

Drive Enterprise Value

Enabled by SAP Governance Risk & Compliance solns

Murali Narayanamurthy



Manage Enterprise Risk and Compliance

Access Risk Management



Manage access risk and prevent fraud

- SAP GRC Access Control
- SAP GRC Access Approver - mobile application

Controls & Compliance Monitoring



Ensure effective controls and ongoing compliance

SAP GRC Process Control
SAP GRC Policy Survey - mobile application

Enterprise Risk Management



Preserve and grow value

SAP GRC Risk Management

Planning and performing Audits



Drive a unified audit management function

SAP GRC Audit Management

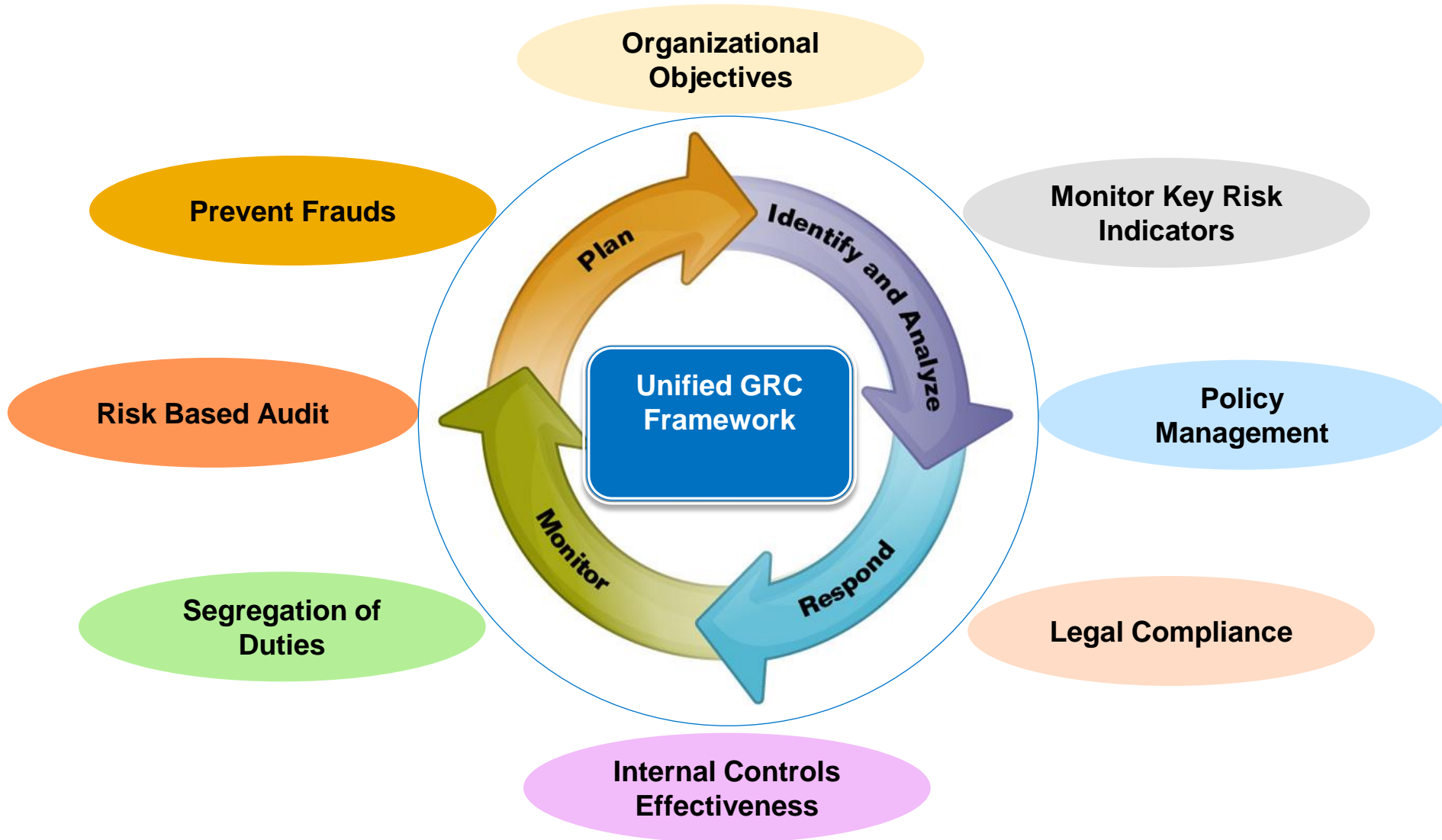
Fraud detection and investigation



Prevent, detect, investigate, and monitor fraud patterns and predictions

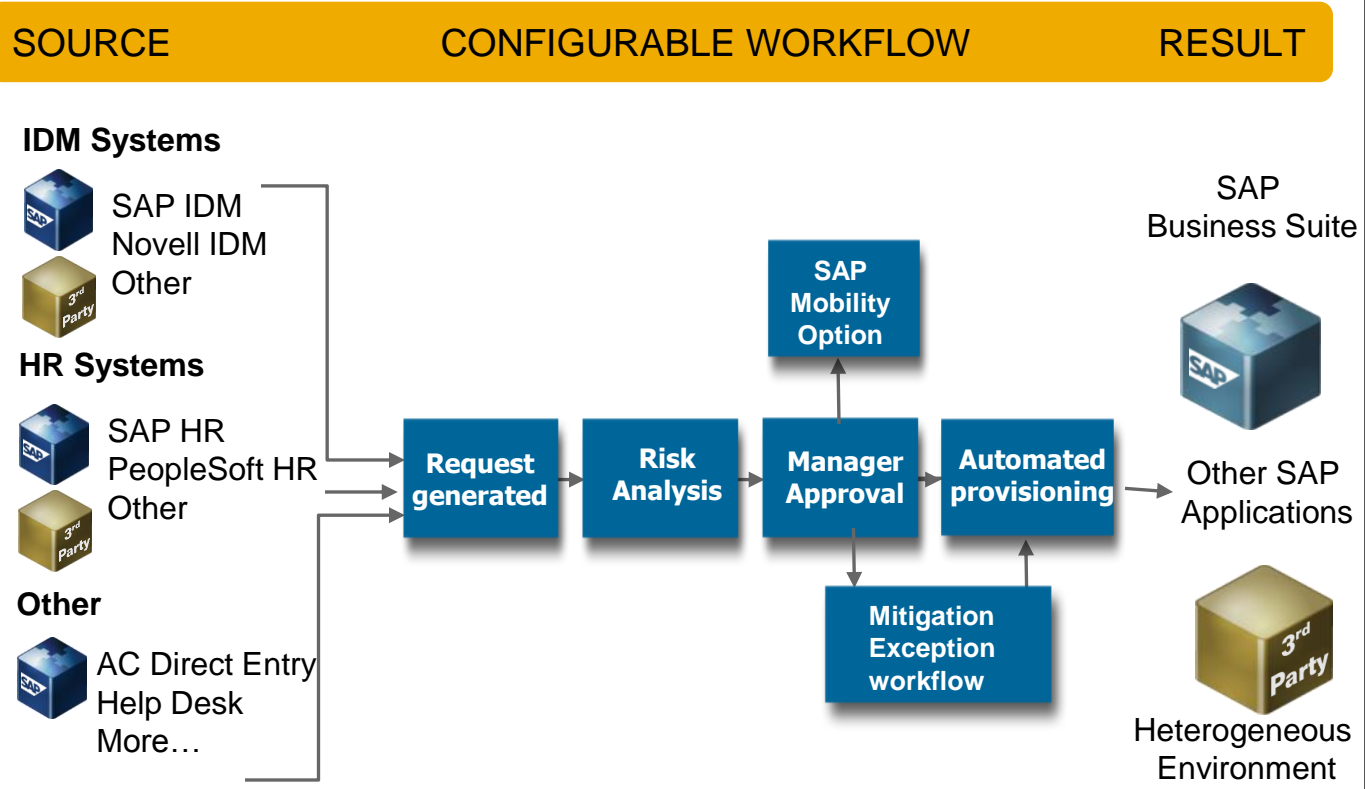
SAP GRC Fraud Management

SAP's Approach: Unified Governance Risk & Compliance



Streamlined User Access Management

Standardizes on SAP Business workflow technology, supports more flexible and tailored access request and approver views, simplifying the provisioning process



