



Risk and Controls 101

Agenda

- What is a Risk and Control?
- Controls 101
 - ❖ What is Risk and Control?
 - ❖ Control Types
 - ❖ Control Execution
 - ❖ Control Categories
- A-123 Process here at LBNL
 - ❖ Process
 - ❖ Risk Map
 - ❖ Control Summary
- Wrap-up



What is Risk?

A **risk** is a possibility of suffering harm or loss, or “what can go wrong”



Example:
The Airline Industry
Risks: Terrorism,
Bankruptcy...



What is a control?

A control is an **activity** that **prevents** or **detects** errors to mitigate risks

Example:
The Airline Industry
Controls: Security
measures...





Two Basic Types of Controls

Control Types	Description	Examples
Preventive Controls	Prevent undesirable events from occurring Facilitate desirable events	<ul style="list-style-type: none">■ System controls preventing unauthorized access■ Restrictions of user overrides■ Segregation of duties■ Dual entry of sensitive managerial transactions
Detective Controls	Identify/Detect undesirable events	<ul style="list-style-type: none">■ Exception reports, management review and action taken on the exceptions

Example:
The Airline Industry
Preventive?
Detective?



Two Ways Controls are Executed

- **Manual** (performed by people)
 - ❖ Examples: Authorizations, Management reviews
- **Automatic** (embedded in application code)
 - ❖ Examples: Exception reports, Interface controls, System access



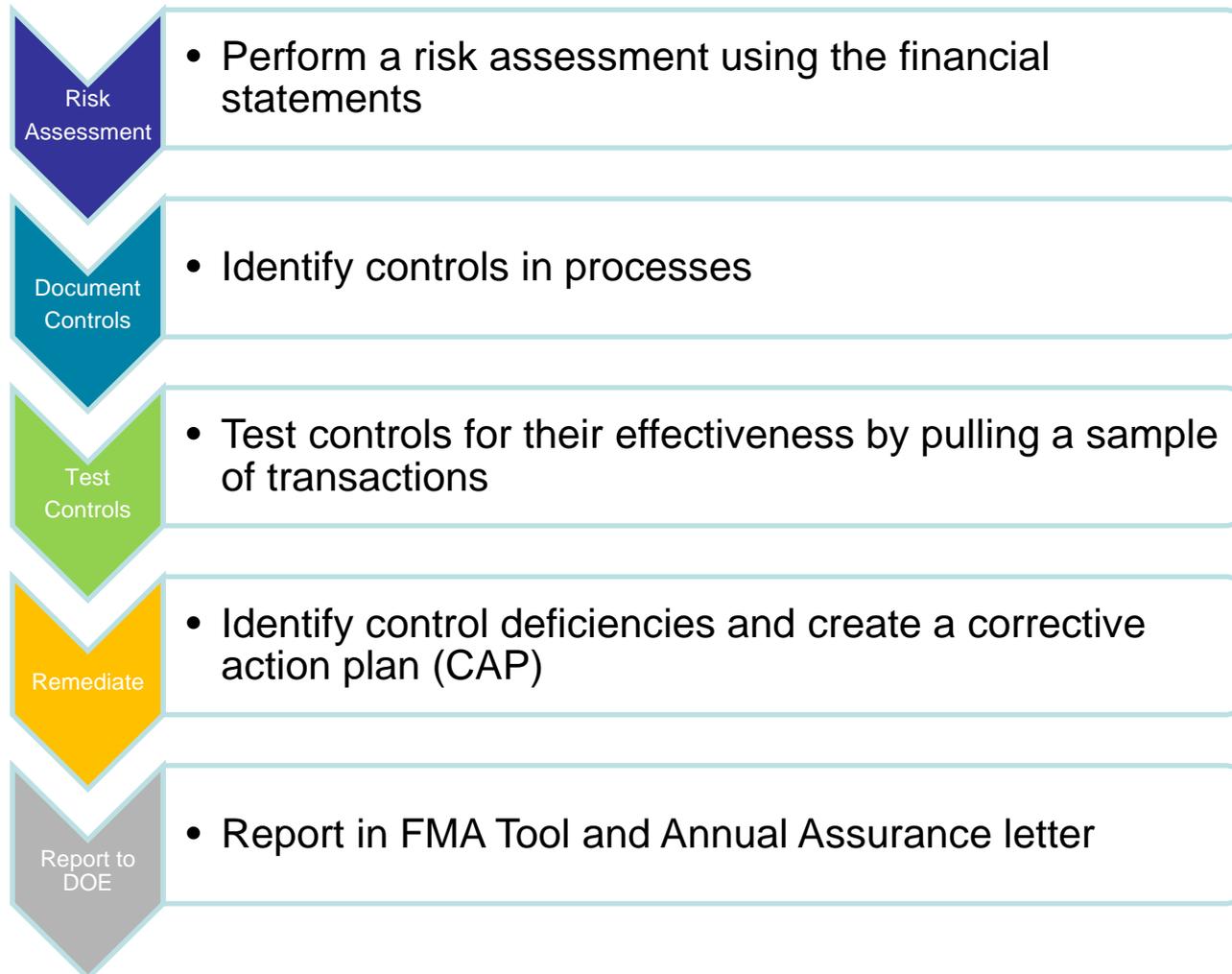
Example:
The Airline Industry
Manual controls? Automatic controls?

