

**Deloitte.**



**Winning strategies for mitigating risk**

2017 Engineering and Construction Conference

# Presenting today

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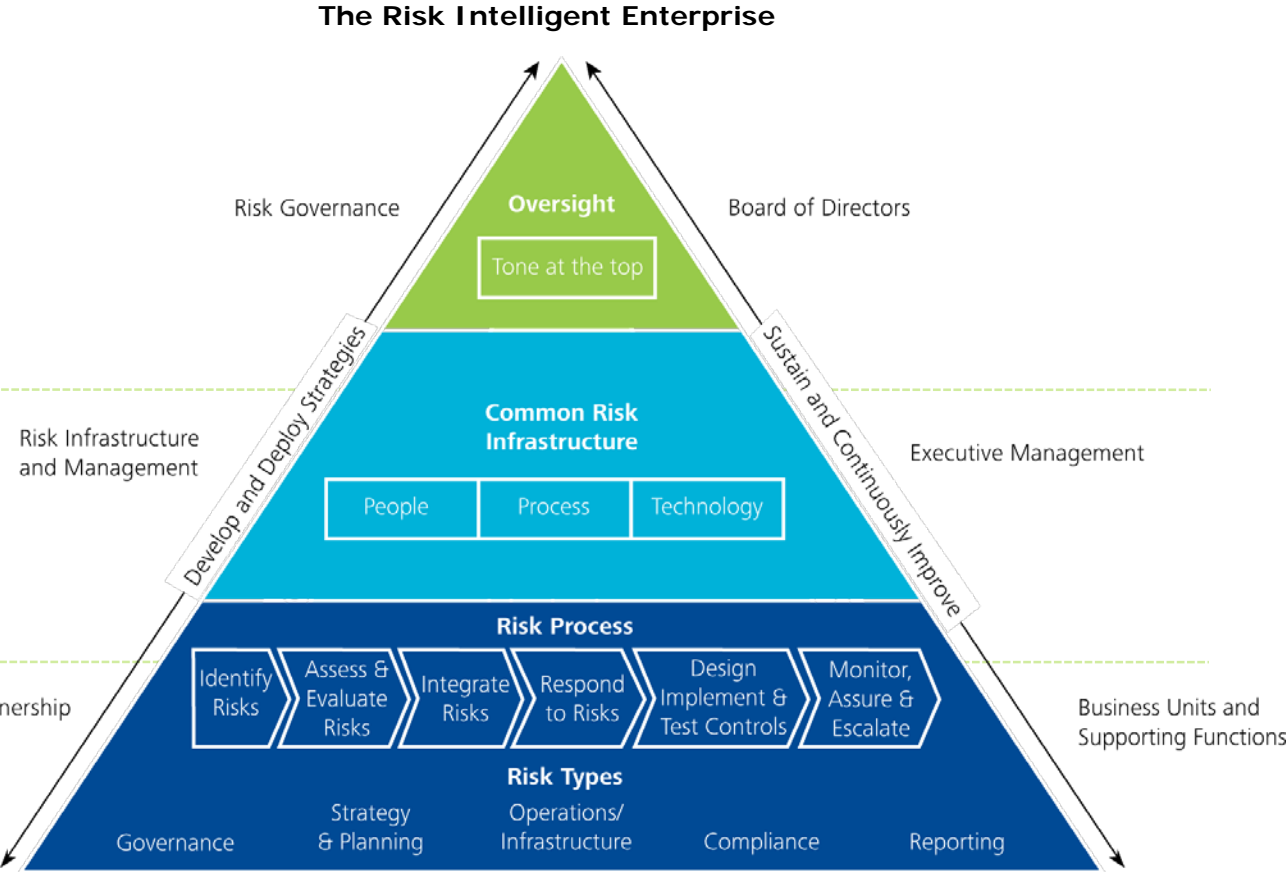
# Financial & Project Risk Management

