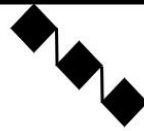

RISK OVERSIGHT

SOLUTIONS



Using Objective Centric Risk Assessment for SOX 404 and SOX 404 like requirements

Tim Leech, Managing Director

Risk Oversight Solutions Inc.

timleech@riskoversightsolutions.com

www.riskoversightsolutions.com

Module Coverage

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Using Objective Centric Risk Assessment for SOX 404 and similar national requirements

- Understanding 5 primary assurance methods
- Completing macro level reliable financial statements assessments – key concepts
- Completing Line item/sub-objective assessments
- Reporting results to CEO/CFO/Board
- Benefits of using objective centric assurance for financial statements reporting

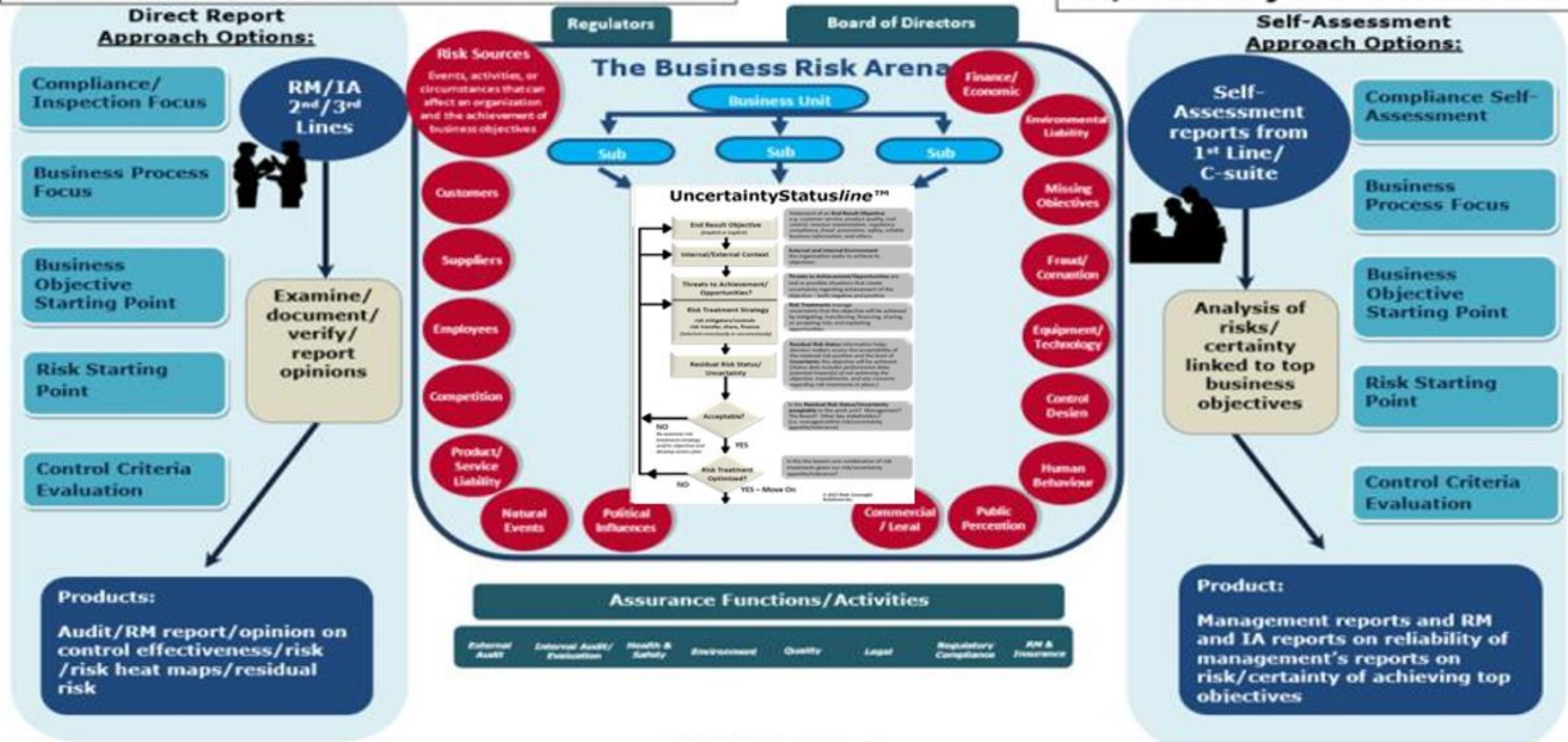
Understanding the 5 Primary Assurance Methods

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Understanding the 10 Assurance Methods

#2/Next Best: Objective Centric RM/IA

#1/Best: Objective Centric S.A.



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Macro Level Risk Assessments

