

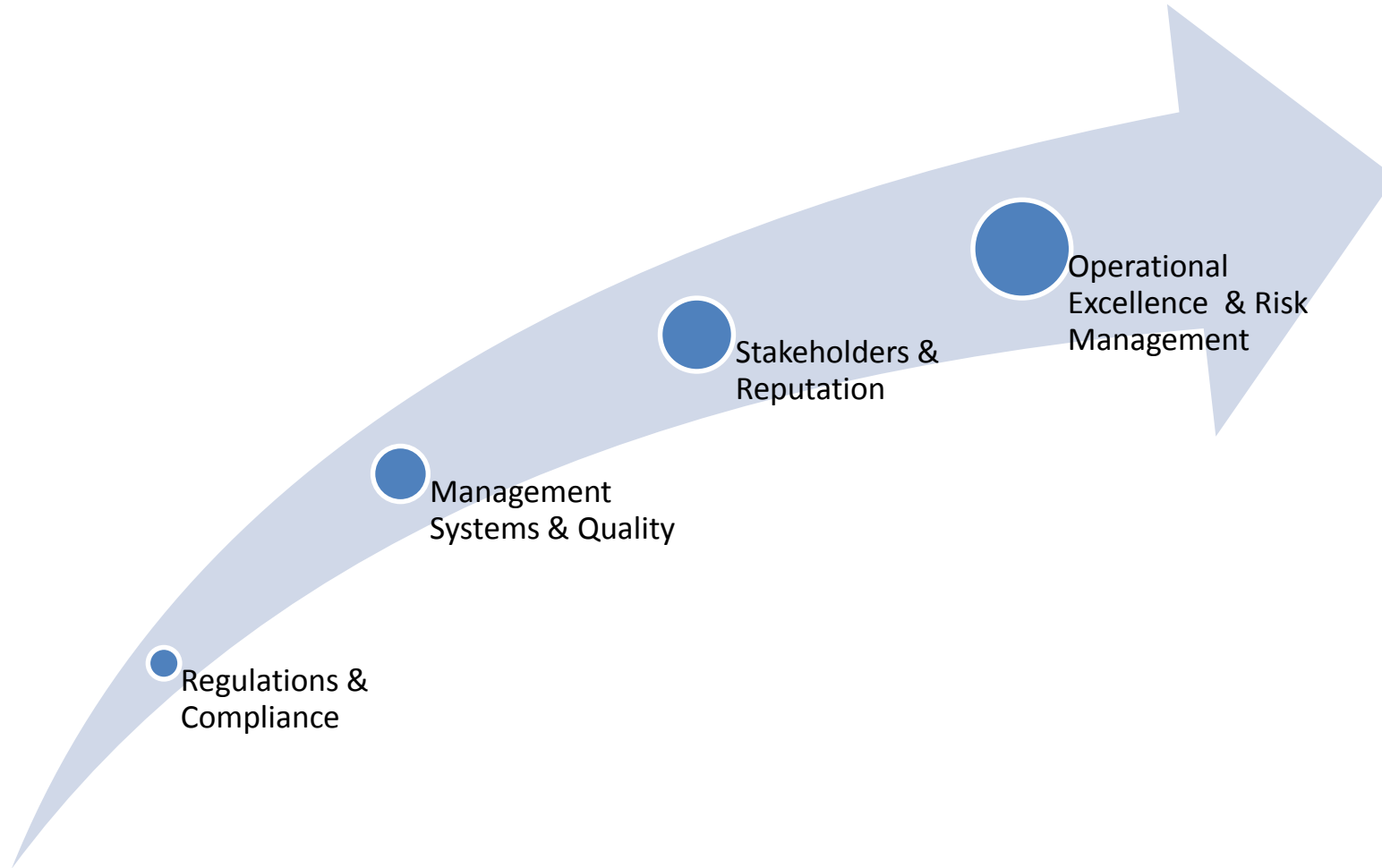
# Operational Excellence By Automating Operational Risk Management