# Building the Risk Intelligent Enterprise™: Framework applied to Enterprise Risk Management

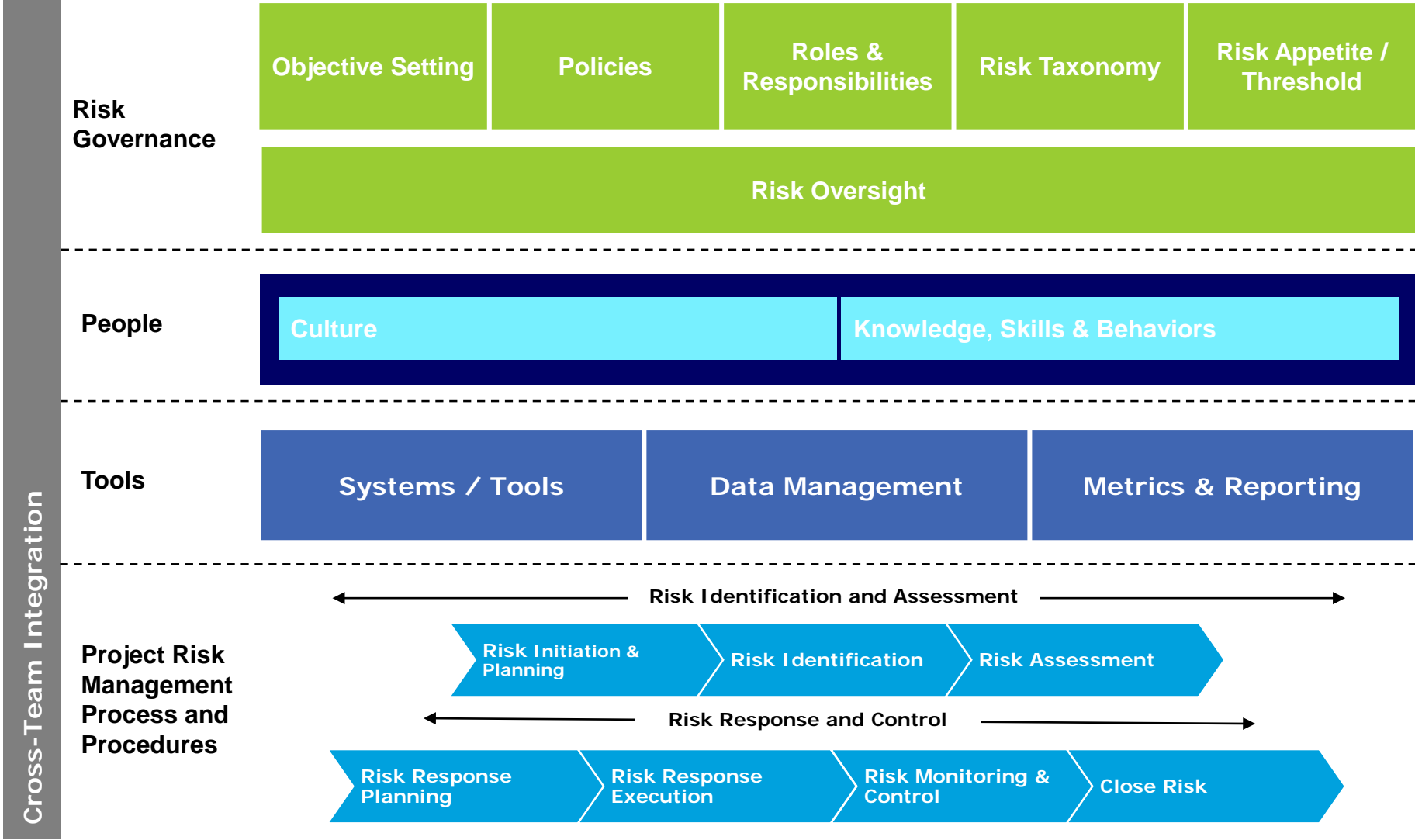
Risk intelligent enterprises adopt a balanced perspective of risk management, supported by fundamental principles:

## Nine Principles for Building a Risk Intelligent Enterprise

- Common Definition of Risk
- Common Risk Framework
- Roles & Responsibilities
- Transparency for Governing Bodies
- Common Risk Infrastructure
- Executive Management Responsibility
- Objective Assurance and Monitoring
- Business Unit Responsibility
- Support of Pervasive Functions



# Project Risk Management Framework



# Measuring and monitoring risk culture effectiveness

## Effectiveness is understood by measuring specific influencers and indicators

To fully understand an organization's current risk culture effectiveness and to track progress of cultural change, a focused diagnostic is required. Deloitte has developed an approach to measuring risk culture effectiveness based on our Risk Culture Framework. The framework consists of 16 risk culture indicators aligned to the four risk influencers. Once an organization's risk culture is understood, then the Risk Culture Framework can be used to begin to help to manage it, too.

