



Continuous Monitoring

Contemporary Issues - Time to Move Forward

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Smart controls.
It's just Good Business



MP Cangemi: Business Career

- Merrill Lynch/Blair&Co – High School&College
- Ernst & Young – CPA – Dir IT Audit
- Phelps Dodge – CAE – VP - CIO
- **Professional work – IS Control Journal (87-07) & Books - Managing the Audit (Wiley)**
- BDO Seidman Ptr. IT Audit – IA Services
- CFO/COO to CEO Etienne Aigner, Inc. 91-04
- CEO Financial Executives Intl 07-08
- Advisory Boards – FASB; IASB; private companies – Oversight Systems- Tech Co

Continuous Monitoring

- Time to move forward!
- Time for a “Revolution”



Continuous Monitoring Macro

- Automation – computers, new communications and surveillance devices leads to expansion of monitoring
- There is an ever expanding “Orwellian” interest in monitoring
- Pace may be an issue BUT automated monitoring is **expanding** in Business; Government; Medical Practices

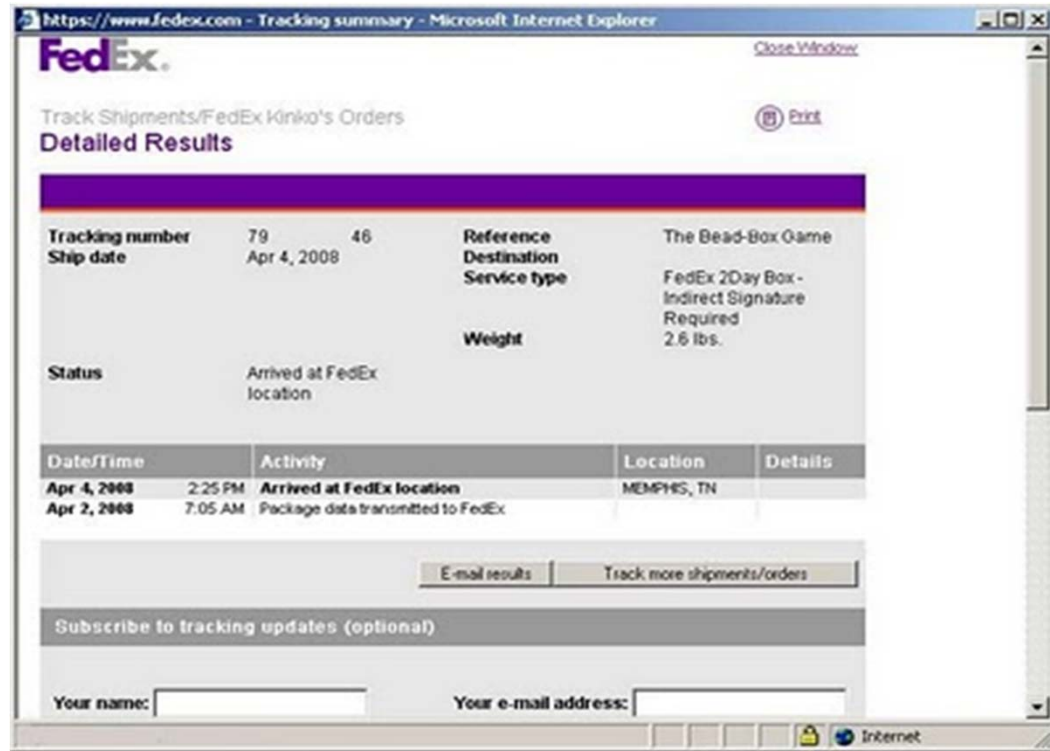
Apollo 13 – CM is everywhere



Monitoring is everywhere

Federal Express created New Standard

- Lost cell
Phone – letter
To NY Times
- Retail



https://www.fedex.com - Tracking summary - Microsoft Internet Explorer

FedEx. [Close Window](#)

Track Shipments/FedEx Kinko's Orders [Print](#)

Detailed Results

Tracking number	79 46	Reference	The Bead-Box Game
Ship date	Apr 4, 2008	Destination	
		Service type	FedEx 2Day Box - Indirect Signature Required
		Weight	2.6 lbs.
Status	Arrived at FedEx location		

Date/Time	Activity	Location	Details
Apr 4, 2008 2:25 PM	Arrived at FedEx location	MEMPHIS, TN	
Apr 2, 2008 7:05 AM	Package data transmitted to FedEx		