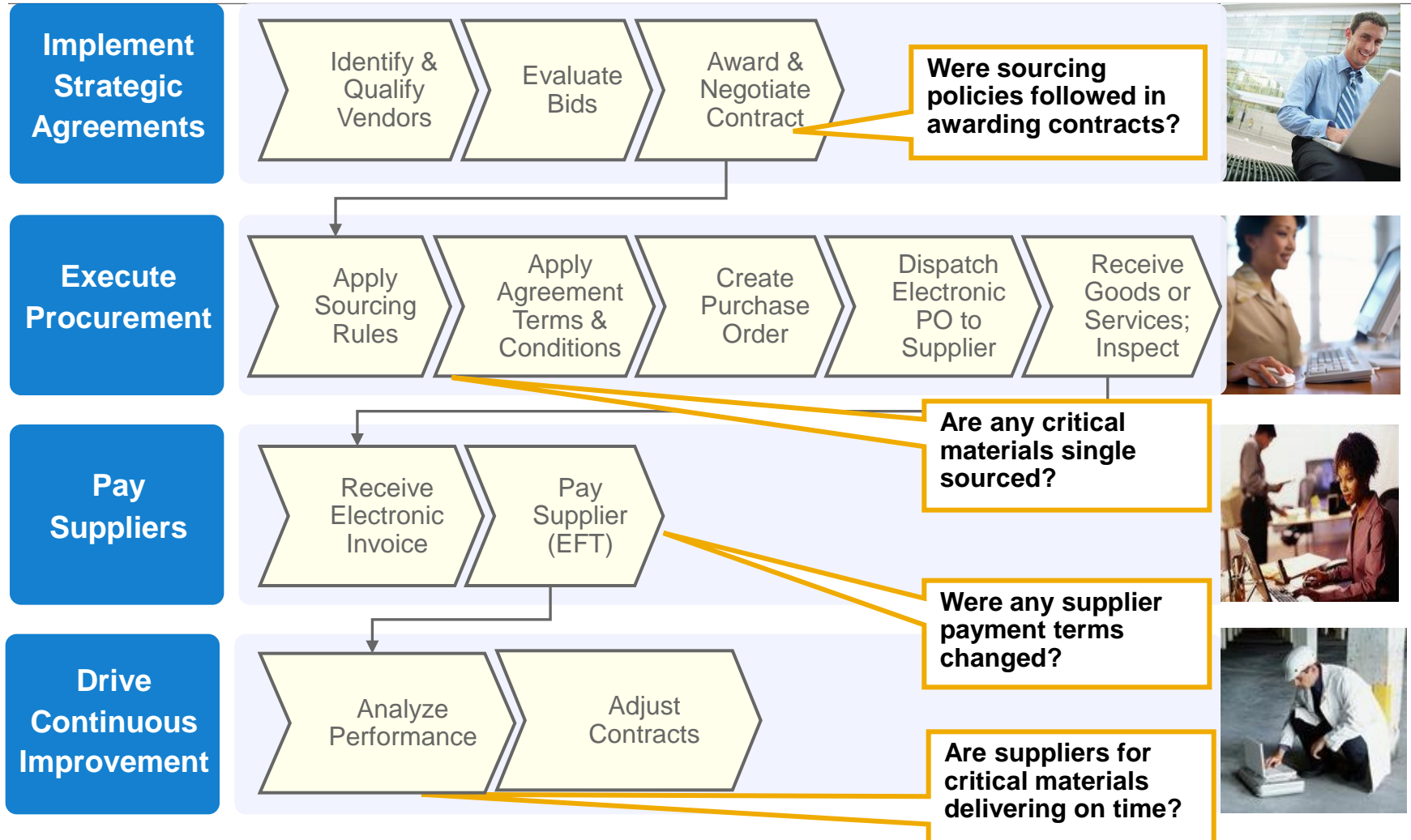
Key Benefits

Business workflow **reduces manual tasks** and streamlines access request processing

Leverage existing resources for workflow administration and configuration

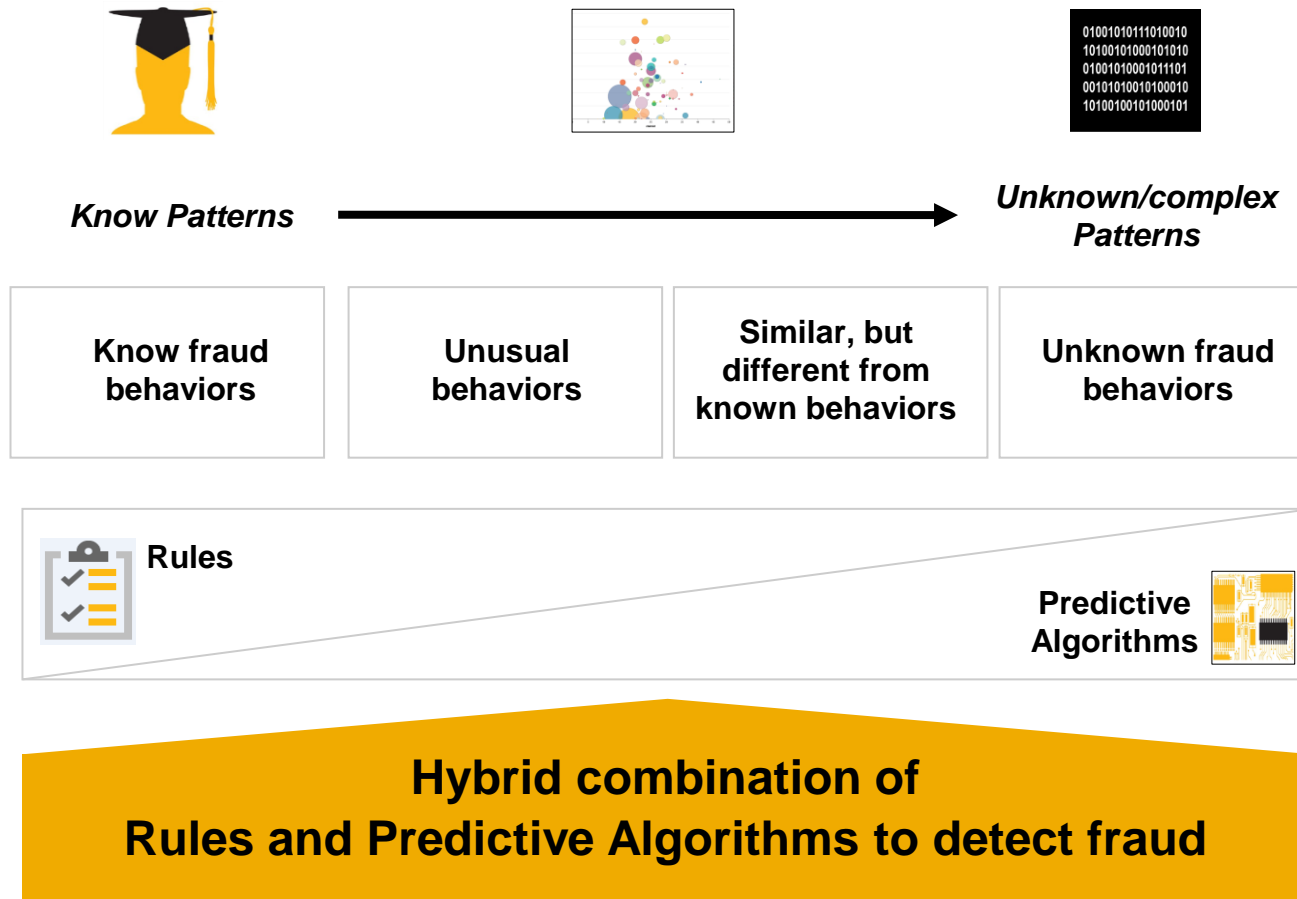
Faster and easier for users to request the roles they need.

Business Control Monitoring: Supplier Relationship Management Process



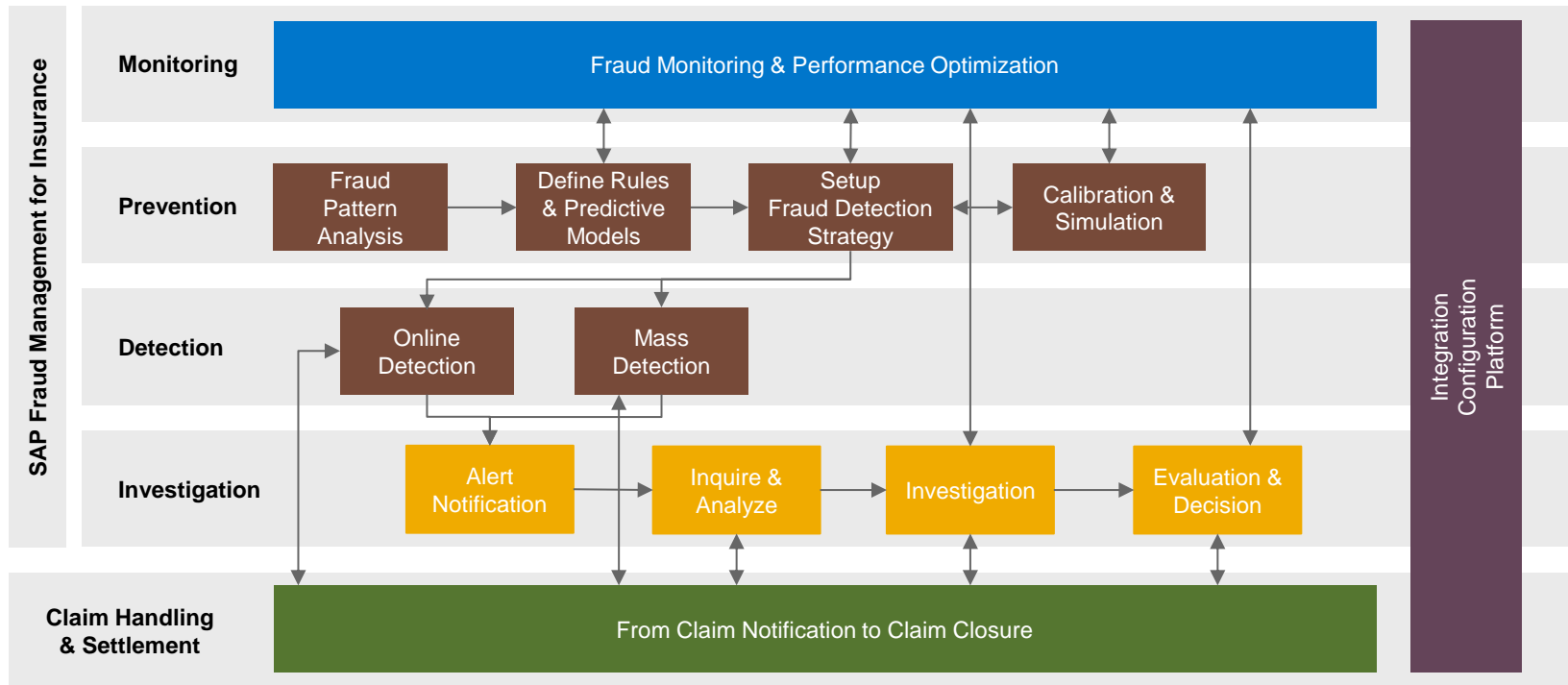
Combining the power of different approaches