February 4, 2016

Doug Hatler, EVP of Sales

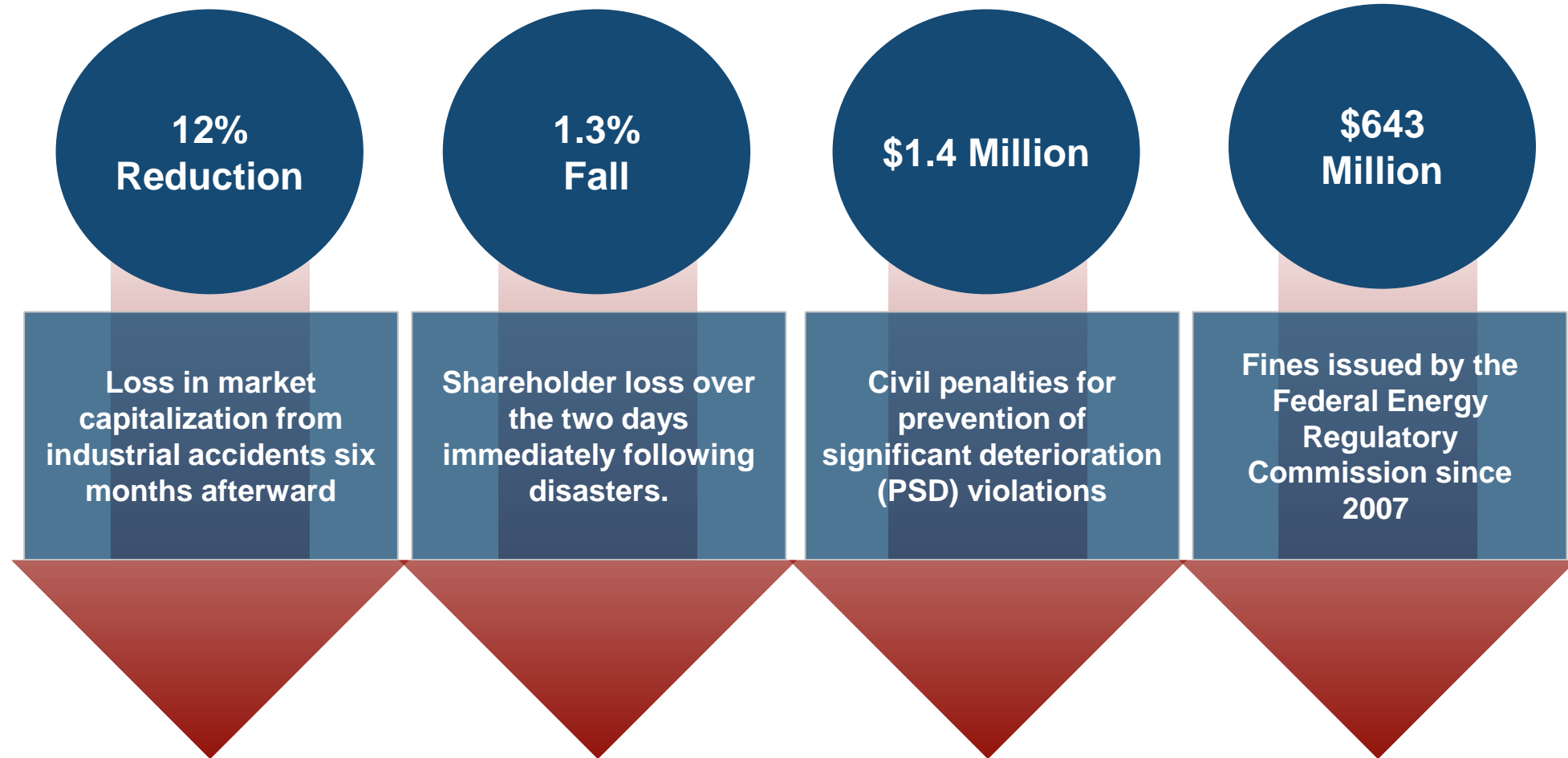
# Industry is in a Paradigm Shift

---



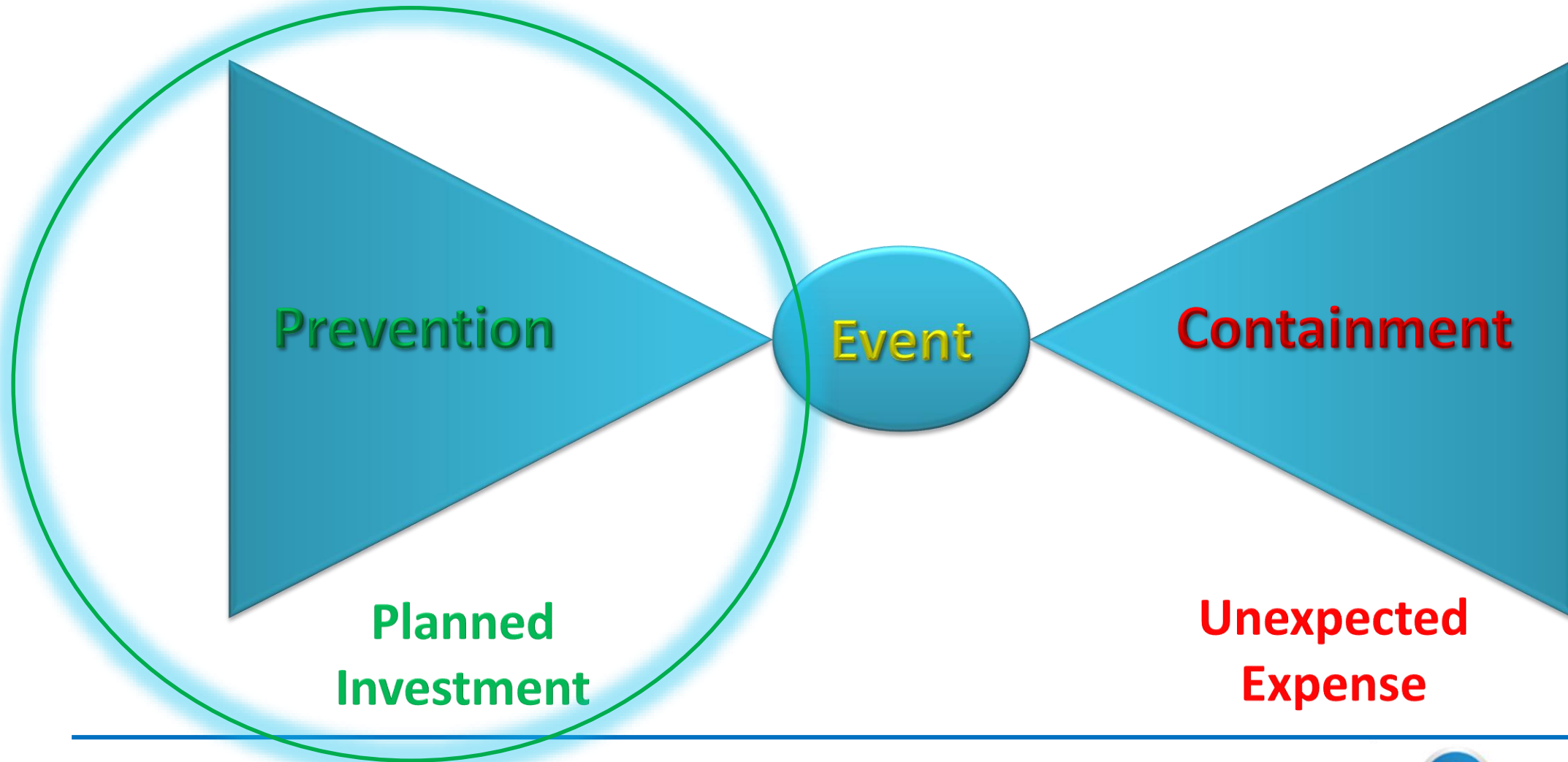
# Key Drivers

---



# What's the overall objective?

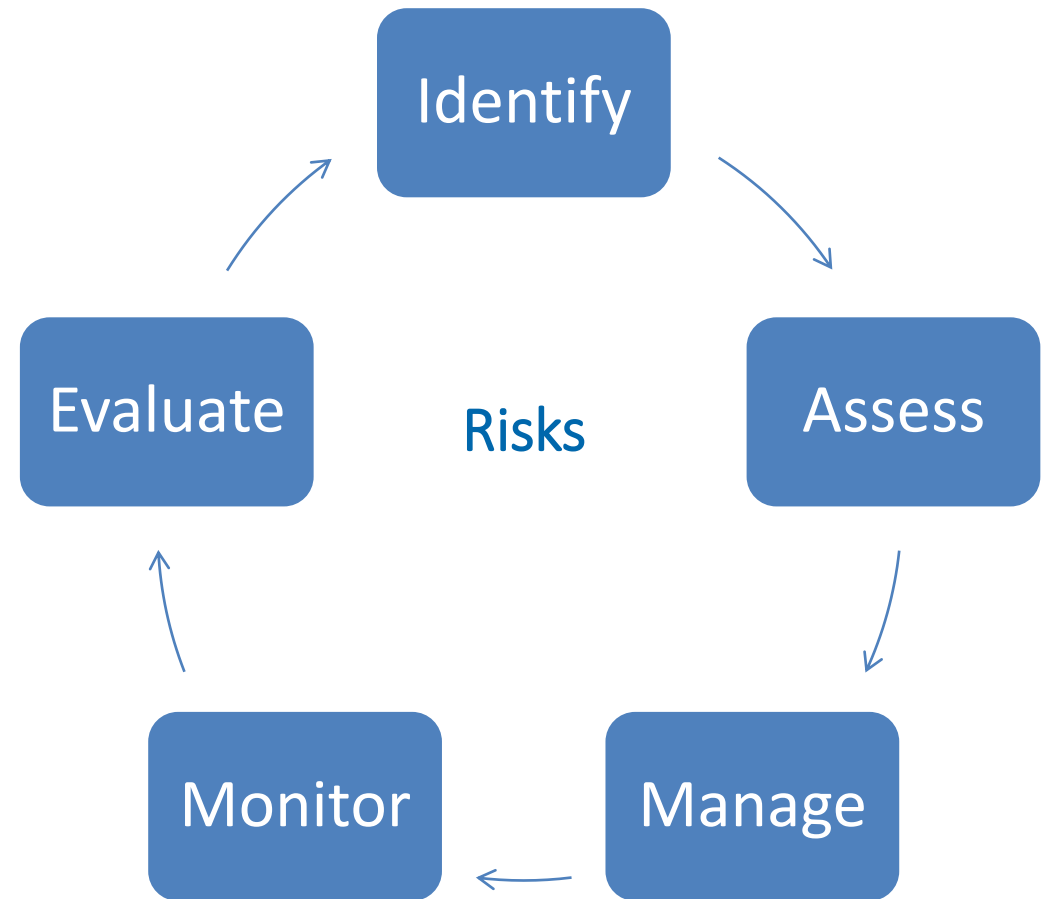
---



# Elements of Operational Risk Management

---

- Internal and external security
- Employment practices and workplace safety
- Customers, products, services, vendors and business practices
- Damage to physical assets and the environment
- Business disruption and systems failures
- Execution, delivery, and process management