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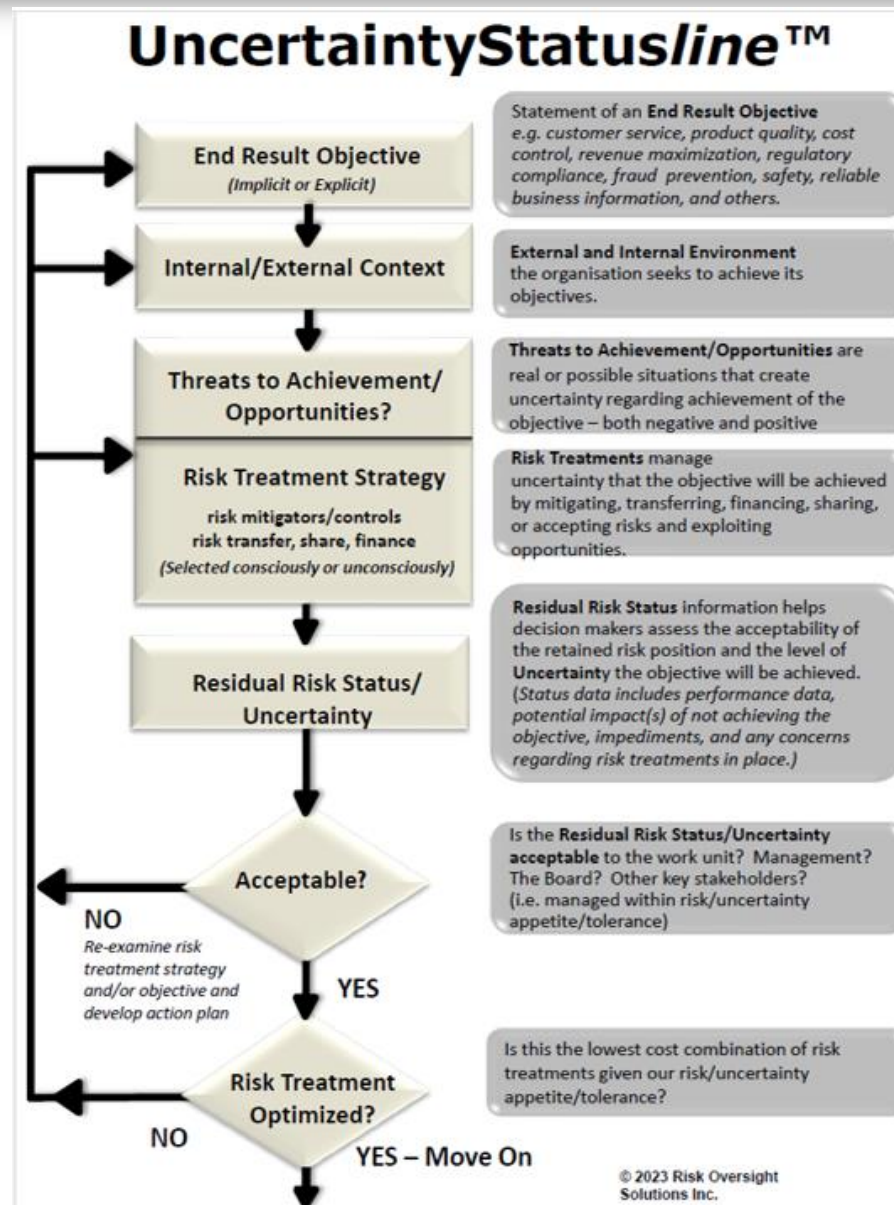
Macro Objective:

Ensure ABC's financial statements are materially reliable in accordance with applicable GAAP and, in the U.S., "internal controls" are "effective" in accordance with a "suitable" internal control framework, usually COSO ICIF 2013.

We strongly recommend that a macro risk assessment be done first; and then decisions made on the need for separate more detailed assessments of supporting sub-objectives including important note and supplemental disclosures.

Macro Level Risk Assessments

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Macro Level Risk Assessments

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Committee of Sponsoring Organizations of the Treadway Commission

Internal Control – Integrated Framework

Executive Summary



May 2013

Macro Level Risk Assessment

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Macro Level Risk Assessment

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Research done by Institute of Management Accountants issued in 2006 4 years post SOX indicated not many companies could demonstrate with clarity how their financial reporting internal controls are, or are not, “effective” in accordance with the COSO Internal Control Integrated Framework

Macro Level Risk Assessment

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INTERNAL CONTROL

COSO 1992 Control Framework and Management Reporting on Internal Control: Survey and Analysis of Implementation Practices



Macro Level Risk Assessment

TABLE 15. DID THE SOX COMPLIANCE TEAM IDENTIFY PLAUSIBLE RISKS?

Question Statement	Extent to which Plausible Risks Identified (N=372)				
	No Extent	Some Extent	Moderate Extent	Large Extent	Uncertain
1. For the majority of your <i>financial statement accounts</i> , to what extent did your SOX 302/404 compliance team identify the plausible risks that could threaten the integrity of the balance in each one of the accounts?	4.6% (17)	20.7% (77)	25.0% (93)	47.3% (176)	2.4% (9)
2. For the majority of your <i>financial statement note disclosures</i> , to what extent did your SOX 302/404 compliance team identify the plausible risks that could threaten the integrity of the information in each one of the note disclosures?	8.3% (31)	29.0% (108)	26.3% (98)	30.1% (112)	6.25% (23)
3. To what extent did your SOX 302/404 compliance team identify plausible <i>IT-related</i> risks (e.g., infrastructure, access, integrity, security, etc.) for each application that impacts financial statement accounts and note disclosures?	1.6% (6)	18.0% (67)	25.0% (93)	53.5% (199)	1.9% (7)

Macro Level Risk Assessment

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TABLE 16. USE OF THE COSO 1992 FRAMEWORK PRIOR TO SOX BY COMPANY MANAGEMENT

Q1: Extent to which COSO 1992 was utilized by our company to manage its enterprise risk and controls			
Response Scale	Overall Sample (N=373)	Internal Auditors (N=146)	Management-types (N=227)
	% of Total	% of Total	% of Total
1. No Extent	37.8% (141)	45.9% (67)	32.6% (74)
2. Some Extent	31.4% (117)	30.1% (44)	32.2% (73)
3. Moderate Extent	13.9% (52)	11.6% (17)	15.4% (35)
4. Large Extent	11.3% (42)	7.5% (11)	13.7% (31)
5. Not Sure	5.6% (21)	4.8% (7)	6.2% (14)

Macro Level Risk Assessment

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TABLE 17. USE OF THE COSO 1992 FRAMEWORK PRIOR TO SOX BY EXTERNAL AUDITORS