SAP Fraud Management covers the full spectrum of fraud detection



Fraud Management

A Closed-loop, Cross-Functional Process



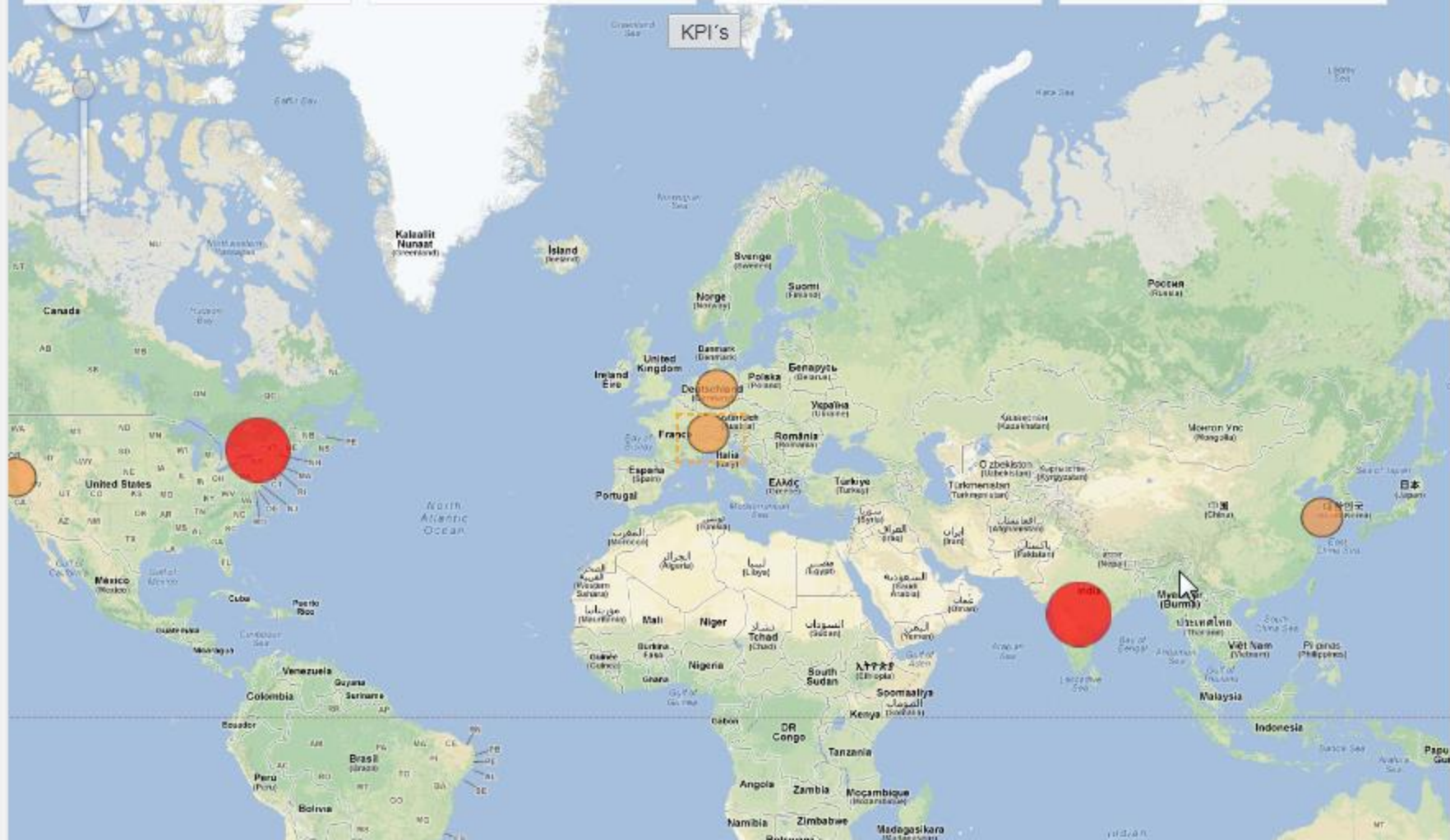
EXECUTIVE INSIGHT

27
Open Alerts

\$1,894,780
Total Value

43.5%
Accuracy

3 days
Avg. Close Time



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ALERT SUMMARY



3

My New Alerts



33

My Open Alerts



1

My Closed Alerts



0

My Transferred Alerts

My Alerts

SEARCH

David*



1 2 3 4 5 > >>

**Alert: 90510**

In Process | Responsible: David Smith |
From: 2012-12-28
Vendor: 278

**Alert: 90511**

In Process | Responsible: David Smith |
From: 2012-12-28
Vendor: 24

**Alert: 90512**

In Process | Responsible: David Smith |
From: 2012-12-28
Vendor: 1779

**Alert: 90522**

In Process | Responsible: David Smith |
From: 2012-12-28
Vendor: 1560

**Alert: 90524**

MY RECENT OBJECTS



< 1 2 3 >

**Alert: 90527**

In Process | Responsible: David
Smith | From: 28.12.2012
Vendor: 1336 | Date: 01.01.2012

**Alert: 90526**

In Process | Responsible: David
Smith | From: 28.12.2012
Vendor: 1379 | Date: 01.01.2012

**Alert: 90855**

Completed | Responsible: David
Smith | From: 03.01.2013
Vendor: WQWQ

**Alert: 90562**

In Process | From: 28.12.2012
Vendor: 383 | Date: 01.01.2012

**Alert: 90564**

In Process | From: 28.12.2012
Vendor: 363 | Date: 01.01.2012

SAP JAM



Update Your Status



Torsten Zube added: Alert
33025 (Text)

Source: New Fraud Pattern? -
Sep 11, 2012 7:35 AM -
Unmark Important - Bookmark

1 person thinks this is important



Torsten Zube edited: Alert
33025 (Text)

Changed text to
"https://ldcifra.wdf.sap.corp:44315/sap/bc/ui5_ui5/sap/fra_shell/index.html?sap-ui-appcache=false&sap-client=100&sap-language=FN#Alerts

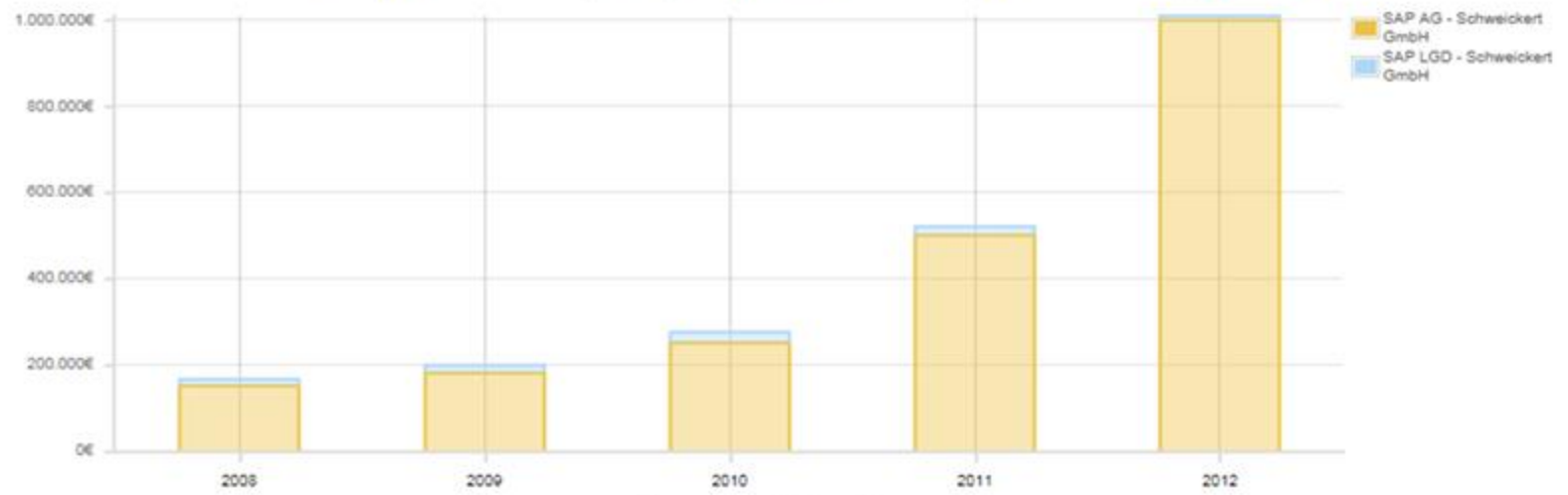
Alerts (48)

Assign Show: **My Open Alerts**

Rating	Type	Alert	Investigation Reason	Due Date	Inv. Object Type	Inv...	Alert Status	Person Responsi...
▲▲▲△△	🛡️	90527	Conflict of Interest	02.01.2013	Vendor	1336	In Process	David Smith
▲▲▲▲▲	🛡️	90526	Conflict of Interest	03.01.2013	Vendor	1379	In Process	David Smith
▲▲▲△△	🛡️	90525	Conflict of Interest	02.01.2013	Vendor	1457	In Process	David Smith
▲▲▲△△	🛡️	90523	Conflict of Interest	03.01.2013	Vendor	1559	In Process	David Smith
▲▲▲△△	🛡️	90521	Conflict of Interest	03.01.2013	Vendor	1567	In Process	David Smith
▲▲▲△△	🛡️	90520	Conflict of Interest	03.01.2013	Vendor	1569	In Process	David Smith
▲▲▲△△	🛡️	90519	Conflict of Interest	04.01.2013	Vendor	1685	In Process	David Smith
▲▲▲△△	🛡️	90518	Conflict of Interest	04.01.2013	Vendor	1688	In Process	David Smith
▲▲▲△△	🛡️	90517	Conflict of Interest	04.01.2013	Vendor	1731	In Process	David Smith
▲▲▲△△	🛡️	90516	Conflict of Interest	04.01.2013	Vendor	174	In Process	David Smith
▲▲▲△△	🛡️	90515	Conflict of Interest	04.01.2013	Vendor	1744	In Process	David Smith
▲▲▲△△	🛡️	90514	Conflict of Interest	05.01.2013	Vendor	1768	In Process	David Smith
▲▲▲△△	🛡️	90513	Conflict of Interest	05.01.2013	Vendor	1776	In Process	David Smith
▲▲▲△△	🛡️	90565	Conflict of Interest	02.01.2013	Vendor	314	In Process	David Smith
▲▲▲△△	🛡️	90564	Conflict of Interest	02.01.2013	Vendor	363	In Process	David Smith
▲▲▲△△	🛡️	90563	Conflict of Interest	03.01.2013	Vendor	366	In Process	David Smith
▲▲▲△△	🛡️	90562	Conflict of Interest	03.01.2013	Vendor	383	In Process	David Smith
▲▲▲△△	🛡️	90561	Conflict of Interest	04.01.2013	Vendor	393	In Process	David Smith
▲▲▲△△	🛡️	90560	Conflict of Interest	04.01.2013	Vendor	433	In Process	David Smith