[E-mail results](#) | [Track more shipments/orders](#)

Subscribe to tracking updates (optional)

Your name: Your e-mail address:

Internet

Retail – Monitoring Weight



Government Monitoring

- Government in addition to space travel
 - National Security
 - Terrorist – airport screening
 - Red Lights in Newark – cameras vs. police
 - compliance – tax W-2; 1099; property tax;
 - motor vehicle monitoring;
 - EZPass – expectation – no duplicate charges

Medical Monitoring

- Search CM on Google –
 - Glucose monitoring high on list
- ER – CM of patients vital signs – using probes and sensors providing automated CM of Heart, oxygen level, blood pressure, temperature
- But one in five claims are wrongly handled – without monitoring
 - Per MSNBC.COM – article CM Solutions Can Save Your Healthcare Business Money



CM Example – Medical Claims

Per Forbes Magazine 5-10-10

- Medicare “questionable claims” 10% - \$47 Billion of the \$480 Billion processed
- Private Insurers health claims, computer systems checks i.e.: CM – reduce rate on \$600 Billion results in fraud rate 1.5%
- Recommendation – US Gov should adopt the private sectors “pre claim adjudication processes” i.e. CM

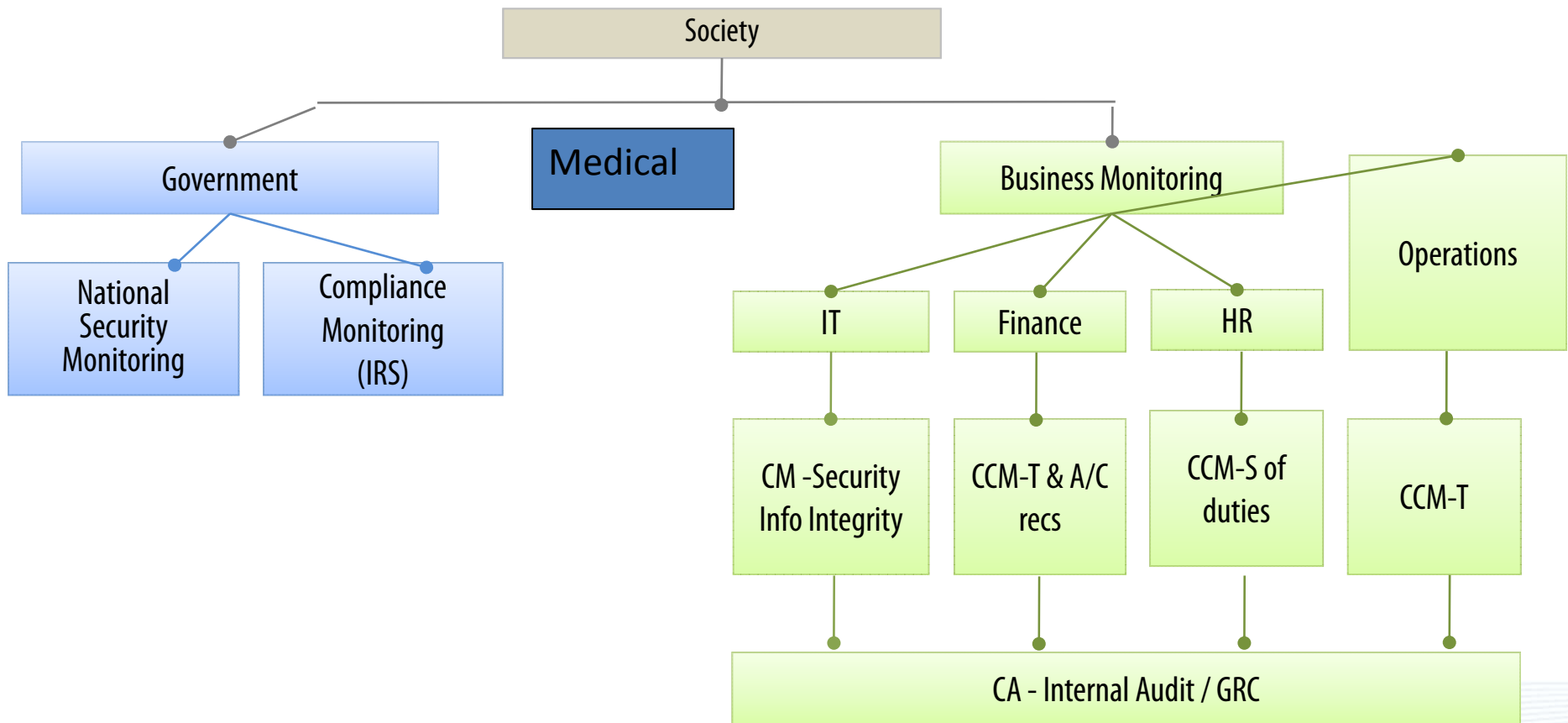
Monitoring Macro - Business

- Business Monitoring:
 - To some degree started with IT Auditing MORE ON THIS LATER
- Extensive IT Security Monitoring
 - IT people use automation!!
- Finance – A/P & telecom = cash recoveries (FEI Research confirmed; but \$\$s to contingency)
- Expanding into operations – this needs to move faster -**my theme #1 today**

Monitoring Macro - Assurance

- CM adds value to IC system – COSO
Monitoring – good step, not far enough
- Business CM has Financial & IC Focus –
 - Most common terms CCM, CCM-T, CA
- **Start higher** - CM – is more pervasive
 - Need for more clarity of CM objectives, benefits and definitions – get it into core operations

Overview of Continuous Monitoring



Control Community - IAs

- Helped launch IT security – IT monitoring