### The collective risk management competence of the organization

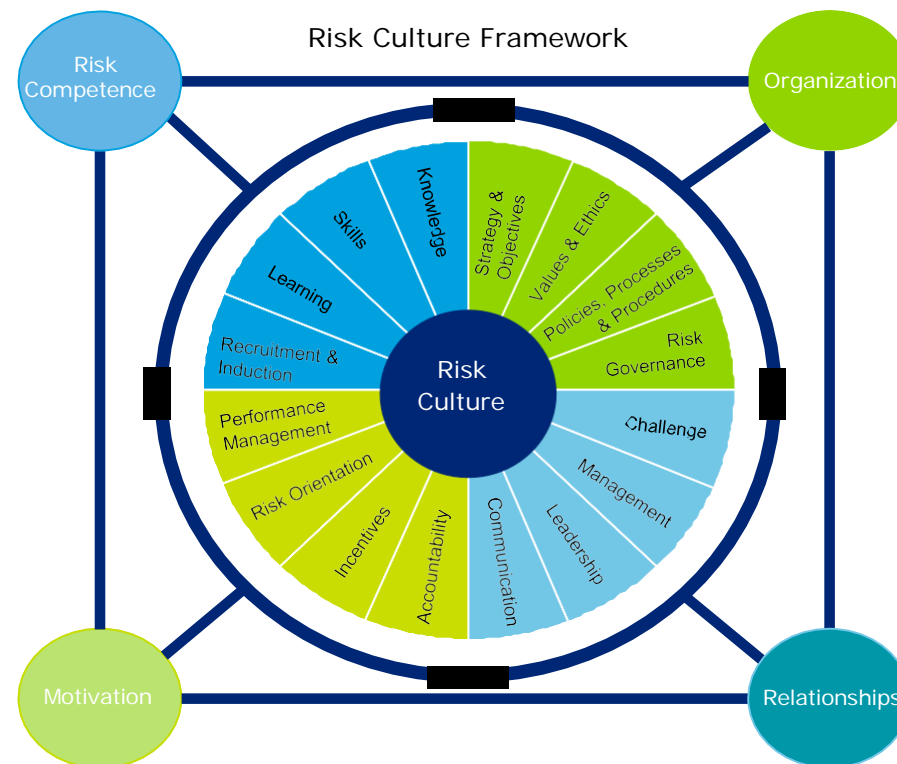
Example survey responses:

- *In this organization, we assess and learn from risk events and mistakes when they occur*
- *I understand the key risks associated with my role*
- *Our people are made aware of their risk-related responsibilities from the day they are hired*

### The reasons why people manage risk the way that they do

Example survey responses:

- *The pressure on me to meet performance targets is balanced with the need to comply with risk policies, processes and procedures*
- *People in this organization are penalized if they take unacceptable risks, even if their actions subsequently generate good returns*



### How the organizational environment is structured and what is valued

Example survey responses:

- *When it comes to risk management, this organization practices what it preaches*
- *People in this organization know how to escalate risks*
- *People in this organization share similar ethical values*