Q2: Extent to which COSO 1992 was utilized by your external auditors to size up the effectiveness of your system of internal control and share this assessment annually with the company management			
Response Scale	Overall Sample (N=373)	Internal Auditors (N=146)	Management-types (N=227)
	% of Total	% of Total	% of Total
1. No Extent	23.6% (88)	30.1% (44)	19.4% (44)
2. Some Extent	29.5% (110)	28.8% (42)	30.0% (68)
3. Moderate Extent	13.9% (52)	11.6% (17)	15.4% (35)
4. Large Extent	7.2% (27)	5.5% (8)	8.4% (19)
5. Not Sure	25.7% (96)	24.0% (35)	26.9% (61)

Macro Level Risk Assessment

TABLE 20. PERCEPTIONS ABOUT COSO 1992 MEETING THE SEC CRITERIA OF SUITABILITY

Criteria for an Acceptable Control Evaluation Framework per Section 404 Final Rules	Extent to which COSO 1992 meets each one of the four criteria (N=301)				
	No Extent	Some Extent	Moderate Extent	Large Extent	Uncertain
1. Is free from bias	2% (7)	23% (68)	28% (85)	36% (108)	11% (33)
2. Permits reasonably consistent qualitative and quantitative measurements of a company's internal control over financial reporting	5% (15)	25% (74)	28% (85)	34% (102)	8% (25)
3. Is sufficiently complete so that those relevant factors that would alter a conclusion about the effectiveness of a company's internal control over financial reporting are not omitted	3% (8)	25% (75)	27% (82)	36% (108)	9% (28)
4. Is relevant to an evaluation of internal control over financial reporting	2% (6)	22% (65)	27% (82)	40% (121)	9% (27)

Note: Percentages are rounded.

Macro Level Risk Assessment

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TABLE 23. IS IT POSSIBLE TO ARRIVE AT A RELIABLE PASS/FAIL CONCLUSION ON ICOFR USING COSO 1992?

Response Scale	# of Respondents (N=327)	% of the Total Sample	Small Companies (N=62)	Medium to Large Companies (N=265)
1. No Extent	8	2.4%	0.0%	3.0%
2. Some Extent	163	49.8%	58.1%	47.9%
3. Moderate Extent	59	18.0%	16.1%	18.5%
4. Large Extent	72	22.0%	16.1%	23.4%
5. Uncertain	25	7.6%	9.7%	7.2%

TABLE 24. CONSENSUS IN CONCLUSIONS BETWEEN MANAGEMENT AND EXTERNAL AUDITOR USING COSO 1992

Response Scale	# of Respondents (N=327)	% of the Total Sample	Small Companies (N=62)	Medium to Large Companies (N=265)
1. No Extent	10	3.1%	1.6%	3.4%
2. Some Extent	166	50.8%	58.1%	49.1%
3. Moderate Extent	61	18.7%	19.4%	18.5%
4. Large Extent	58	17.7%	12.9%	18.9%
5. Uncertain	32	9.8%	8.1%	10.2%

Macro Level Risk Assessment

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TABLE 27. RELIANCE ON FIVE COSO 1992 COMPONENTS TO EVALUATE CONTROLS FOR SPECIFIC ACCOUNT BALANCES

Five Components of the COSO 1992 Framework	Extent to which your SOX Compliance Team Relied on Five COSO Components while Evaluating Internal Controls over Specific Account Balances (N=327)				
	No Extent	Some Extent	Moderate Extent	Large Extent	Uncertain
1. Control Environment	6% (20)	28% (91)	31% (102)	31% (102)	4% (12)
2. Risk Assessment	7% (23)	32% (106)	34% (111)	23% (75)	4% (12)
3. Control Activities	4% (12)	23% (75)	30% (99)	39% (129)	4% (12)
4. Information and Communication	7% (23)	36% (119)	28% (93)	23% (74)	6% (18)
5. Monitoring	6% (21)	31% (101)	31% (102)	27% (89)	4% (14)

Note: Percentages are rounded.

Macro Level Assessment

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Per COSO page 8 Executive Summary

“an effective system provides reasonable assurance regarding achievement of an entity’s objectives.”

“reasonable assurance” = acceptable uncertainty

Objective Centric Risk and Certainty Management and Uncertainty Statusline have been designed to allow a fact-based determination of what’s reasonable assurance/acceptable uncertainty.

Uncertainty Statusline Risk Treatment Principles and sub-elements map directly to COSO 2013 ICFR