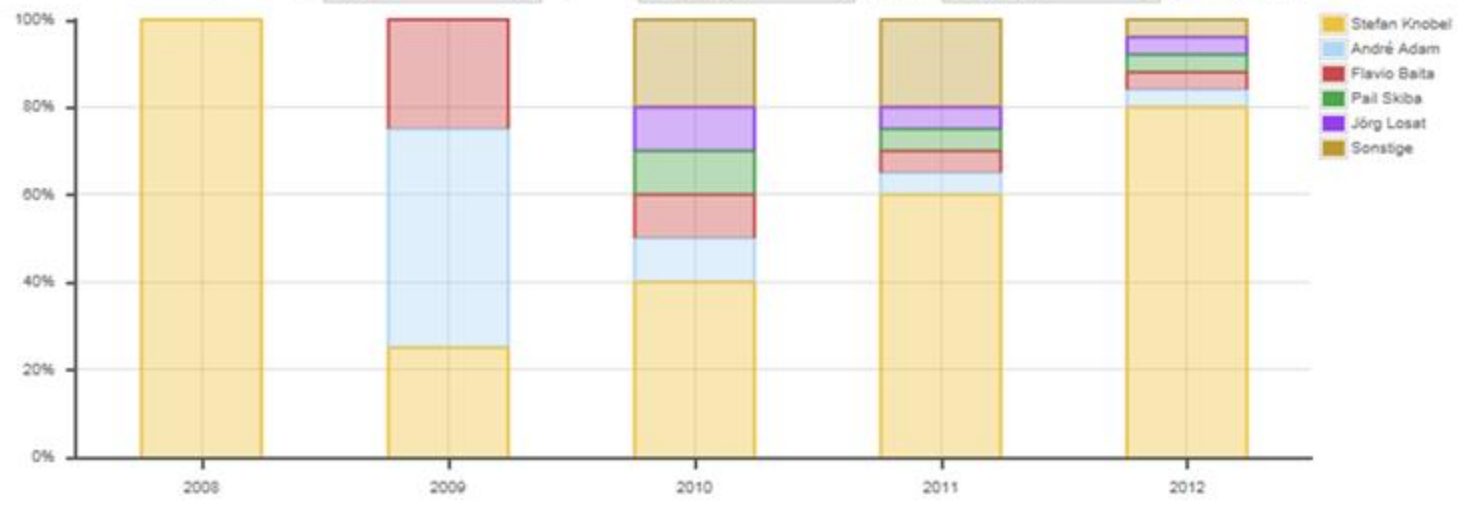
Vendor Growing Rate

Group Currency: Euro | Period: All Company Codes | Period: Fiscal year | Show tooltip



Approver Structure

Group Currency: Euro | Approver: All Approver | Period: Fiscal year | Show tooltip



ALERT



Vendor 1379



Set in Process

Reopen



GENERAL INFORMATION

Person Responsible: David Smith

Fraud Division: EMEA

Alert: 90526

Investigation Reason: Conflict of Interest

Due Date: 03.01.2013 10:34:47

Status: In Process

Transfer Status: Not Transferred

VENDOR INFORMATION

Date: 01.01.2012

RISK ASSESSMENT

Risk Rating: ▲▲▲▲▲

DETECTION VENDOR TIMELINE DECISION

Alert Items (1)

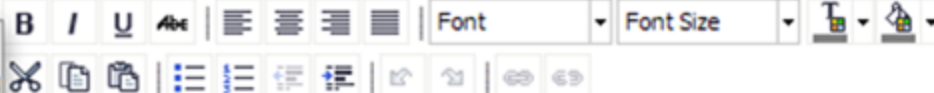
Detection Object	Lifecycle Status	Reason for Cl...	Finding	Financial Outc...
Vendor - 1379	In Process			0,00 EUR

Vendor - 1379

Summary *

Send Standard Letter

Transfer to GRC Process Control



Investigation proved fraudulent activities according to vendor 1379; further internal measures are initiated; governance department to be informed in order to consider corrective measures as proposed in timeline entry [90526/00034](#).

Reason: * Fraud proven by Internal Investigation

Finding: * Proven Fraud

Fin. Outcome: 15.000 EUR

Save

Cancel

USER FRIENDLY INTERFACE TO HELP MATURE ALGORITHMS

9
Open Alerts

\$1,894,780
Total Value

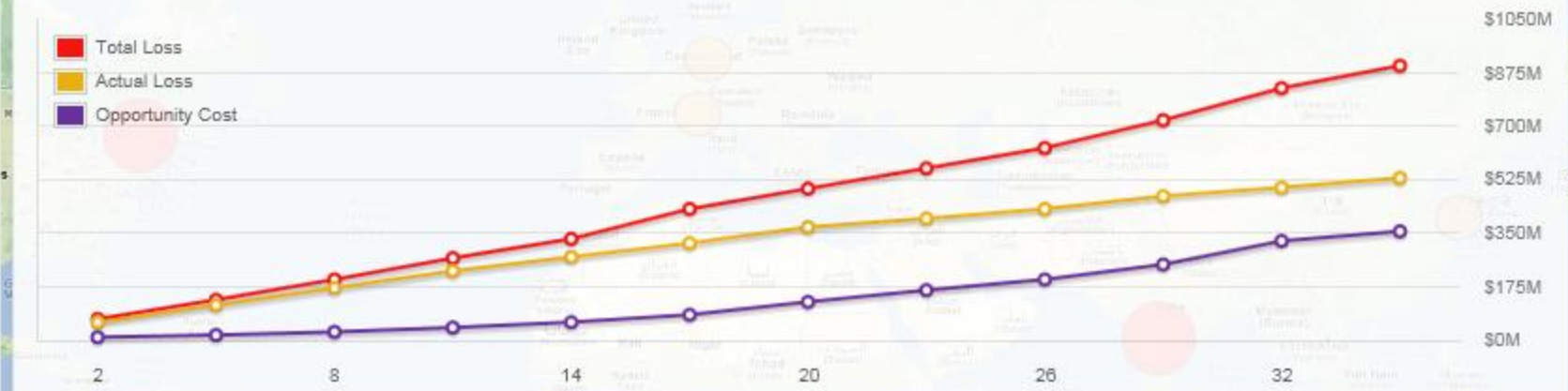
43.5%
Accuracy

3 days
Avg. Close Time

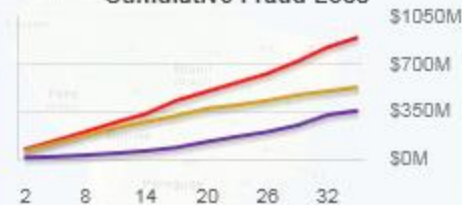


Cumulative Fraud Loss

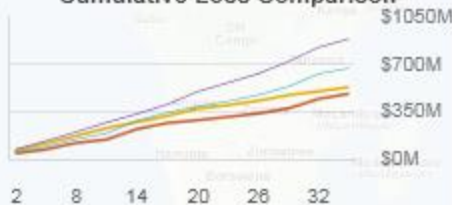
- Total Loss
- Actual Loss
- Opportunity Cost



Cumulative Fraud Loss



Cumulative Loss Comparison



Accuracy Trend



9

Open Alerts

\$1,894,780

Total Value

43.5%

Accuracy

3 days

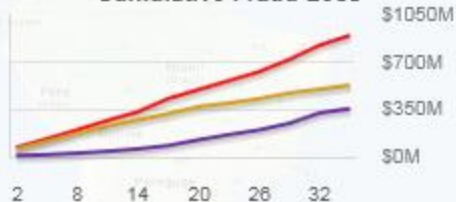
Avg. Close Time



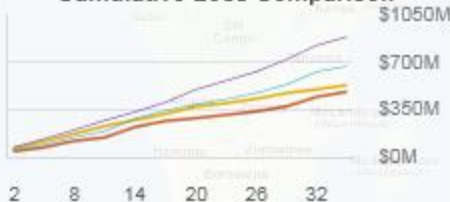
Accuracy Trend



Cumulative Fraud Loss



Cumulative Loss Comparison



Accuracy Trend



Calibration Settings for Strategy "CONFLICT OF INTEREST"

Start Date

End Date

Reference Strategy

Comparison



Simulation Tuning

Threshold

Was: 99

Detection Methods

Turnover of first year exceeds threshold

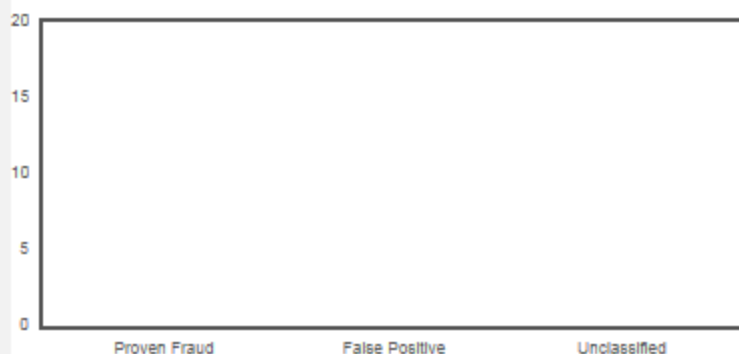
Was: 100

Parameters

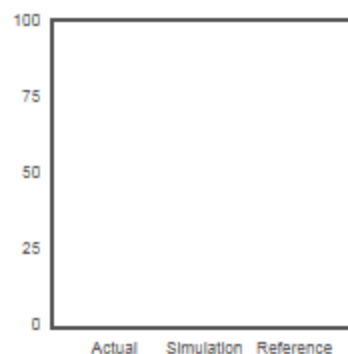
Growth between 1st and 2nd year exceeds threshold

Was: 100

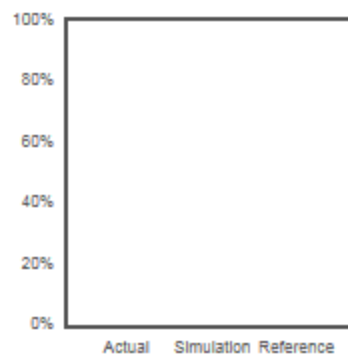
Number of Alert Items



Composition



Efficiency



	Actual		Simulation		Reference	
	Alert Items	%	Alert Items	%	Alert Items	%
Proven Fraud	0	0%	0	0%	0	0%
False Positive	0	0%	0	0%	0	0%
Unclassified	0	0%	0	0%	0	0%
New Alert Items	---	---	0	0%	---	---
Total	0		0		0	
Efficiency		0%		0%		0%