- Early adopter real time CA-CM BUT – a new Control Community Role emerging
- Finance & audit – to lead & educate
- PWC IA 2012 study Risk Centric; add value
- Identify - CM in Operations in addition to Controls Focus; add information integrity; efficiency focus; business/customer focus

Continuous Audit (CA) vs. Continuous Monitoring (CM)



Continuous Auditing Performed by Internal Audit

- Gain audit evidence more effectively and efficiently
- React more timely to business risks
- Leverage technology to perform more efficient internal audits
- Focus audits more specifically
- Help monitor compliance with policies, procedures and regulations

Continuous Monitoring Responsibility of Management

- Improve governance – aligning business/compliance risk to internal controls and remediation
- Improve transparency and react more timely to make better day-to-day decisions
- Strive to reduce cost of controls and cost of testing/monitoring
- Leverage technology to create efficiencies and opportunities for performance improvements

From CA/CM as Preventive Care against Fraud
by James R. Littley and Andrew M. Costello, KPMG



EDPACS –Cangemi “IA’s Role in CM”

- April 2010; elected as #16 best in last decade
- **Continuous Monitoring (CM) is a business operational issue swirling around in the auditing and accounting professions**
- CA is very valuable, as is CCM and CCM-T and CCM-SD **But built in CM is more important to your organization**
- **Leverage – the assurance function!!!!**

FCPA – SOX and IC Scope

- FCPA at Phelps Dodge circa 1980
 - IC reviews with operation improvement focus
 - Managing the Audit Function- by Cangemi
- SOX –IC over FR – very limited
- Ignored the opportunity to change the backwardly looking audit model and expand integrated automated controls
- Result – good focus on IC but cost of compliance doubled

SOX – propelling CM

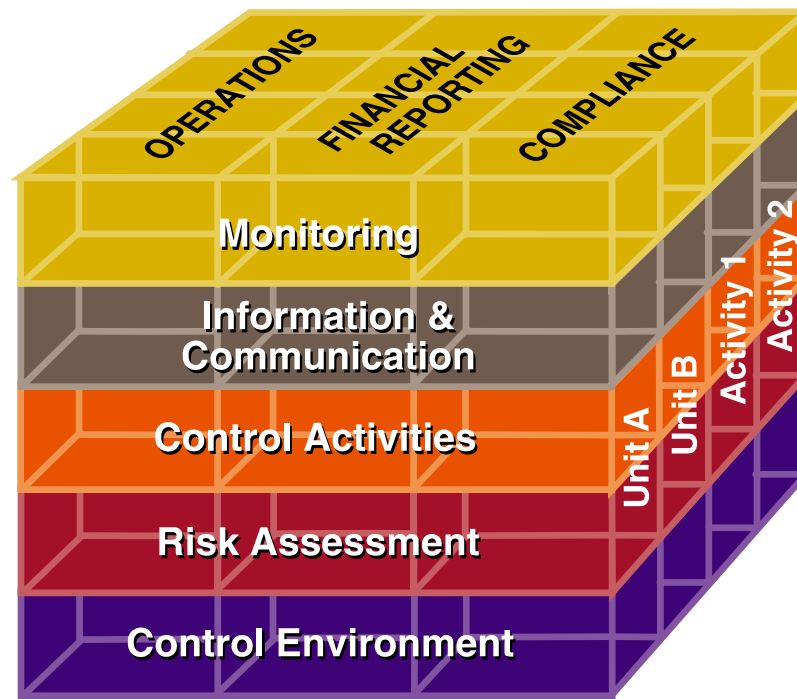
SOX doubled the cost of controls/audits –
with a focus on FS accuracy

– not integrated IC using technology!