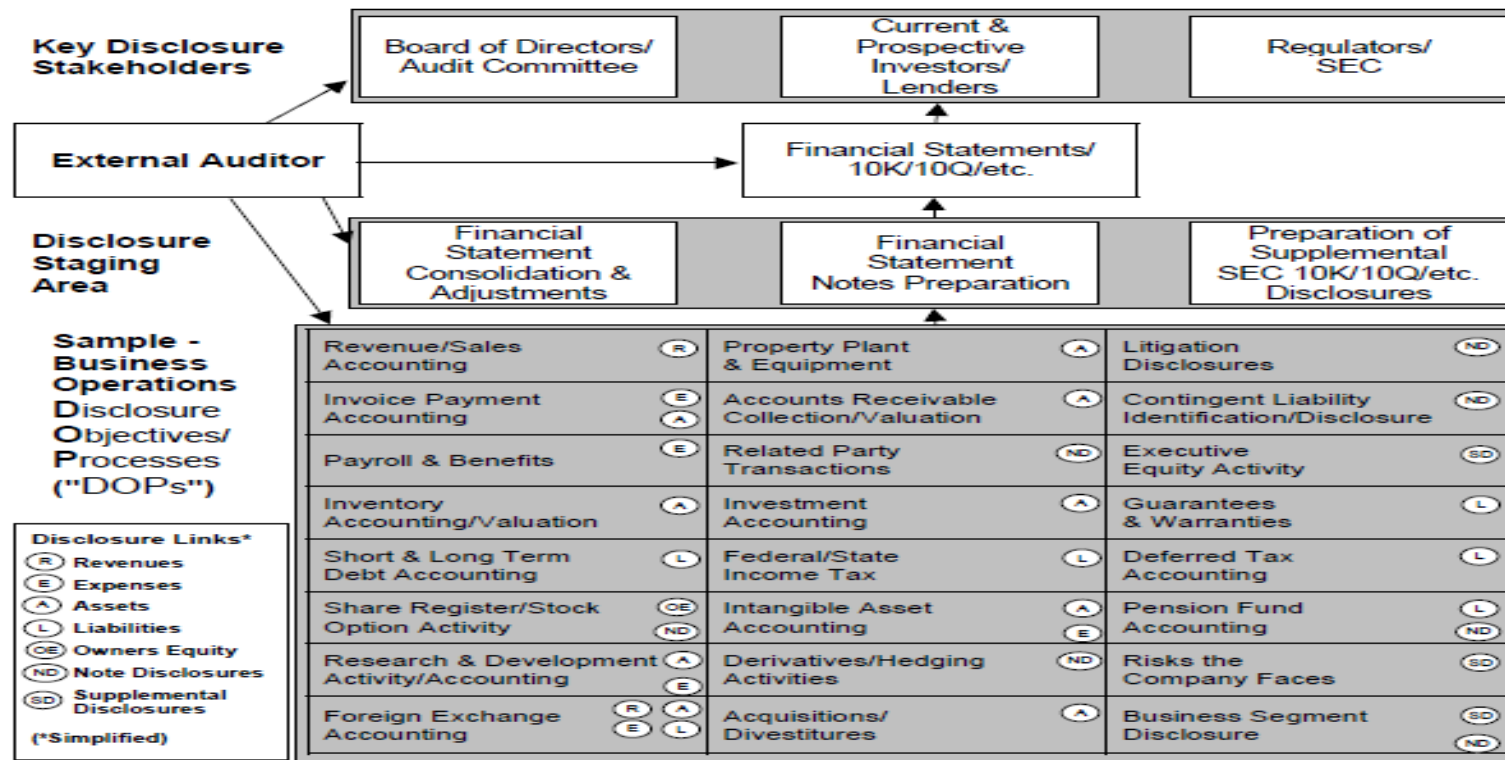
Macro Level Assessment

VISUALIZING THE GOALS OF SECTIONS 302 and 404

The fundamentals of sections 302 and 404 can be explained using the diagram below. The primary goal of the disclosure system is summarized in the purpose statement of SarbOx:

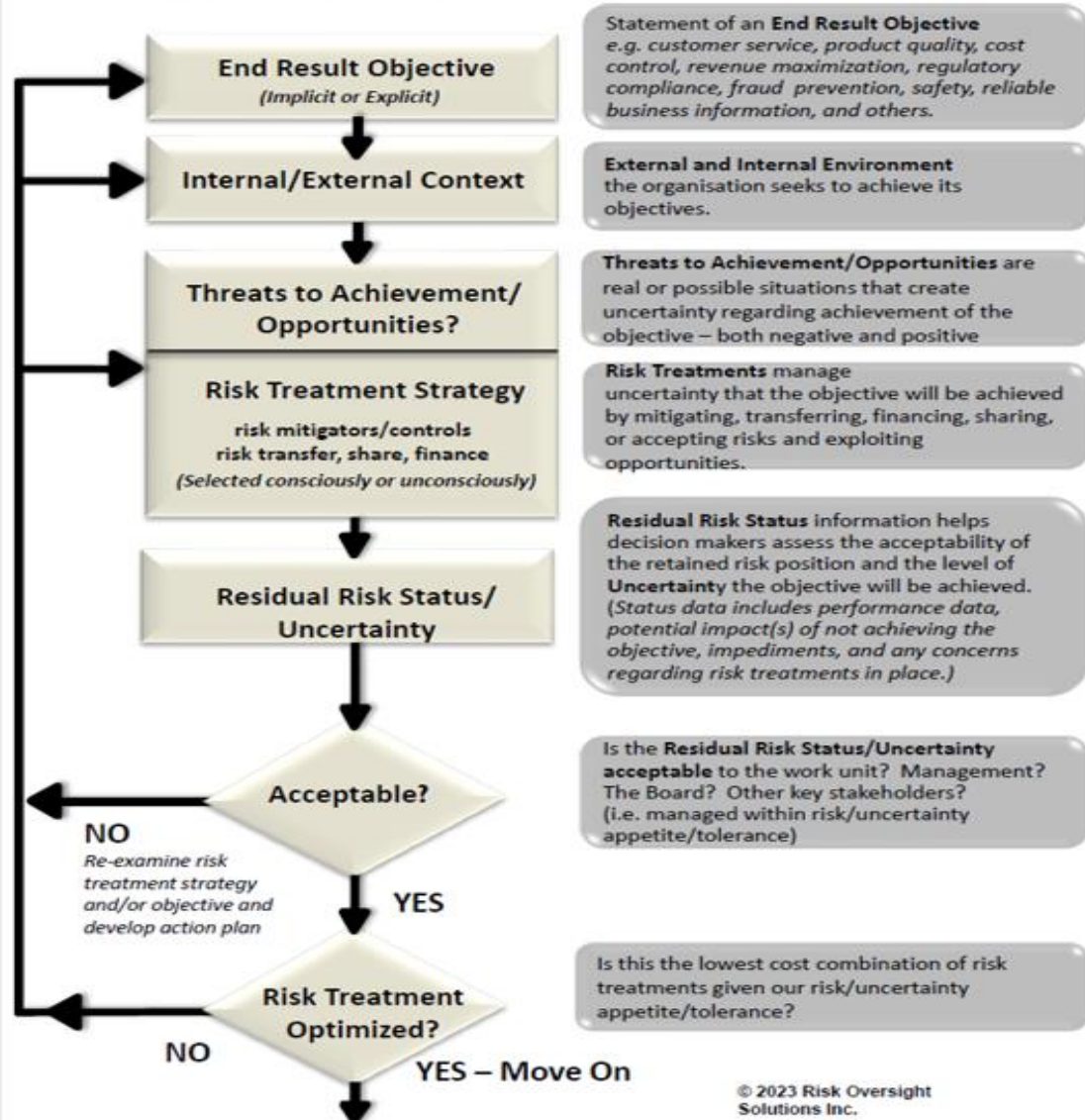
To protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to securities laws, and for other purposes.