Comparison



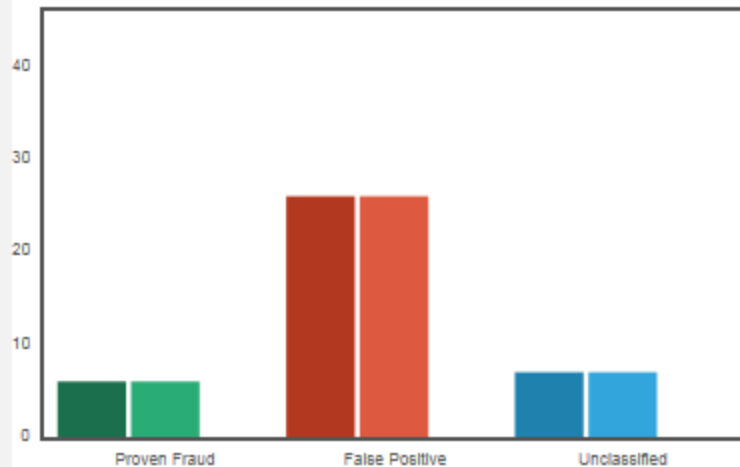
Simulation Tuning

Number of Processed Records: 288

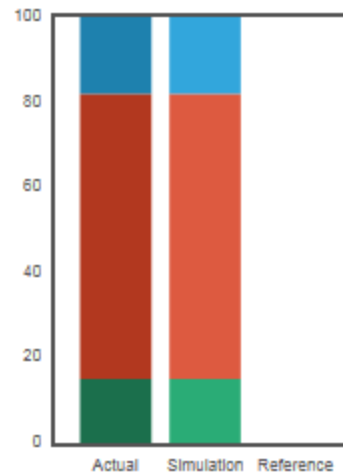
Start Simulation

Save

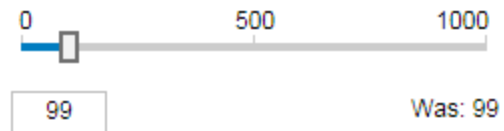
Number of Alert Items



Composition

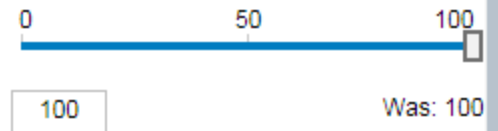


Threshold



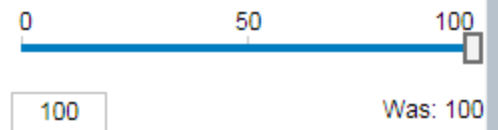
Detection Methods

Turnover of first year exceeds threshold



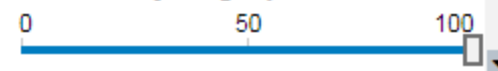
Parameters

Growth between 1st and 2nd year exceeds threshold



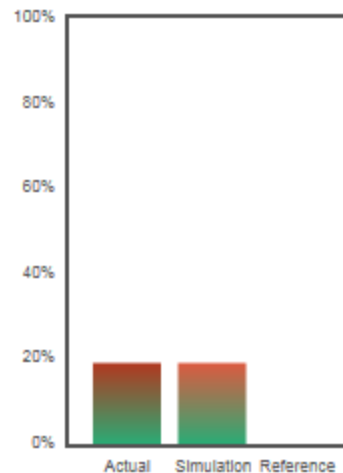
Parameters

Percentage of turnover approved by single person



	Actual		Simulation		Reference	
	Alert Items	%	Alert Items	%	Alert Items	%
Proven Fraud	6	15%	6	15%	0	0%
False Positive	26	67%	26	67%	0	0%
Unclassified	7	18%	7	18%	0	0%
New Alert Items	---	---	0	0%	---	---
Total	39		39		0	
Efficiency		19%		19%		0%

Efficiency



Comparison



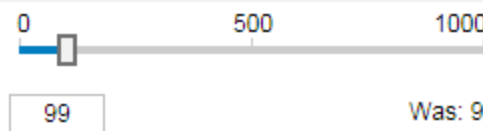
Simulation Tuning

Number of Processed Records: 288

Start Simulation

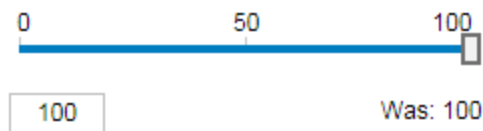
Save

Threshold



Detection Methods

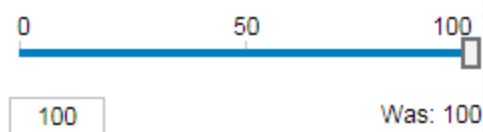
Turnover of first year exceeds threshold



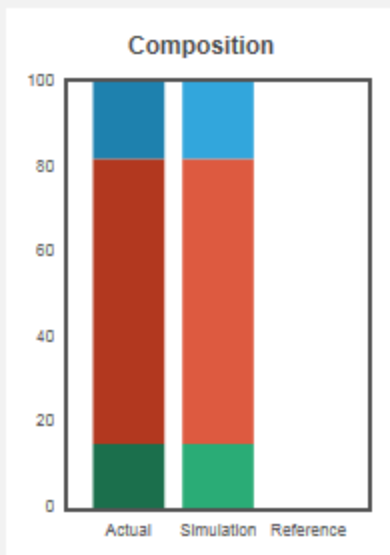
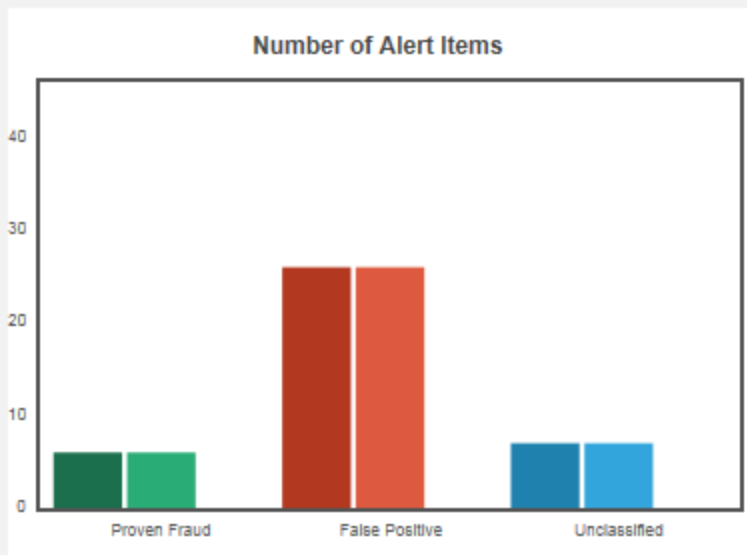
Parameters

Turnover threshold
1st year. Has to be EUR exceeded

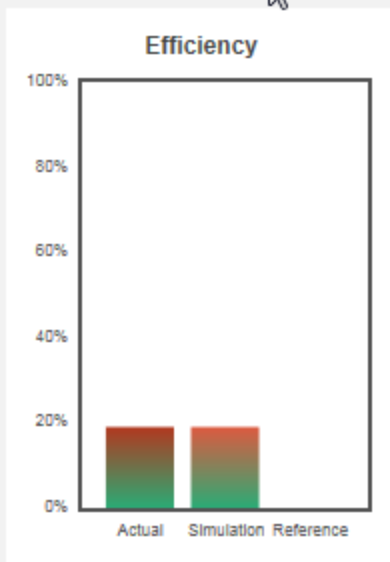
Growth between 1st and 2nd year exceeds threshold



Parameters



	Actual		Simulation		Reference	
	Alert Items	%	Alert Items	%	Alert Items	%
Proven Fraud	6	15%	6	15%	0	0%
False Positive	26	67%	26	67%	0	0%
Unclassified	7	18%	7	18%	0	0%
New Alert Items	---	---	0	0%	---	---
Total	39		39		0	
Efficiency		19%		19%		0%



Comparison



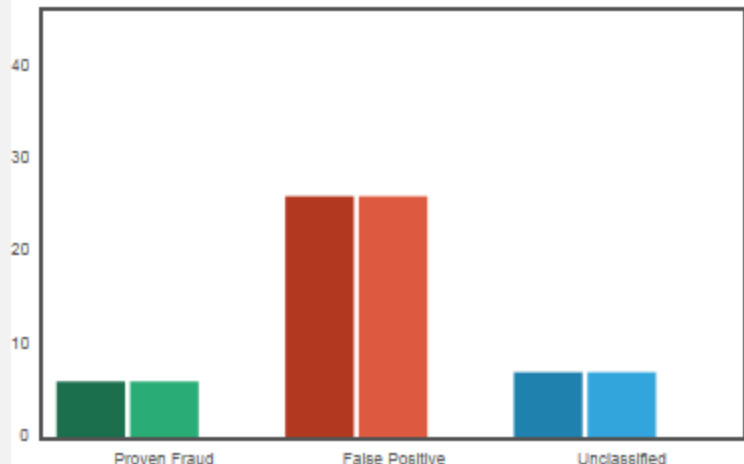
Simulation Tuning

Number of Processed Records: 288

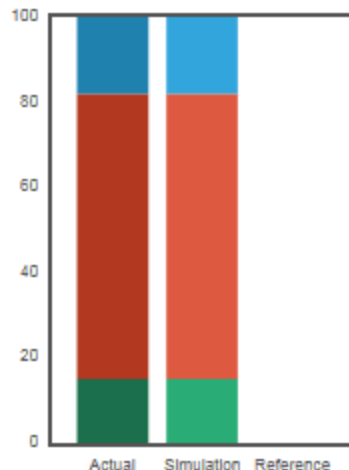
Start Simulation

Save

Number of Alert Items



Composition

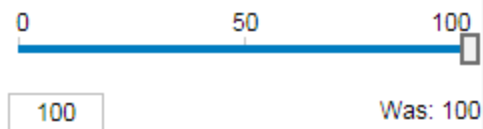


Threshold



Detection Methods

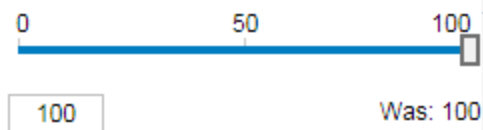
Turnover of first year exceeds threshold



Parameters

Turnover threshold
1st year. Has to be EUR
exceeded

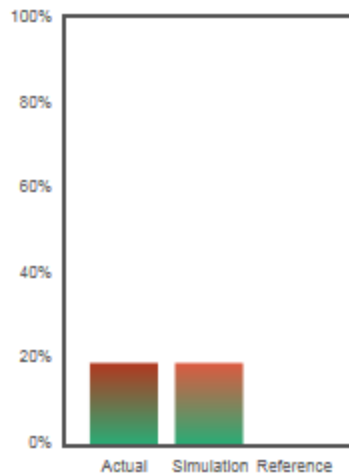
Growth between 1st and 2nd year exceeds threshold