Control Categories

Control Category Legend	Description	Example
Authorization	Approval of transactions executed and access to assets and records only in accordance with management's general or specific policies and procedures.	Authorization limits.
Configuration/ Account Mapping	"Switches" to secure data against inappropriate processing.	Screen layouts with required fields.
Exception/ Edit Reports	Reports are generated to monitor something and exceptions are followed up to resolution. (Exception - a violation of a set standard, Edit - a change to a master file).	Reports of transactions exceeding limits.
Interface/ Conversion Controls	Controls over moving data between computer systems. Process used to migrate data from a legacy system.	Interface between AP system and GL system.
Key Performance Indicators	Financial and non-financial quantitative measurements that are collected by the entity and used to evaluate progress toward meeting objectives.	A/R over 90 days.
Management Review	A person different from the preparer analyzing evidence and performing oversight of the activities performed.	Manager review of reconciliations.
Reconciliation	Check whether two items (account balances, computer systems) are consistent. Items must be from different systems or records.	Reconciliation of A/R to G/L.
Segregation of Duties	Separation of duties and responsibilities for authorizing transactions, recording transactions and maintaining custody.	Staff who bill accounts receivable do not post cash collections.
System Access	Capabilities that individual users or groups of users have within a computer information system as determined by access rights are configured in the system.	Password protection linked to level of access.



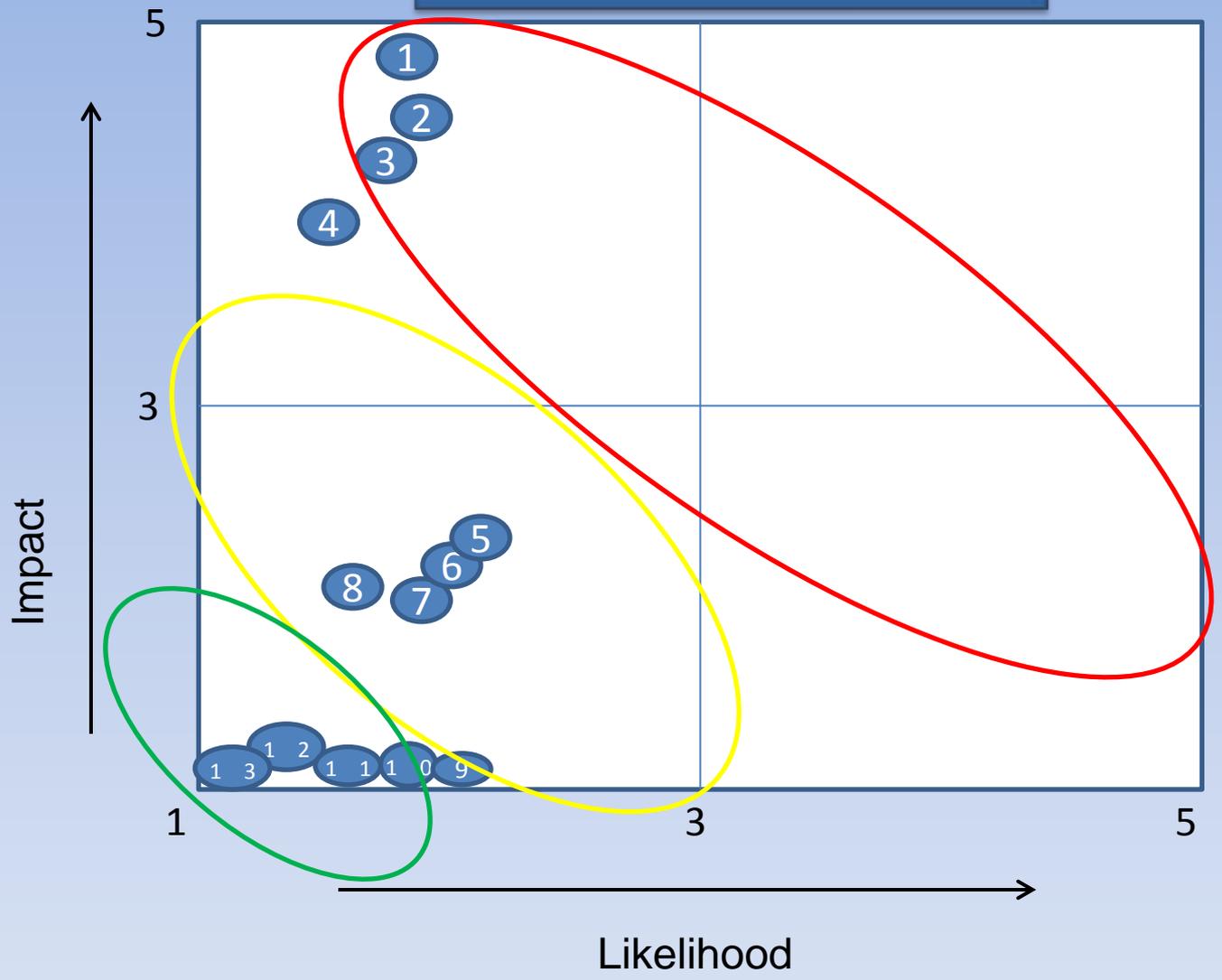
LBNL Process



A-123 Risk MAP FY12

Risk Ranking

- 1. General Ledger Management
- 2. Funds Management
- 3. Cost Management
- 4. Property Management
- 5. Environmental Liabilities
- 6. Payroll
- 7. Acquisition Management
- 8. Payables Management
- 9. Project Cost Management
- 10. Receivables Management
- 11. Benefits Administration
- 12. Revenue Recognition
- 13. Travel



Inherent Risk Key:

- High
- Medium
- Low

Key Control Summary-FY12

Process	Manual	Automated	Total
Funds	0	0	0
Cost	3	0	3
GL	5	1	6
Property	5	0	5
AP/Improper Payments	8	3	11
Project Cost Management	20	3	25
Acquisitions	19	6	25
Payroll	10	9	19
Environmental Liabilities	16	3	19
IT*	5	7	12
Totals	91	32	123

* Internal Audit to Test

Wrap-Up



Questions?

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