Sarbanes-Oxley Section 302 & 404 Overview



Macro Level Assessment: Step by Step

Uncertainty Statusline™



Macro Level Assessment: Step by Step

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Internal/External Context

- Implications to the company's credit rating
- Implications to the company's reputation
- Implications to the company's cost of capital
- Personal implications to senior executives and board members
- Audit firm resignations/refusals
- Impact on the company's share price
- Personal philosophy of the company's CEO, CFO and Board of Directors
- Likelihood External Auditor Opinion on Financial Statements is wrong

Macro Level Assessment: Step by Step

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Internal/External Context

- 1. Detected error history – external auditor
- 2. Detected error history – management detected after release of statements
- 3. Detected error history – management detected prior to release of statements
- 4. Complexity of accounting
- 5. Absolute dollar/unit of local currency value/impact of location/account
- 6. Detected error history – regulators/tax authorities/customers/others
- 7. Detected error history – internal audit
- 8. Detected/known errors in other companies in the same business sector
- 9. Amount of management judgment/subjectivity
- 10. Importance of account/location to security analysts
- 11. Importance of account/note disclosure to debt covenants
- 12. Susceptibility of account to fraud from insiders
- 13. Susceptibility of account to fraud from outsiders
- 14. Account/note linkage to the company's reward/compensation system

Macro Level Assessment: Step by Step

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IDENTIFYING RISKS/THREATS TO ACHIEVEMENT

NOTE: refer to OCRUM learning module on identifying risks for information on the full range of risk identification methods available

- 1. Research/AI and observation**
- 2. Company Specific History**
- 3. Experience of senior level staff**
- 4. Industry specific scenario analysis**
- 5. Risk source analysis**
- 6. Industry “CHECK LISTS”**

Macro Level Assessment: Step by Step

IDENTIFYING RISKS/THREATS TO ACHIEVEMENT

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Some statistically predictable risk examples. Ask Chat GPT for statistically significant risks.

1. CEO and CFO have significant financial incentives to falsify and/or inappropriately manage financial results.
2. Senior management has major financial incentives to direct backdating of stock options.
3. Senior management directs improper/fraudulent post-close journal entries to manage profits and/or hit earning targets disclosed to the market.
4. Management overrides controls to hit bonus targets or prevent loss of positions.
5. Audit Committees have financial incentives not to ask management tough questions.

Macro Level Assessment: Step by Step

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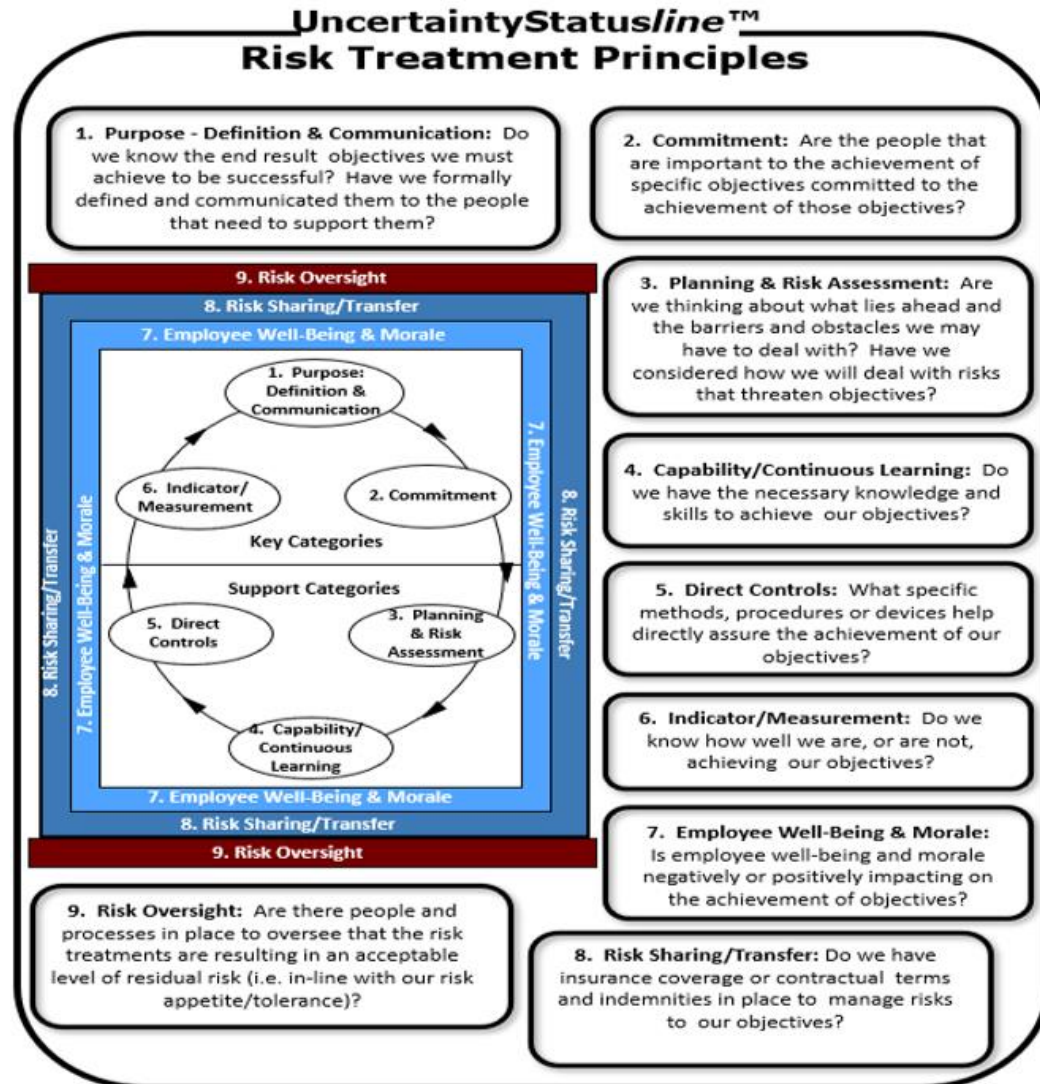
IDENTIFYING RISKS/THREATS TO ACHIEVEMENT