Parameters

	Actual		Simulation		Reference	
	Alert Items	%	Alert Items	%	Alert Items	%
Proven Fraud	6	15%	6	15%	0	0%
False Positive	26	67%	26	67%	0	0%
Unclassified	7	18%	7	18%	0	0%
New Alert Items	---	---	0	0%	---	---
Total	39		39		0	
Efficiency		19%		19%		0%

Efficiency



Comparison



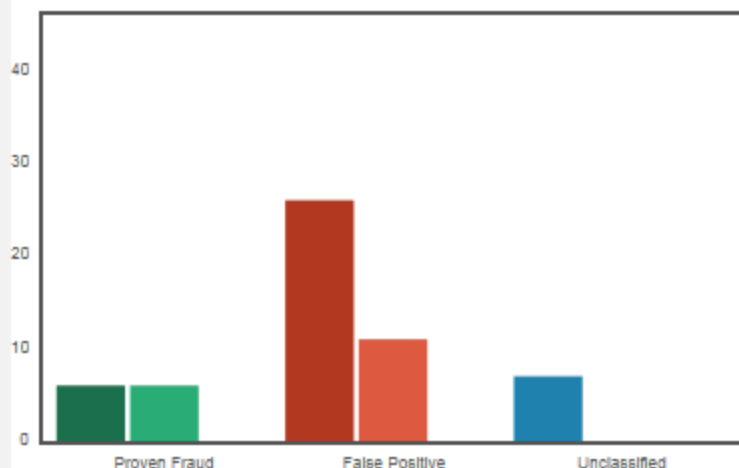
Simulation Tuning

Number of Processed Records: 288

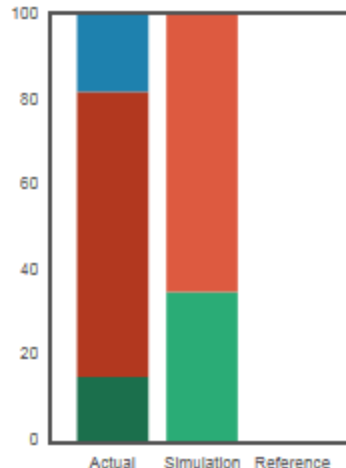
Start Simulation

Save

Number of Alert Items



Composition



Threshold



99

Was: 99

Detection Methods

Turnover of first year exceeds threshold



100

Was: 100

Parameters

Turnover threshold
1st year. Has to be exceeded EUR

Growth between 1st and 2nd year exceeds threshold



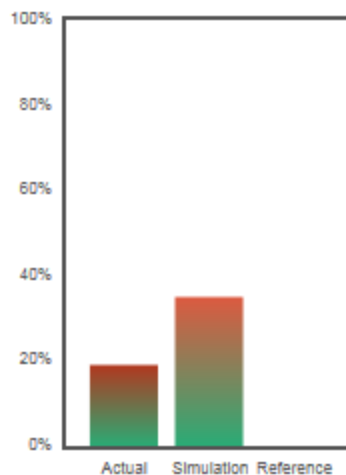
100

Was: 100

Parameters

	Actual		Simulation		Reference	
	Alert Items	%	Alert Items	%	Alert Items	%
Proven Fraud	6	15%	6	35%	0	0%
False Positive	26	67%	11	65%	0	0%
Unclassified	7	18%	0	0%	0	0%
New Alert Items	---	---	0	0%	---	---
Total	39		17		0	
Efficiency		19%		35%		0%

Efficiency



Comparison



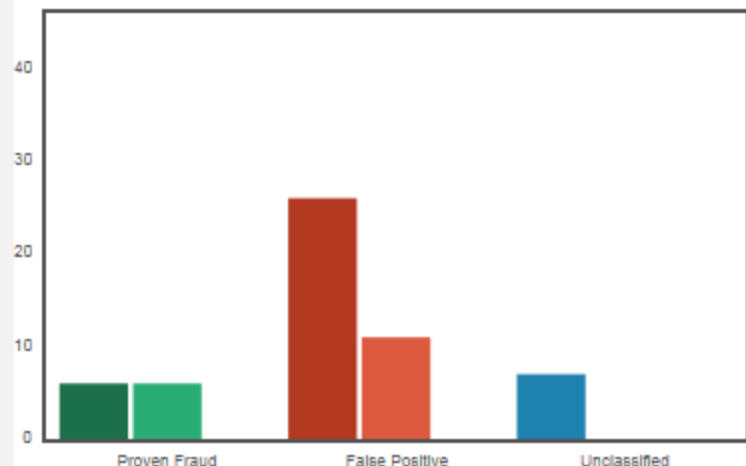
Simulation Tuning

Number of Processed Records: 288

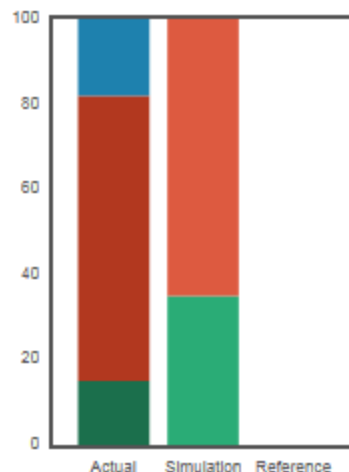
Start Simulation

Save

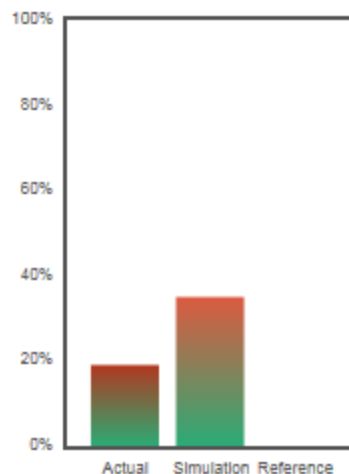
Number of Alert Items



Composition



Efficiency



	Actual		Simulation		Reference	
	Alert Items	%	Alert Items	%	Alert Items	%
Proven Fraud	6	15%	6	35%	0	0%
False Positive	26	67%	11	65%	0	0%
Unclassified	7	18%	0	0%	0	0%
New Alert Items	---	---	0	0%	---	---
Total	39		17		0	
Efficiency		19%		35%		0%

Threshold



99

Was: 99

Detection Methods

Turnover of first year exceeds threshold



100

Was: 100

Parameters

Turnover threshold
1st year. Has to be EUR exceeded

Growth between 1st and 2nd year exceeds threshold



100

Was: 100

Parameters

Calibration Settings for Strategy "CONFLICT OF INTEREST"



Comparison

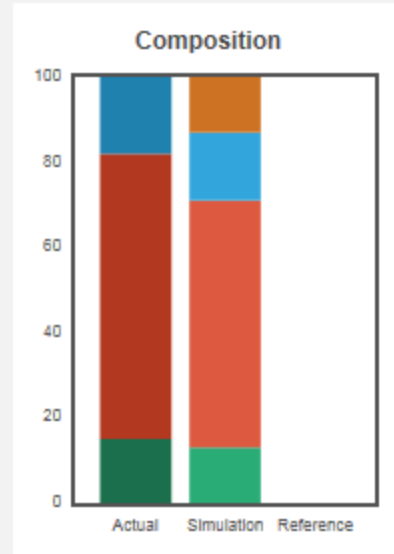
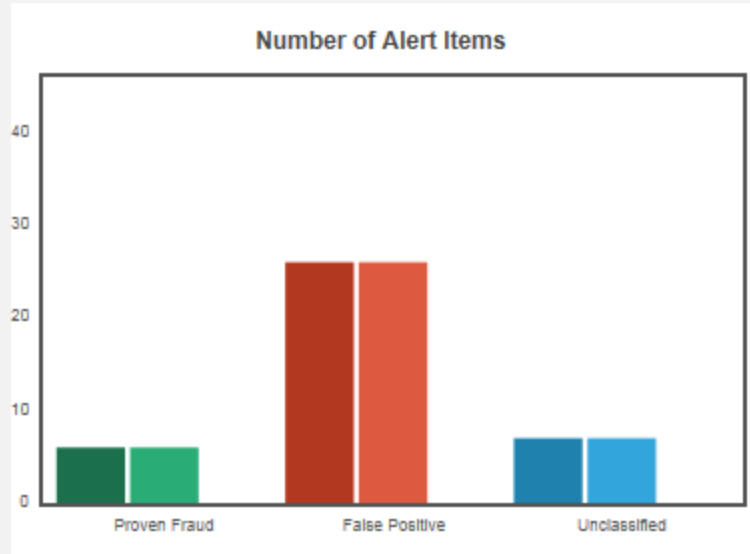


Simulation Tuning

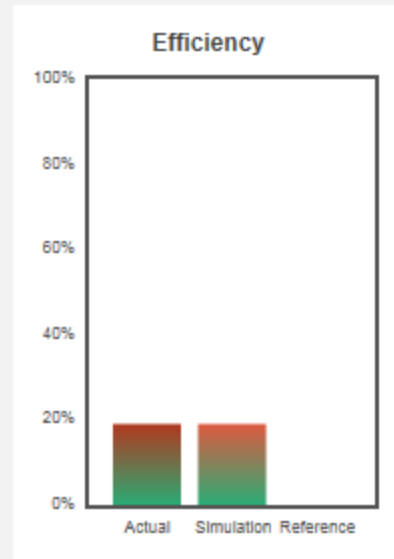
Number of Processed Records: 288

Start Simulation

Save



	Actual		Simulation		Reference	
	Alert Items	%	Alert Items	%	Alert Items	%
Proven Fraud	6	15%	6	13%	0	0%
False Positive	26	67%	26	58%	0	0%
Unclassified	7	18%	7	16%	0	0%
New Alert Items	---	---	6	13%	---	---
Total	39		45		0	
Efficiency		19%		19%		0%