Question – can we use this environment to add efficiency and change the backwardly looking control/audit model ?

Yes there is a large interest in lowering cost; improving Info Integrity - IC verifications, UK bribery Act, using automation to expand coverage at lower costs

COSO = Internal Control



- Recognized as the major framework for evaluating internal control
- Operations - opportunity to build in controls and other verifications; expand coverage; find errors early: recover \$\$\$

COSO Monitoring 2009– my view



- directionally great – suggesting greater use of monitoring to reduce cost of year end and ongoing internal audits (SOX)
- could have been more specific about the use of computers (automation) to expand monitoring
- comments suggesting references and examples of how computers can be used to monitor **were not included.**

KPMG 404 Inst. – Annual Survey



- leading companies continue to get more 404 done with fewer hours
- Why? Automation is an important part of the explanation- but only 22% automated
- Compliance Week article - “404 Study Shows Little Automation Yet”
- Gartner – only 5% penetration of CCM, slightly higher for CCM-S

Assurance & Control Community



- Summary: excellent progress – expanding use of near real time – automated monitoring
- Redefine the Control Community Role
 - Finance & audit – to lead & educate and recommend CM applications
- New focus expand CM in Operations in addition to Assurance - Financial Focus

CM – business focus

- Senior management focus now !!!!
 - Recession - puts pressure on costs – even audit and recently IT
- Need add **efficiency** -Audit-Control Model
- My View - BIG opportunity for CM-CCM
- Gartner – CCM-T can produce quick ROI
- But – firms/CFOs not focused on CM -we need to build the business case

Case Study: Metcash

Challenge

- No effective solution to address associated control weaknesses
- Many disparate databases and legacy systems
- Managing the exceptions proved to be challenging due to the sheer volume of transactions

Case Study: Metcash

Solution

- Used existing tools (ACL scripts) with CaseWare Monitor
- Monitor 100% of all transactions
- Automatically distribute exceptions to relevant personnel
- Create a wider window of opportunity to alleviate control breaches and prevent losses

Case Study: Metcash

Results

- Assurance
- Business can act on exceptions immediately
- Quantifiable dollar savings



“Over several years, we have implemented Continuous Monitoring applications to interrogate high volume systems on a regular basis to confirm that our key controls work effectively. Significant benefits have been returned over time both in control assurance and the identification and correction of inevitable errors in a high volume transaction environment.”

Glen Laslett
Group Audit Manager
Metcash



Case Study:

Assurance meets Cash, business value

- When we ship – we bill – collect cash
- Supply Chain has money in it
- Aigner: no locator system – slow picking process and full physical- ie; stop Shipping
- Goal use automated locator, then: pick sequencing and CM of inventory
- speed throughput and cash flow

Aigner Benefits

- Cut staff in DC by 30 percent attrition
- Improved shipping performance – faster shipping better cash flow
- Increased capacity of throughput
- Eliminated Physical Inventory (which actually introduced errors)
- I got promoted !!!!!



Case Study – Retail POS

- 75 stores across the country
- Basic Retail POS System KWI
 - SaaS started 1985 - in-out-back in
- Inventory shrink – ½ of 1%
 - Budget -Asked for Loss Prevention - \$250+ per yr
- KWI has an idea – monitoring POS for loss prevention – retail data experts

Why is CM implementation slow

- Need for a champion – who initiates the process
- Audit, Finance = aware but in review mode; no budget; no P&L responsibility
- Operations – less aware – hence the opportunity for IA - Finance
- Issue of audit independence – discussion

REVIEW---New Generation GRC – Control Community



- Recommend CM to operations
- Not just a control issue also information integrity, accuracy, reputation
- EDPACS Article- **Continuous Monitoring (CM) is a business operational issue swirling around in the auditing and accounting professions.**

New – GRC/Control Community

- Get in the flow with management
 - Innovate/Reinvent - Respond
- Large investment in IT
- Leverage this investment
- To Do- Lower cost – higher imagination
 - Recommend Continuous Monitoring into Operations Core Systems
 - Not just a control issue also information integrity, accuracy, reputation

Secret Sauce !!