Some statistically predictable risk examples continued

6. Accounting staff are not current on accounting standards.
7. Management lacks the appropriate knowledge and skills to deal with accounting for complex or significant judgement related transactions.
8. In-house accounting personnel lack the necessary training and experience to deal with the scope of the organization's operations.
9. The external audit team's objectivity is compromised by conflicts of interest.
10. External audit team lacks appropriate knowledge/skills, and/or the courage to challenge management's assumptions.

Macro Level Assessment: Step by Step

IDENTIFYING RISKS TREATMENTS



Macro Level Assessment: Step by Step

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IDENTIFYING RISKS TREATMENTS

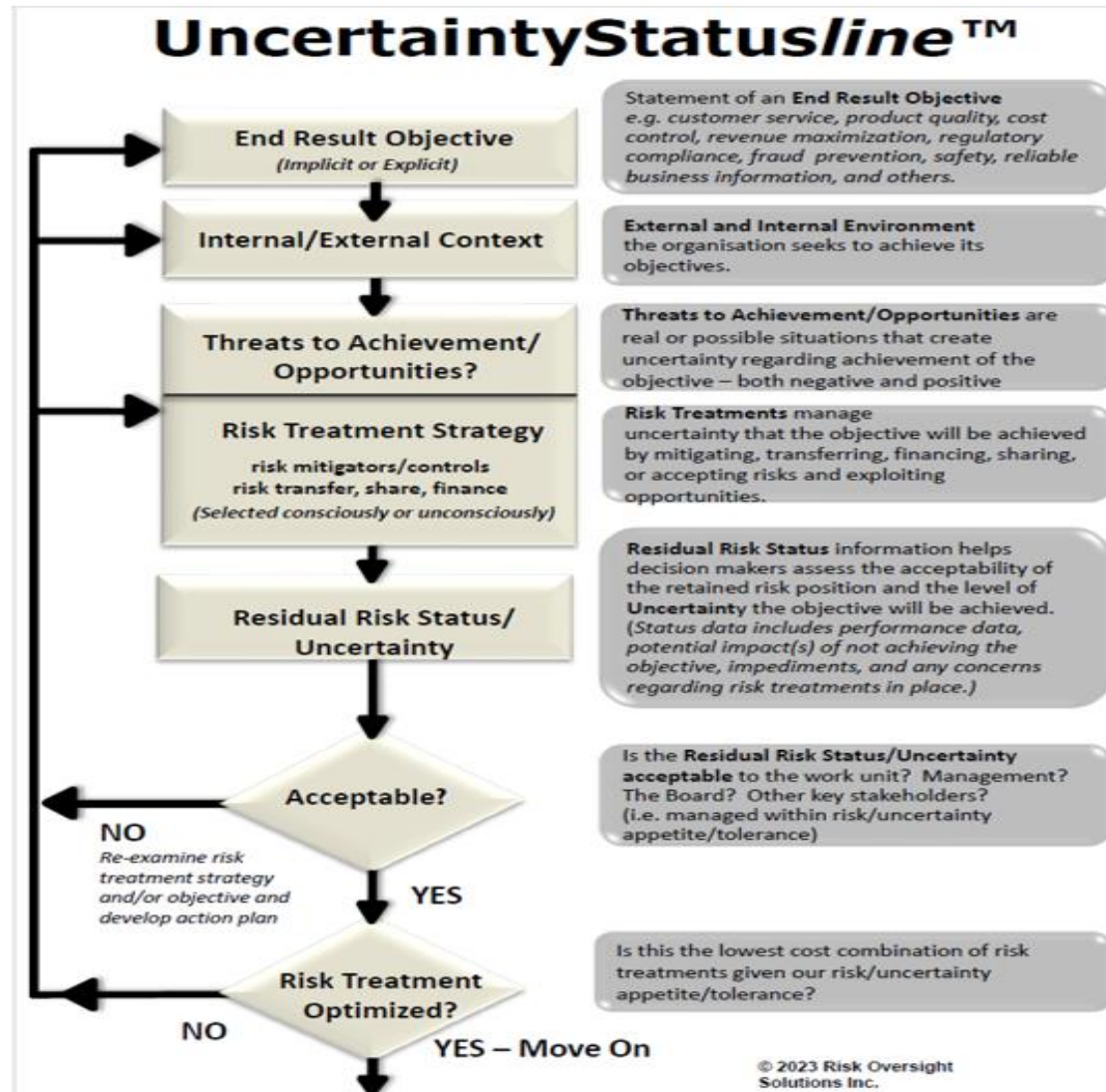
Risk Treatment Principles Elements

- | | |
|---|---|
| <ul style="list-style-type: none">1. PURPOSE: DEFINITION & COMMUNICATION<ul style="list-style-type: none">1.1 Definition of Corporate Mission & Vision1.2 Definition of Entity Wide Objectives1.3 Definition of Unit Level Objectives1.4 Definition of Activity Level Objectives1.5 Communication of Business/Quality Objectives1.6 Definition and Communication of Corporate Conduct Values and Standards2. COMMITMENT<ul style="list-style-type: none">2.1 Accountability/Responsibility Mechanisms<ul style="list-style-type: none">2.1a Job Descriptions2.1b Performance Contracts/Evaluation Criteria2.1c Budgeting/Forecasting Processing2.1d Written Accountability Acknowledgements2.1e Other Accountability/Responsibility Mechanisms2.2 Motivation/Reward/Punishment Mechanisms<ul style="list-style-type: none">2.2a Performance Evaluation System2.2b Promotion Practices2.2c Firing and Discipline Practices2.2d Reward Systems - Monetary2.2e Reward Systems - Non-Monetary2.3 Organization Design2.4 Self-Assessment/Risk Acceptance Processes2.5 Officer/Board Level Review2.6 Other Commitment Controls3. PLANNING & RISK ASSESSMENT<ul style="list-style-type: none">3.1 Strategic Business Analysis3.2 Short, Medium and Long Range Planning3.3 Risk Assessment Processes - Macro Level3.4 Risk Assessment Processes - Micro Level3.5 Control & Risk Self-Assessment3.6 Continuous Improvement & Analysis Tools3.7 Systems Development Methodologies3.8 Disaster Recovery/Contingency Planning3.9 Other Planning & Risk Assessment Processes4. CAPABILITY/CONTINUOUS LEARNING<ul style="list-style-type: none">4.1 Knowledge/Skills Gap Identification and Resolution Tools/Processes4.2 Self-Assessment Forums & Tools4.3 Coaching/Training Activities & Processes4.4 Hiring and Selection