# Risk Management

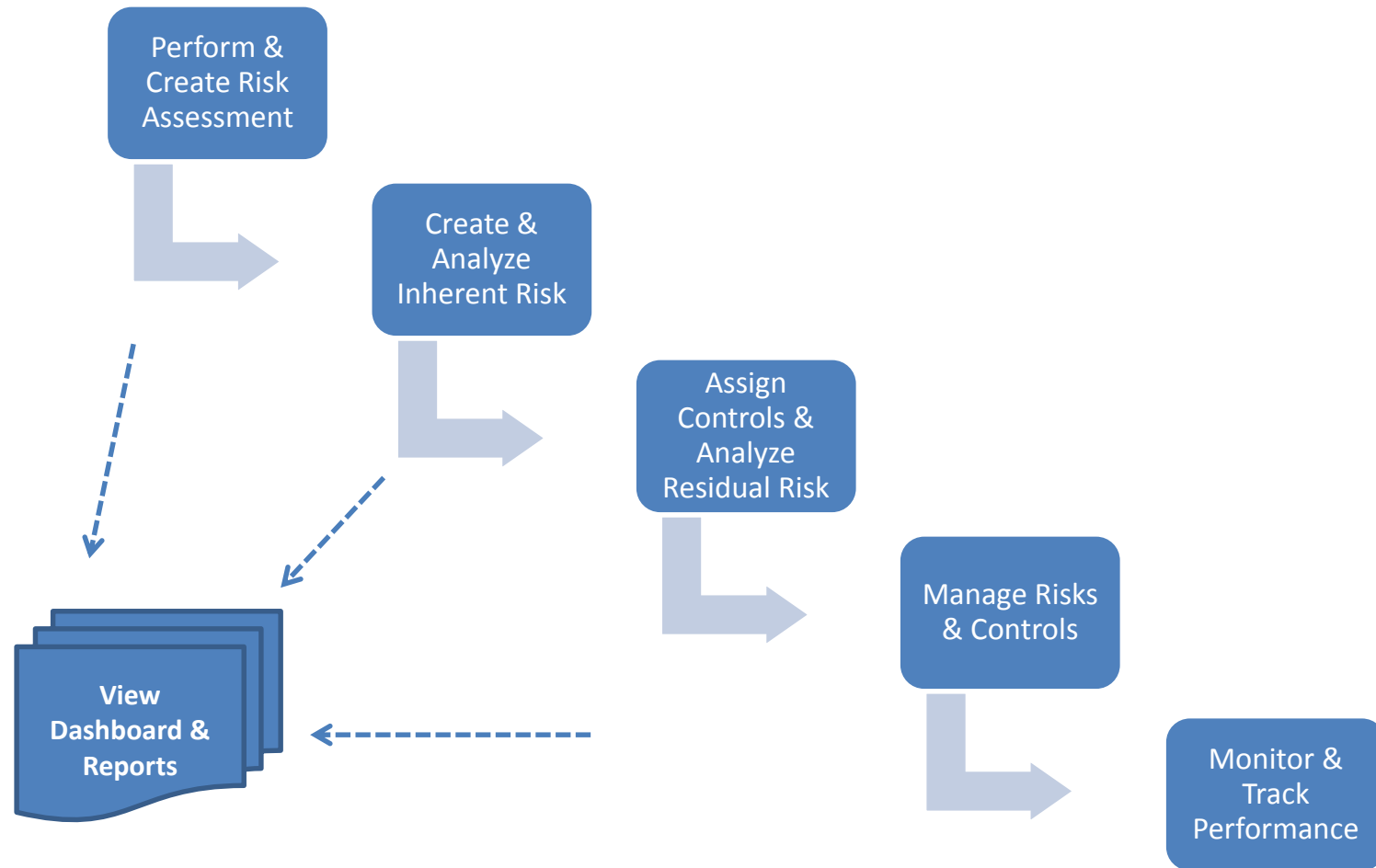
---

Risk Assessment => Risks => Controls => Actions

- Risk Assessment
  - The activity that identifies, raises, and assesses risks
- Risks
  - harmful events that can occur whereby something of value suffers harm or loss
- Controls
  - Preventive, detective, or corrective devices or processes used to reduce risk
- Actions
  - Activities that track the implementation of controls that reduce the Inherent Risk to the Residual Risk