- Gartner--CM can produce quick ROI
- BIG News - New companies and products available and now; and more features coming every day
- They have: PhDs, software engineers; build analytics, “secret sauce” – to address emerging needs

New Generations – CA Software



- CaseWare, ACL, Approva(acquired by Lawson) Oversight
- Yet some companies building their own
- Yet some companies hand over their cash to contingency firms
- **My view use existing software and CM firm experts, to build CM in to systems**

New – continuous monitoring and auditing solutions

- built-in report and dashboard features that present continuous risk reports with color-coded risk ratings (i.e., red, yellow, and green) for all key control objectives.
- threshold-oriented reports automatically alert audit professionals and or BUSINESS MANAGERS
- Why reinvent the wheel !!!

Barriers to CM

- Need a sponsor
 - Build into audit recommendations
- Cost – need for investment and Vision
- Lack of regulatory requirements; PCAOB wants coverage – efficiency not mandated!!



FERF 2011 research: The Benefits of CM

Literature Search; 15 Company Meetings

- Companies recognize CM value
- A case has to be made with ROI
- IA does some CM & CA (ACL & CaseWare)
- New emerging Compliance Departments
- CM in operations growing – lead by A/P cash recoveries vs. contingency firms

Case Study - UTC

- Finance leading— recognized value – has compliance dept., IA and IT involved
- Large volume of transactions to be CM
- Selected 4 major points to CM; manageable # of exceptions
- Large dollar recoveries excellent ROI
- CM is a process – builds overtime

Macro Thoughts

Business run on cash – must be efficient

Focus cash recoveries; Lower expenses

Management & Audit Committees will get it

Problem – Need for SEC, PCAOB & COSO to pay attention to CM - CCM & CA

Problem – IA's get it BUT need to get the CFO to understand and buy in

Regulators: Macro Thoughts

Problem - Need for SEC, PCAOB & COSO to pay attention to CM - CCM & CA

- Who regulates Internal Control ?
- Who should regulate CM?

Problems:

- busy – financial crisis
- accounting and assurance focused
- Little real management experience

Call to Standard Setters



The Australian Financial Review
www.afr.com • Friday 13 August 2010

Making assurance timely

The Auditing and Assurance Standards Board (AuASB) has applauded the Institute of Chartered Accountants' latest research on continuous assurance.

Head of the board Merran Kelsall said the publication *Continuous Assurance for the Now Economy* would throw out challenges to standard setters and she welcomed the opportunity to discuss the concept.

Unlike traditional financial reports where auditors — those providing the assurance — provide an opinion based on historical financial data, continuous assurance is based on real-time data, both financial and non-financial.

Still in its infancy and yet to be adopted by any major financial market, continuous assurance is not governed by any auditing standards. The institute's paper not only wants to raise the debate on the continuous assurance process but also the standards required and the appropriate education for those implementing the process, which Lee White, the general

manager of leadership and quality at the institute, said was inevitable.

"An investor may want to have non-financial information and the driver is how to get the assurance over this," Ms Kelsall said. "[Continuous assurance] is a challenge for auditors to be adaptive and dynamic."

While the digital revolution has transformed many businesses, the way in which they are audited has experienced no equivalent evolution.

External auditors tended to examine an organisation once a year and listed companies report only quarterly in many parts of the world and half yearly here, even through the technology exists for both reporting and auditing in a timelier fashion.

"The dramatic collapse of leading banks around the world makes it all the more important that external and internal auditors take full advantage of modern technology to provide shareholders and managers with the most timely and relevant assurance," the institute said.

Mark Fenton-Jones

Australian Regulators

- Published: “Continuous Assurance for the Now Economy” Rutgers work!!
- Proposed continuous assurance vs. point in time audit report –
- Based on “real time” data both financial and non-financial
- Still in “its infancy” CA not governed by any audit standard!!!!

Closing Thoughts

- Private Equity (PE) firms are investing in it – and good CM-CCM products in pipeline
- This is not a public accounting issue –
 - They didn't propose automating G/L
- Business Management will adopt in due course & Government for public interest
- Need **awareness** to get operations to invest in CM for efficiency and real time reporting integrity/controls checking



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