Threshold



99

Was: 99

Detection Methods

Turnover of first year exceeds threshold



100

Was: 100

Parameters

Turnover threshold
1st year. Has to be exceeded

Growth between 1st and 2nd year exceeds threshold



100

Was: 100

Parameters

SAP Risk Management

Preserve and grow value

Monitor thresholds, effectiveness of risk responses, and corrective actions

Respond to risk after balancing costs and benefits

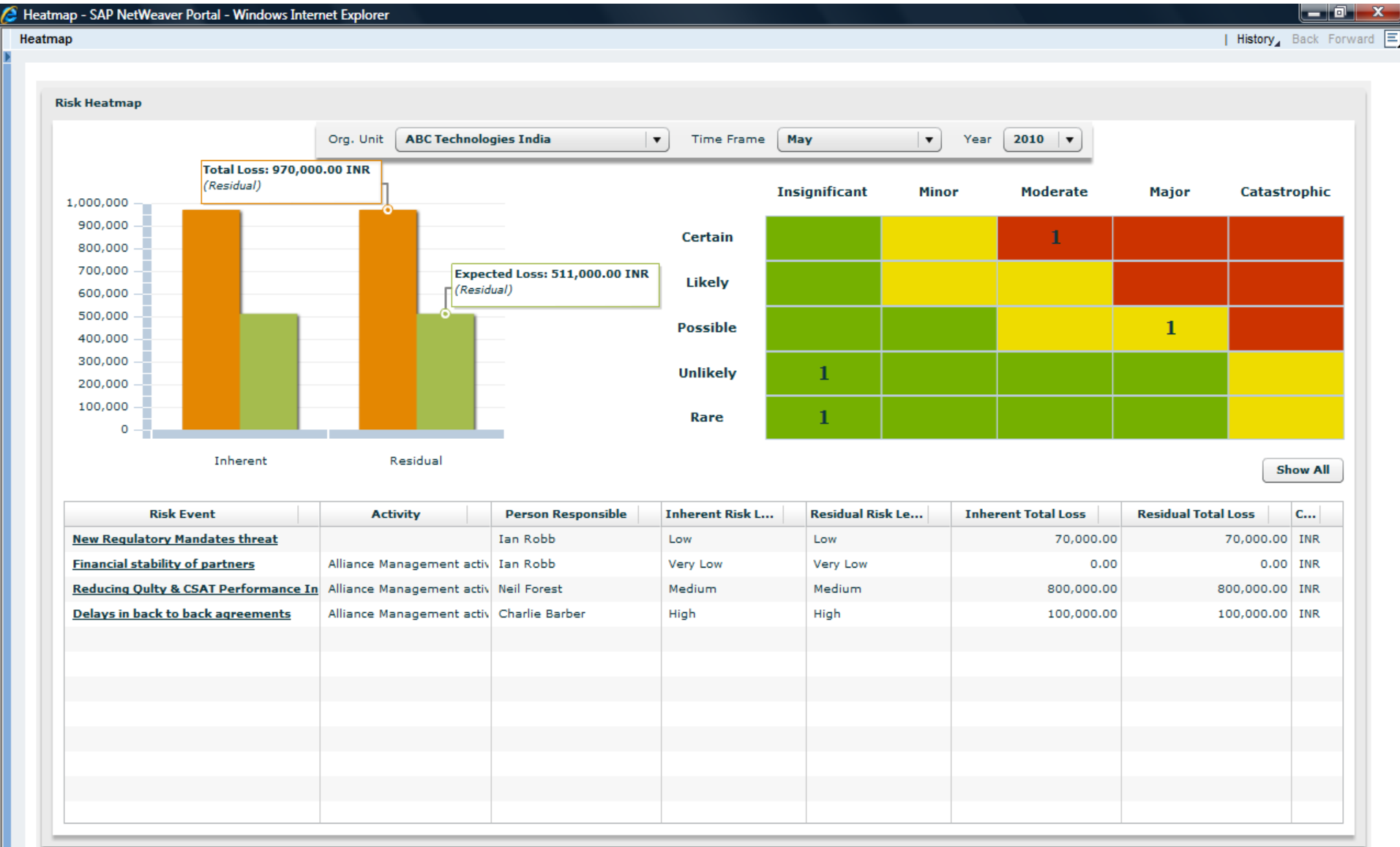


Plan risk management within the context of value to the organization

Link risks, risk drivers, risk indicators, impacts and responses

Analyze risk via scenarios, modeling, & other factors to understand exposure

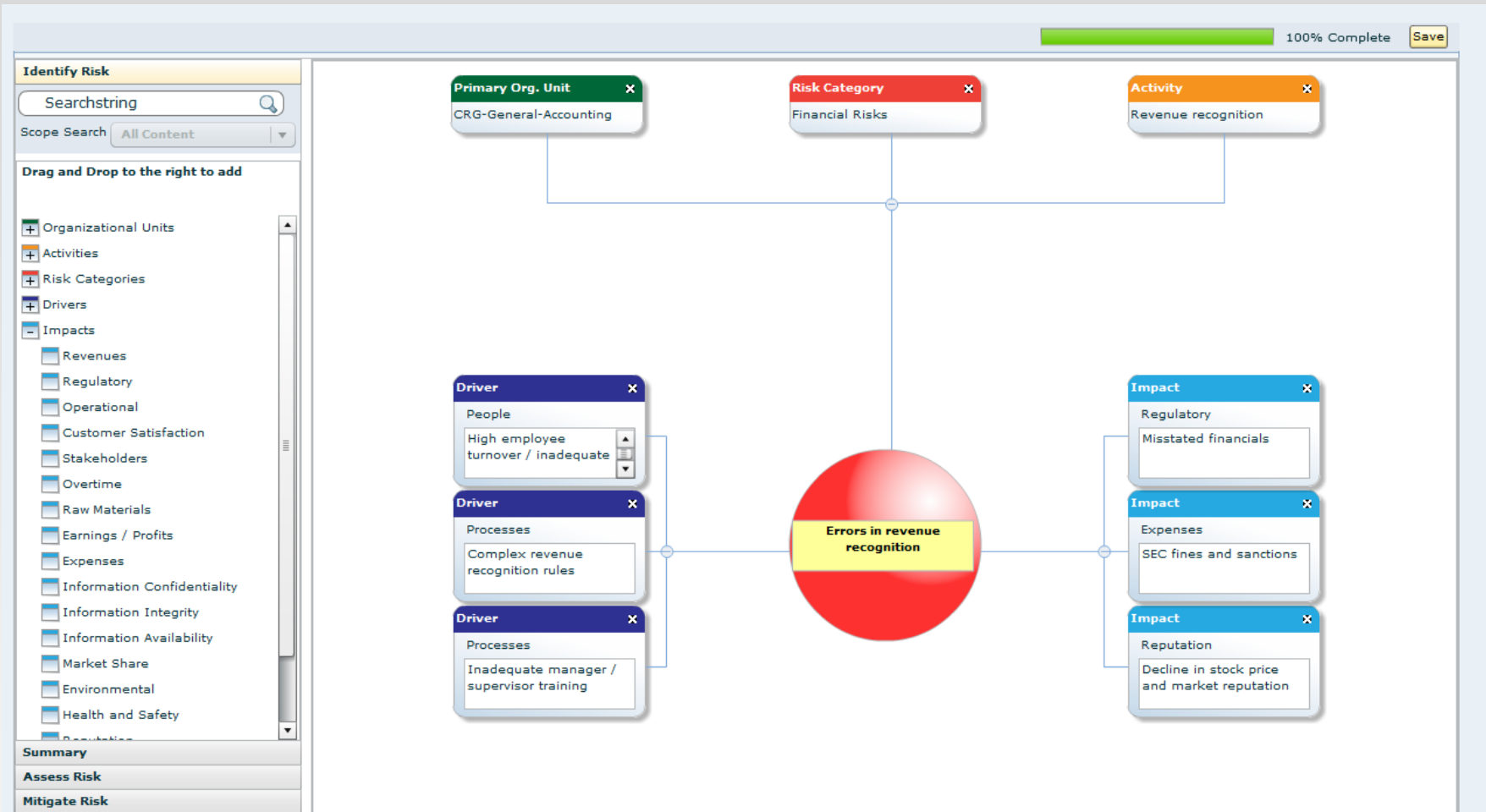
Intuitive Risk Heat maps for prioritization and action



Risk Planning (Bow-tie Builder)



Define the context within which business risks are to be managed



Risk Assessment

Business context based assessments



Identify and assess the impact of risk events on the business

100% Complete Save

Identify Risk		Risk Assessments for Errors in revenue recognition 2011 (1) Create Delete	
Summary			
Assess Risk			

JAN	FEB (1)	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC																
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28