# Risk Management

---



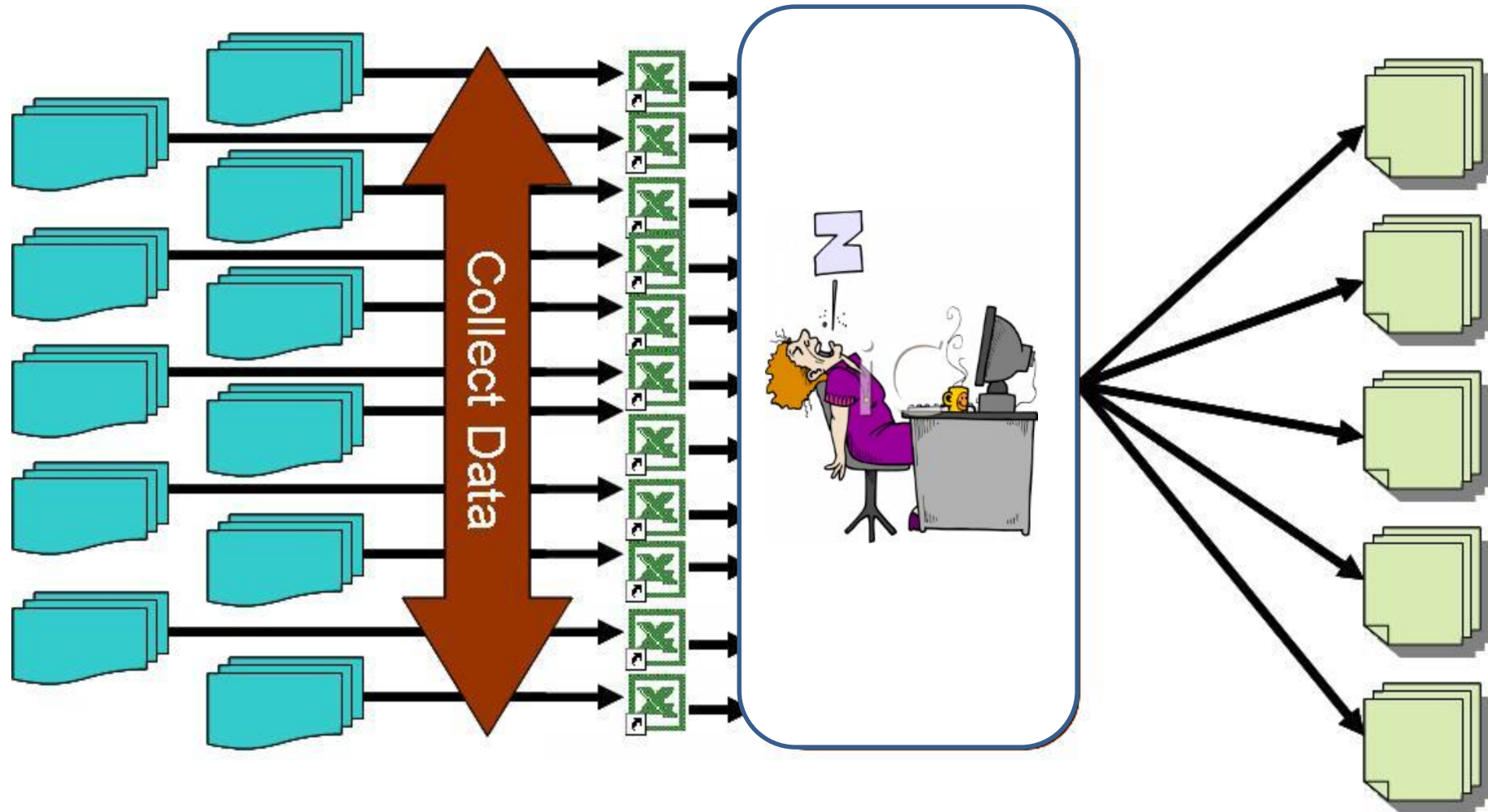
# Typical Scenario In Most Companies

---

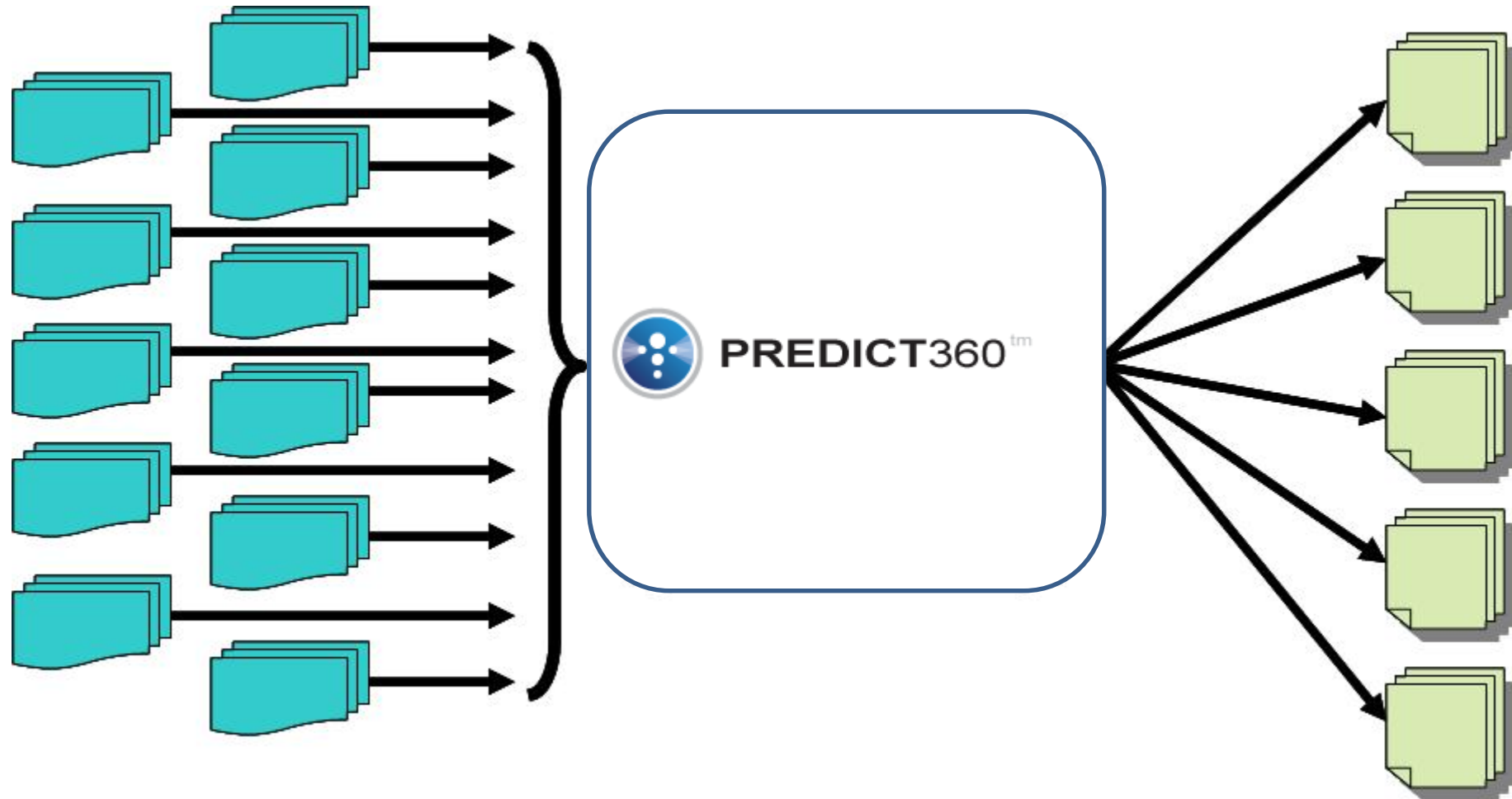
- No common taxonomy and rating criteria
- Standards and methodologies are not uniformly applied
- Manual, disparate, decentralized systems and processes
- Reporting is tactical and done in silos
- Lack of horizontal and vertical transparency