Procedures4.5 Performance Evaluation4.6 Career Planning Processes4.7 Firing Practices4.8 Reference Aids4.9 Other Training/Education Methods | <ul style="list-style-type: none">5. DIRECT CONTROLS<ul style="list-style-type: none">5.1 Direct Controls Related to Business Systems5.2 Physical Safeguarding Mechanisms5.3 Reconciliations/Comparisons/Edits5.4 Validity/Existence Tests5.5 Restricted Access5.6 Form/Equipment Design5.7 Segregation of Duties5.8 Code of Accounts Structure5.9 Other Direct Control Methods, Procedures, or Things6. INDICATOR/MEASUREMENT<ul style="list-style-type: none">6.1 Results & Status Reports/Reviews6.2 Analysis: Statistical/Financial/Competitive6.3 Self-Assessments/Direct Report Audits6.4 Benchmarking Tools/Processes6.5 Customer Survey Tools/Processes6.6 Automated Monitoring/Reporting Mechanisms & Reports6.7 Integrity Concerns Reporting Mechanisms6.8 Employee/Supervisor Observation6.9 Other Indicator/Measurement Controls7. EMPLOYEE WELL-BEING & MORALE<ul style="list-style-type: none">7.1 Employee Surveys7.2 Employee Focus Groups7.3 Employee Question/Answer Vehicles7.4 Management Communication Processes7.5 Personal and Career Planning7.6 Diversity Training/Recognition7.7 Equity Analysis Processes7.8 Measurement Tools/Processes7.9 Other Well-Being/Morale Processes8. RISK SHARING/TRANSFER<ul style="list-style-type: none">8.1 Insurance Coverage8.2 Contractual Indemnities/Remediation8.3 Civil Law Recovery8.4 Other Risk Sharing/Transfer Vehicles9. RISK OVERSIGHT<ul style="list-style-type: none">9.1 Manager/Officer Monitoring/Supervision9.2 Internal Audits9.3 External Audits9.4 Specialist Reviews & Audits9.5 ISO Review/Regulator Inspections9.6 Audit Committee/Board Oversight9.7 Self-Assessment Quality Assurance Reviews9.8 Authority Grids/Structures & Procedures9.9 Other Risk Oversight Activities |
|---|---|

Macro Level Assessment: Step by Step

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IDENTIFYING RESIDUAL RISK STATUS/UNCERTAINTY



- **Threat to Achievement/Risk**
Description: Events, activities, current/known developments and contracts outside of the accounting department are not known and may affect financial statements.

- **Threat to Achievement/Risk**
Description: Time constraints during close related to journal entry preparation and check, as well as reporting/analysis may cause human errors to go undetected.

- **Threat to Achievement/Risk**
Description: Manual inputs from accounting personnel in the system are incorrect because of time constraints, volume/complexity of formulas, knowledge deficiencies (e.g. chemical usage, unbilled revenue).

