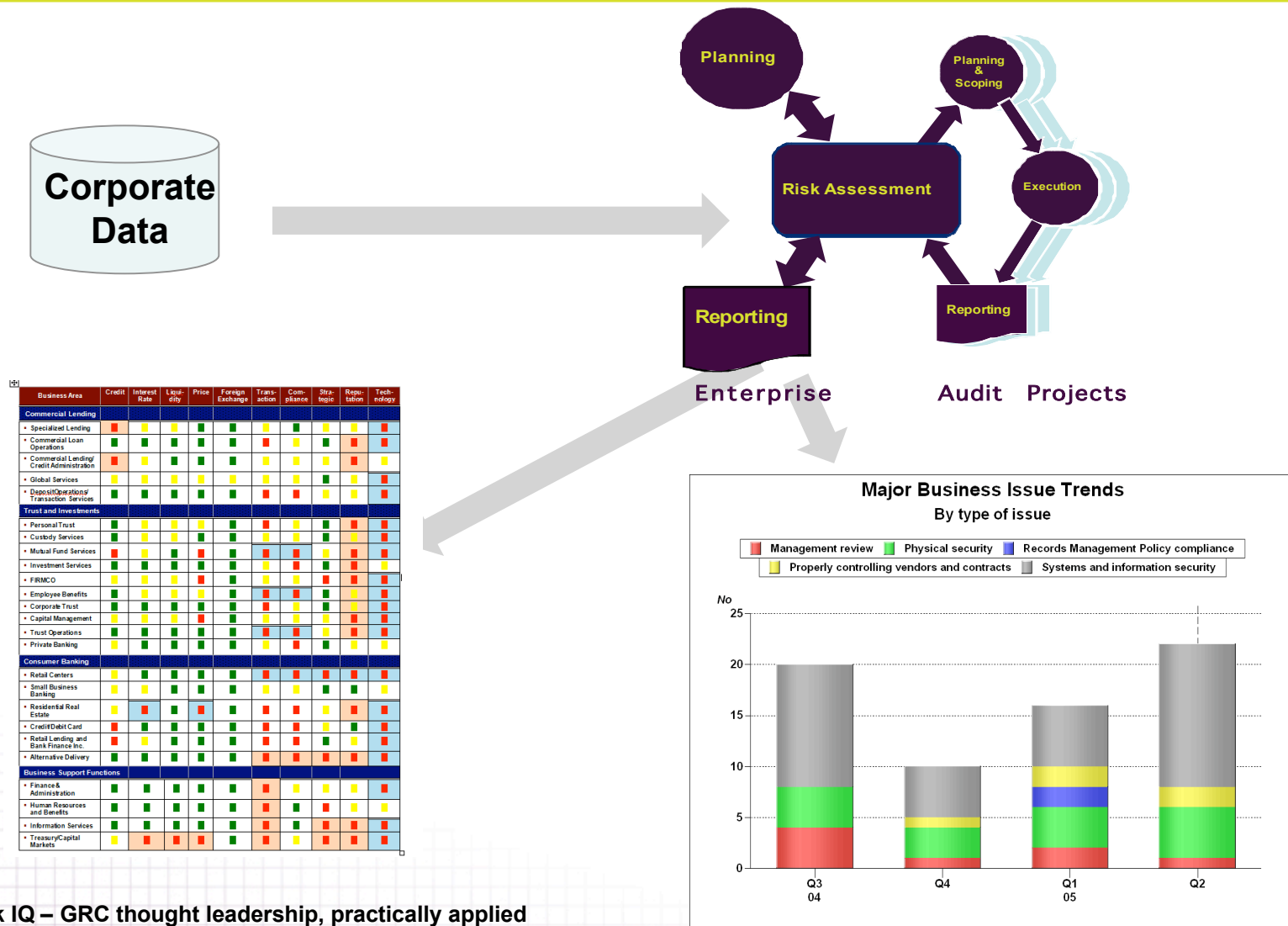
- Audit project reports and summaries to the management and the audit committee is supported by data and data-driven decisions
- Use of Visual Reporting is piloted or even fully adopted. Charts, graphs, and colors clearly communicate audit coverage and results
- Updates to risk assessment take place more than annually, and are based on data-driven activities, including audit follow-up and continuous auditing steps

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Continual risk assessment

Visual reporting can help with Continual Risk Assessment and Continuous Controls Monitoring

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Another Client Example

DIVISION RISK SCORECARD

	General Ledger	Inventory	Fixed Assets	Revenue	Expenditures	Franchise Fees
Location 1						
Location 2						
Location 3						
Location 4						
Location 5						
Location 6						
Location 7						
Location 8						

Individualized per division with drill-down capability...

Another Client Example, continued

*RISK SCORECARD:
EXPENDITURES*

#	Weight	Description	Risk Range		
			Low	Medium	High
RF1	50%	Payments without POs (as percentage of total dollars)	<5%	5-14%	>=15%
RF2	25%	Payee discrepancies from Vendor Master	0	<3%	>=3%
RF3	20%	Invoice approved by user with update privileges to Vendor Master	<2	2-7	>=7
RF4	20%	Percentage of quarterly disbursements exceeding budget	0	1-10%	>10%
RF5	15%	Invoice amount greater than 5% of PO amount	<5	6-20	>20
RF6	10%	Count of split payments	<2	2-7	>=7

LOCATION	Overall	RF1	RF2	RF3	RF4	RF5	RF6
Location 1		6%	2%	5	8%	15	5
Location 2		11%	3	7	10%	20	7
Location 3		2%	0	1	0	4	1
Location 4		25%	3%	12	11%	35	9
Location 5		20%	14%	26	27%	42	48
Location 6		16%	17%	2	18%	8	12
Location 7		11%	3	7	10%	4	0
Location 8		9%	3	2	8%	9	7
Location 9		6%	2%	5	8%	15	5
Location 10		4%	0	1	0	0	1
Location 11		20%	14%	26	11%	35	9

...turning data into meaningful information.