# The “As Is” Model



# The “To Be” Model



# Automating Operational Risk & Compliance

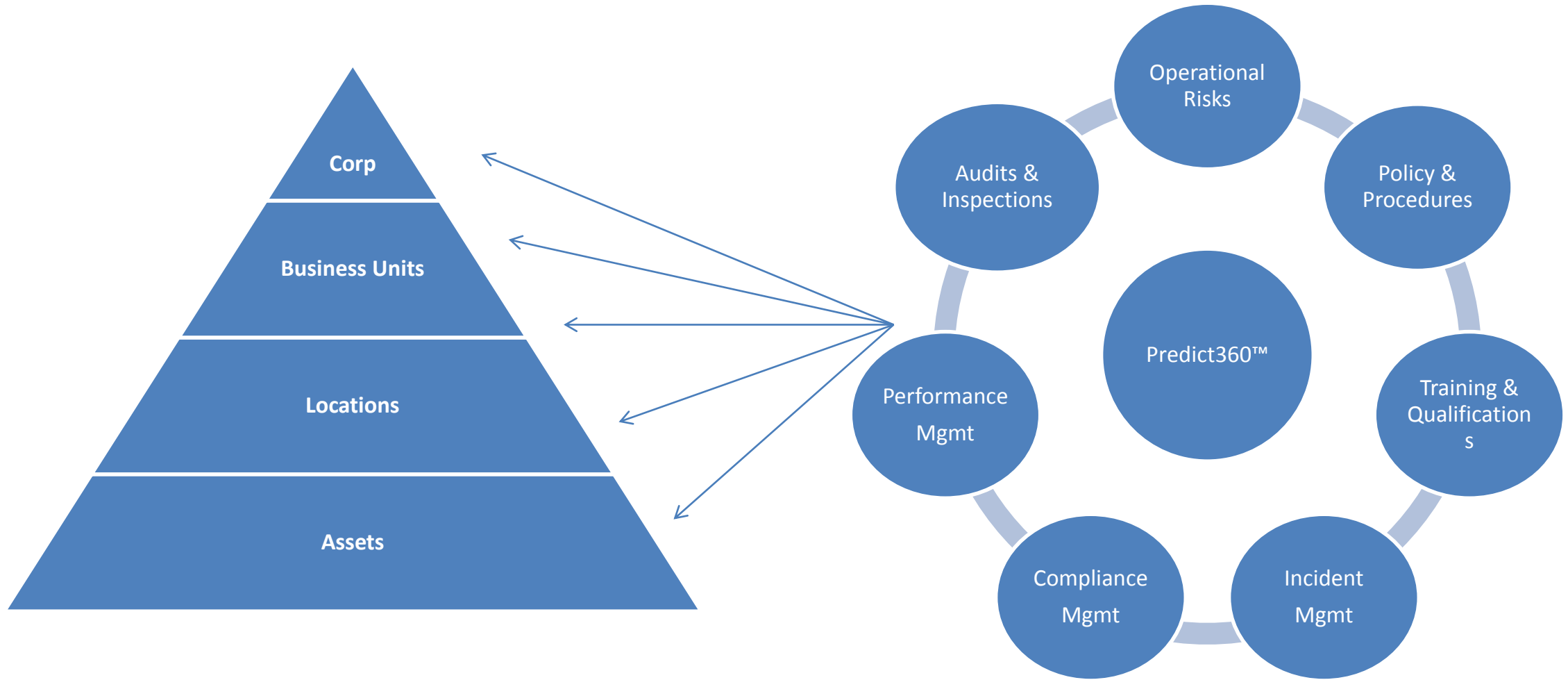
---

- Single database and reporting platform for risk and compliance
- Leverages and values inputs at all organizational levels
- Disparate business processes simplified and made consistent
- Provides a cumulative risk and compliance profile
- Manages regulatory change enterprise wide



# The Power of an Integrated Solution

---



# Operational Risk Maturity Curve

Operational Risk Engagement & Insight

Operational Risk Matrix

Likelihood	Severity				
	Insignificant	Minor	Moderate	Major	Catastrophic
Improbable	Low	Low	Low	Medium	Medium
Unlikely	Low	Low	Medium	Medium	High
Possible	Low	Medium	Medium	High	High
Likely	Medium	Medium	High	High	Very High
Imminent	Medium	High	High	Very High	Very High

Operational Risk Monitoring



- Consolidates risks into a single dashboard providing global transparency and accountability.
- Allows management to see and act on risk "alerts"
- Enables central functions to consider a group wide risk position.

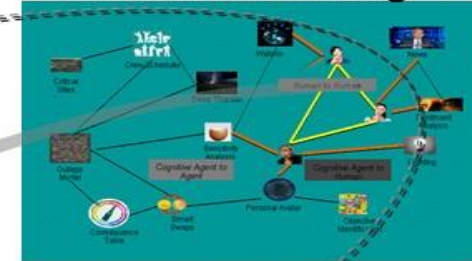
Operational Risk Analytics

EC-RAT Potential Consequence Level	Level I	Level II	Level III	Level IV
Count	0	8	1	1
Rate %	0.000	0.000	0.000	0.000
Column %	0.000	0.000	0.000	0.000
Count	15	134	52	21
Rate %	6.757	60.360	23.423	9.459
Column %	13.889	71.277	2.374	0.341
Count	8	41	1412	373
Rate %	0.436	2.236	76.990	20.338
Column %	7.407	21.809	84.475	6.260
Count	17	13	73	576
Rate %	0.281	0.200	11.033	88.506
Column %	15.741	6.915	32.785	93.582

Cells contain: cross-tabulation of fields (including missing values)  
Chi-square = 11.931542, df = 3, probability = 0

- Applies analytics to operational processes and activities
- Incorporates silos of information to develop a better understanding of cause and effect relationships that create risk
- Allows management to proactively align operational policies and activities to reduce risk

Operational Risk Decision Making



- Provides rapid access to relevant, contextually correct, and actionable operational information
- Incorporates all data forms from internal and external data and information sources
- Allows management and operational personnel to make more informed decisions that reduce risk to maximize production

# Risk Analysis

## ANALYSIS

[Add](#) [Manage](#)