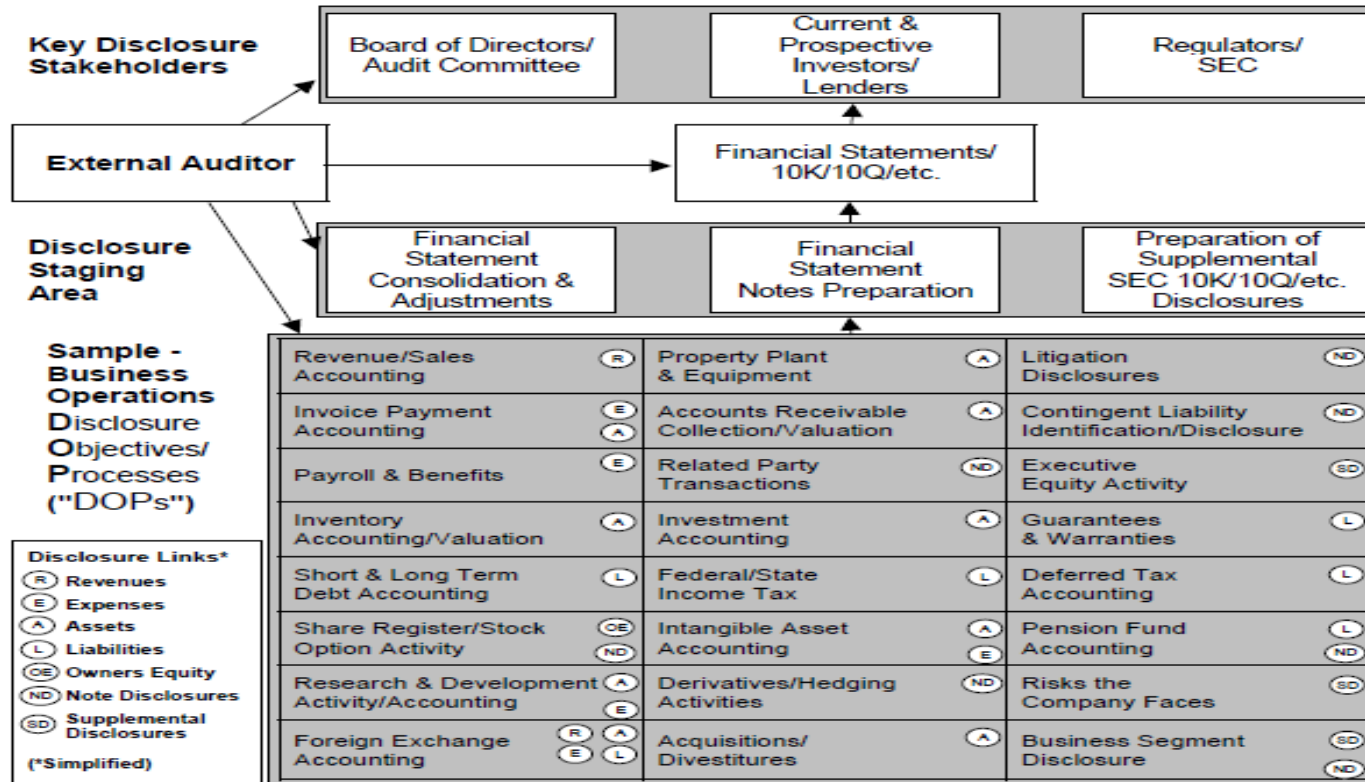
Completing Sub-Objectives

VISUALIZING THE GOALS OF SECTIONS 302 and 404

The fundamentals of sections 302 and 404 can be explained using the diagram below. The primary goal of the disclosure system is summarized in the purpose statement of SarbOx:

To protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to securities laws, and for other purposes.

Sarbanes-Oxley Section 302 & 404 Overview



Completing Sub-Objectives

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Deciding which disclosure line items warrant detailed risk assessment

- 1. Detected error history – external auditor
- 2. Detected error history – management detected after release of statements
- 3. Detected error history – management detected prior to release of statements
- 4. Complexity of accounting
- 5. Absolute dollar/unit of local currency value/impact of location/account
- 6. Detected error history – regulators/tax authorities/customers/others
- 7. Detected error history – internal audit
- 8. Detected/known errors in other companies in the same business sector
- 9. Amount of management judgment/subjectivity
- 10. Importance of account/location to security analysts
- 11. Importance of account/note disclosure to debt covenants
- 12. Susceptibility of account to fraud from insiders
- 13. Susceptibility of account to fraud from outsiders
- 14. Account/note linkage to the company's reward/compensation system

Reporting to CEO/Board

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Concise reporting on which financial statement line items have the highest residual risk status/high uncertainty

Current assets:	
Cash and cash equivalents	\$ 20,289
Short-term marketable securities	53,892
Accounts receivable, less allowances of \$58 and \$53, respectively	17,874
Inventories	4,855
Vendor non-trade receivables	17,799
Other current assets	13,936
Total current assets	128,645
Long-term marketable securities	194,714
Property, plant and equipment, net	33,783
Goodwill	5,717
Acquired intangible assets, net	2,298
Other non-current assets	10,162
Total assets	\$ 375,319
LIABILITIES AND SHAREHOLDERS' EQUITY:	
Current liabilities:	
Accounts payable	\$ 49,049
Accrued expenses	25,744
Deferred revenue	7,548
Commercial paper	11,977
Current portion of long-term debt	6,496
Total current liabilities	100,814
Deferred revenue, non-current	2,836
Long-term debt	97,207
Other non-current liabilities	40,415
Total liabilities	241,272
Commitments and contingencies	
Shareholders' equity:	
Common stock and additional paid-in capital, \$0.00001 par value: 12,600,000 shares authorized; 5,126,201 and 5,336,166 shares issued and outstanding, respectively	35,867
Retained earnings	98,330
Accumulated other comprehensive income/(loss)	(150)

Benefits of Objective Centric Assurance for SOX and SOX like requirements

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BENEFITS

1. Complies with COSO requirement to determine whether there is “an effective system provides reasonable assurance regarding achievement of an entity’s objectives.”
2. Management alerts external auditors to areas with highest residual risk/uncertainty so they can better focus their audit work.
3. This process puts high focus on identification/assessment of risks to help determine resources that should be dedicated to risk treatment design. Current methods often put most time on control testing with limited effort to identify/size risks.

Benefits of Objective Centric Assurance for SOX and SOX like requirements

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BENEFITS

4. Lays a foundation to fully integrate work done to ensure financial statements are reliable with ERM work on the full range of value creation and preservation objectives.
5. Uses a wide range of methods to identify risks, current risk treatments and risk treatments that could be used but aren't currently by many companies.
6. Residual risk status/uncertainty information helps management and the board assess if current assurance/uncertainty is "reasonable"/sufficient.
7. The Six Level Quality Assurance framework is able to provide high assurance risk/certainty status information is reliable. See next page.

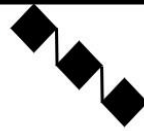
QUESTIONS???

Thank you

timelech@riskoversightsolutions.com

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Using Objective Centric Risk Assessment for SOX 404 and SOX 404 like requirements

Tim Leech, Managing Director

Risk Oversight Solutions Inc.

timleech@riskoversightsolutions.com

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