View of Risk Assessment for Errors in revenue recognition 25/02/2011

Aggregated Risk Level and Total Loss

Risk Level High

Total Loss 7500000 USD
Risk Score 84.16667

Risk Analysis

Probability

Category	Value
Inherent	~65
Residual	~45
Residual (Planned)	~40

25/02/2011

Impact Category Distribution

Legend

Category	Value
7500000	~35%
5000000	~25%
10000000	~40%

Probability

0% 25% 50% 75% 100% %

Misstated financials

Quantitative USD

Impact USD

Inherent: 5000000 USD
Residual: 3125000 USD
Residual (Planned): 2750000 USD

SEC fines and sanctions

Quantitative USD

Impact USD

Inherent: 7500000 USD
Residual: 5950000 USD
Residual (Planned): 5600000 USD

Decline in stock price and market reputation

Quantitative USD

Impact USD

Inherent: 10000000 USD
Residual: 8175000 USD
Residual (Planned): 7900000 USD

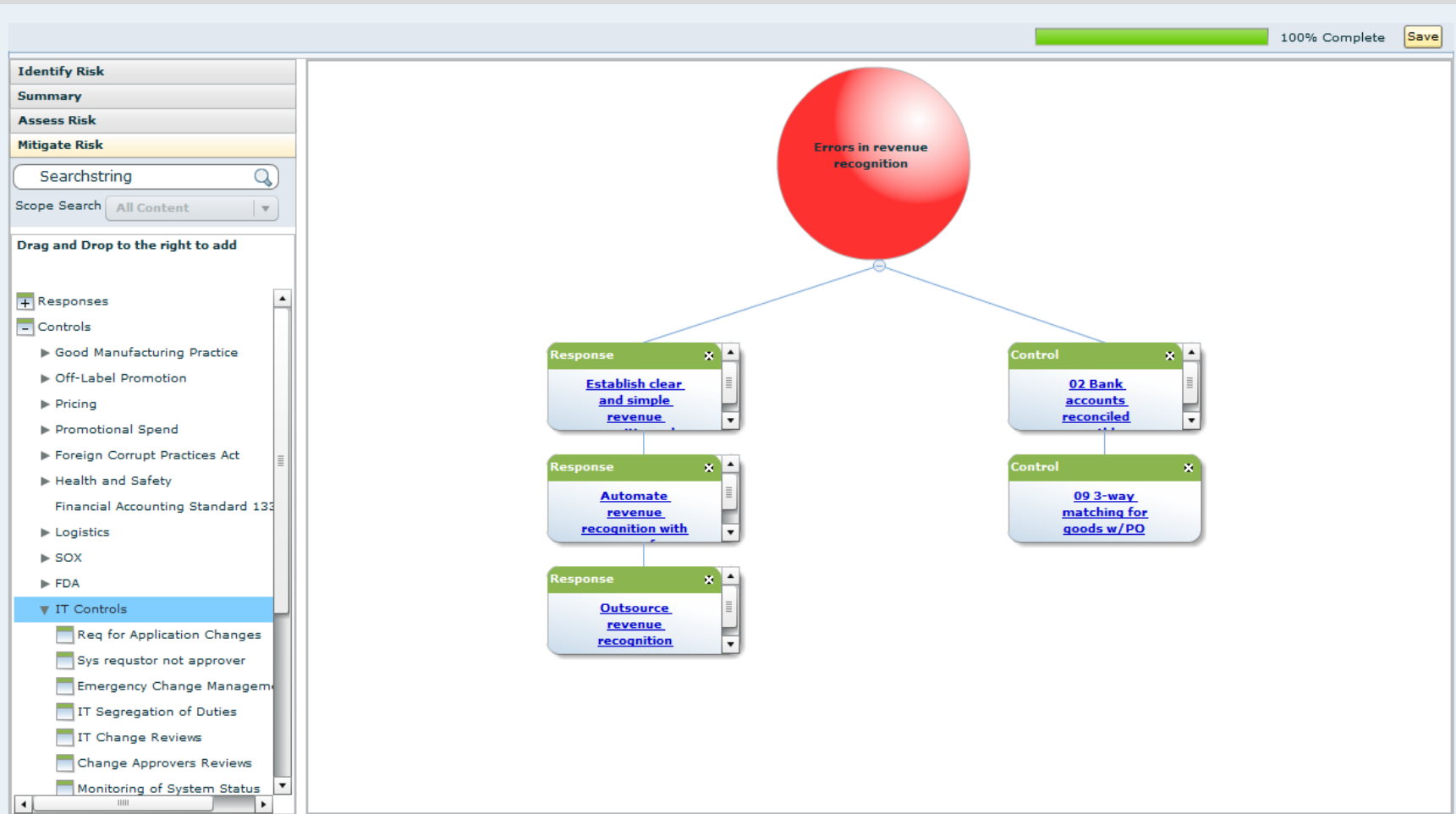
Mitigate Risk

Risk Response

Implement responses – Superior mitigation with automation



Evaluate and select the risks to be addressed and create risk responses

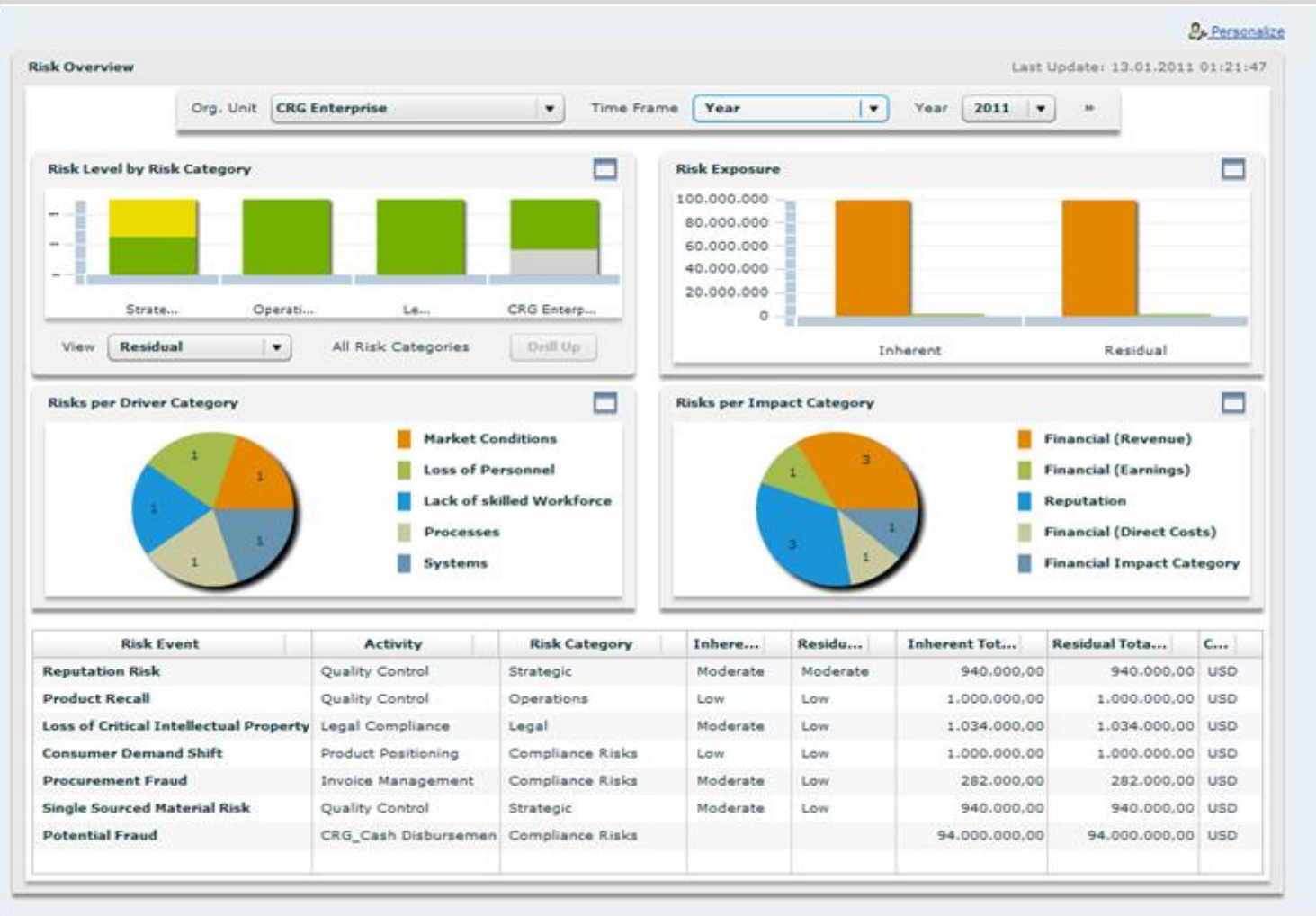


Risk Monitoring

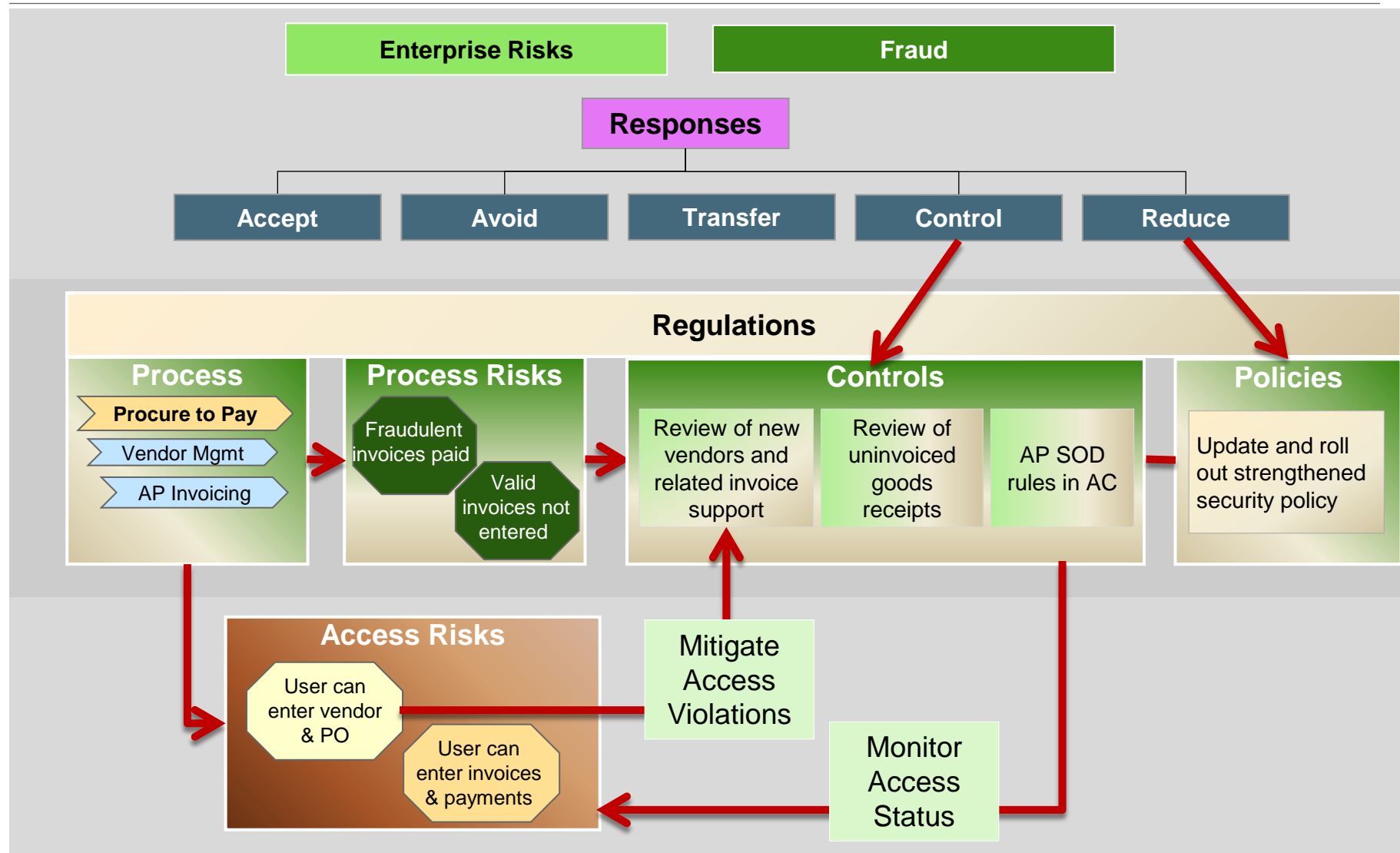
Proactive risk management and prevention



Monitor the effectiveness and completeness of the response actions



Enterprise Wide Integrated Governance Risk & Compliance Example using SAP GRC Solutions



Achieving Benefits with Enterprise Risk and Control Management





Thank You!

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