	Inherent			Residual			
Risk Criteria	Likelihood	Impact	Risk Rating	Likelihood	Impact	Risk Rating	Treated Rating
	<input type="text" value="Almost Certain (5.00)"/>	<input type="text" value="Major (4.00)"/>	20	<input type="text" value="Possible (3.00)"/>	<input type="text" value="Minor (2.00)"/>	6	20
Environmental	<input type="text" value="Likely (4.00)"/>	<input type="text" value="Major (4.00)"/>	16	<input type="text" value="Possible (3.00)"/>	<input type="text" value="Moderate (3.00)"/>	9	16
Financial	<input type="text" value="Likely (4.00)"/>	<input type="text" value="Moderate (3.00)"/>	12	<input type="text" value="Unlikely (2.00)"/>	<input type="text" value="Insignificant (1.00)"/>	2	12
Legal	<input type="text" value="Almost Certain (5.00)"/>	<input type="text" value="Major (4.00)"/>	20	<input type="text" value="Possible (3.00)"/>	<input type="text" value="Minor (2.00)"/>	6	20
Reputation	<input type="text" value="Almost Certain (5.00)"/>	<input type="text" value="Major (4.00)"/>	20	<input type="text" value="Possible (3.00)"/>	<input type="text" value="Minor (2.00)"/>	6	20

# Global Risk Heat Map

Likelihood	Impacts				
	Catastrophic (5.00)	Major (4.00)	Moderate (3.00)	Minor (2.00)	Insignificant (1.00)
Almost Certain (5.00)	Extreme 4.00	Extreme 4.00	Extreme 4.00	High 3.00	High 3.00
Likely (4.00)	Extreme 4.00	Extreme 4.00	High 3.00	High 3.00	Moderate 2.00
Possible (3.00)	Extreme 4.00	Extreme 4.00	High 3.00	Moderate 2.00	Low 1.00
Unlikely (2.00)	Extreme 4.00	High 3.00	Moderate 2.00	Low 1.00	Low 1.00
Rare (1.00)	High 3.00	High 3.00	Moderate 2.00	Low 1.00	Low 1.00

# Surveys and Inspections

## EHS AUDIT

Print

### AISLES/EXITS/EGRESS

Question Bank : AISLES/EXITS/EGRESS

1. Minimum width of any aisle leading to an exit is at least 44 inches wide.

- Yes
- No
- N/A

2. Are exits marked, free of debris and readily accessible at all times?

- Yes
- No
- N/A

3. Is emergency lighting operating? (Test by using test button if you can do so from the ground or floor.)

- Yes
- No
- N/A



# Assessment Summary and Action Needed

The screenshot displays the Predict360 software interface. The main window is titled 'ANALYZE SURVEY' and has tabs for 'Summary' and 'Individuals'. The 'Summary' tab is active, showing an 'EHS Audit' section with various risk categories and their status. A modal window titled 'Take Action' is overlaid on the main window, showing a table of tasks. A red arrow points from the 'Take Action' button in the modal to the 'Take Action' button in the main window.

**Predict360**

**ANALYZE SURVEY**

Summary Individuals

EHS Audit

**AISLES/EXITS/EGRESS**

- + Recommended Risk Threshold: **Low (3.00)**  
Flag risk at or above: **3.0** (Recorded Risk: **2.29**)

**COMPRESSED GAS CYLINDERS**

- + Recommended Risk Threshold: **Low (3.00)**  
Flag risk at or above: **3.0** (Recorded Risk: **2.4**)

**EMERGENCY, HEALTH, AND SAFETY INFORMATION**

- + Recommended Risk Threshold: **Low (3.00)**  
Flag risk at or above: **3.0** (Recorded Risk: **2.0**)

**FIRE EMERGENCY**

- + Recommended Risk Threshold: **Low (3.00)**  
Flag risk at or above: **3.0** (Recorded Risk: **3.0**)

**FIRE PREVENTION**

- + Recommended Risk Threshold: **Low (3.00)**  
Flag risk at or above: **3.0** (Recorded Risk: **3.0**)

**Take Action**

Cases CAPA Tasks Training Plans Experts Risks

Create Task Link

Key	Summary	Created	Updated
[SMS-37]	Check Aisles for NonCompliance	08/07/2014	08/07/2014

Close

Take Action

Take Action

Take Action

Take Action

Take Action

# Key Features

---

## Risk Taxonomies and Risk Register

- A single repository using standard taxonomies for risks and controls
- Risk register with standard and customizable risk criteria and rating scales for inherent and residual risks
- Standard risk events and risk library
- Assign risks to business units and responsible persons
- Standard control type and control libraries
- Associate one or many controls to risks and identify the control efficacy for evaluation of which controls are most effective to implement
- View risk and control data in configurable reports and dashboards

## Risk Surveys and Inspections

- Frameworks, questions and questions banks to be used to create risk survey and inspections
- Survey and inspection scoring including risk weightings and risk threshold criteria
- Create, publish, and assign to one or many users or groups risk surveys and inspections
- Send email notifications with links to the survey enabling users to log in and complete surveys and inspections
- Track survey and inspection progress and analyze the results against risk scoring and threshold criteria
- Take action if a risk survey or inspection exceeds threshold criteria
- View survey and inspection data in configurable reports and dashboards