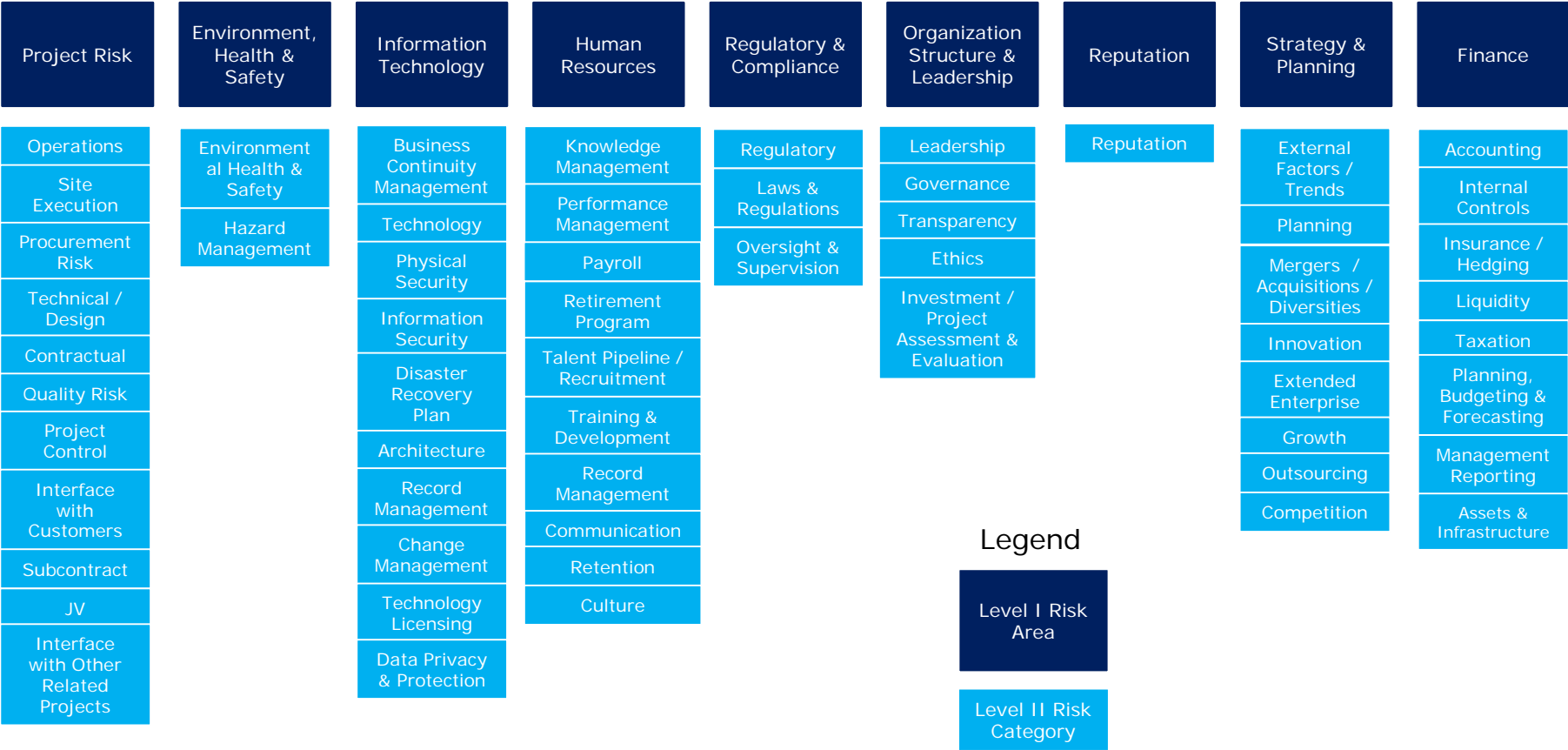
### How people in the organization interact with others

Example survey responses:

- *People in this organization are expected to do what they are told, no matter what*
- *Risk management concerns are discussed openly and honestly in this organization*
- *The leaders of this organization role model the right risk behaviors*

# Proposed Risk Taxonomy for our clients

A Risk Taxonomy is a classification system to organize enterprise-wide risks and create a common risk language. The purpose of the taxonomy is to organize the universe of risks into logical groupings (risk areas and risk categories), which helps determine ownership and accountability for risk and facilitates identification of emerging risks.



# Risk management tools

The following are a few examples of tools that Deloitte has implemented for risk tracking and reporting:

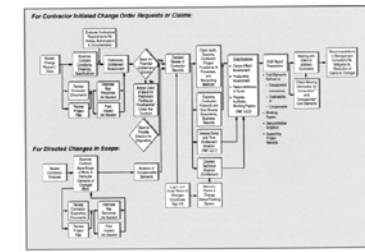
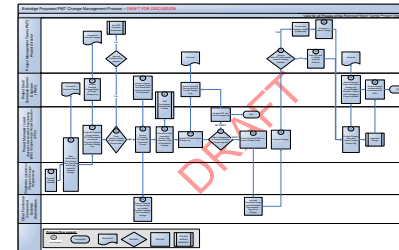
## ✓ Risk Register

The Risk Register is summary document typically in spreadsheet format used to identify, document and manage project risks. The Risk Register houses all identified risks until a Risk Response Plan has been implemented and the Residual Risk signed off by the Risk Owner. The Risk Register is used for both threats and opportunities.

RISK REGISTER																							
ACME - Example Project																							
RISK IDENTIFICATION				INITIAL RISK								RISK RESPONSE PLAN								RESIDUAL RISK			
ID	Name	Category	Sub-Category	Owner	Impact	Probability	Score	Response	Start	End	Score	Impact	Probability	Score	Response	Start	End	Score	Impact	Probability	Score		
001	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		

## ✓ Risk Management Process Flow Chart

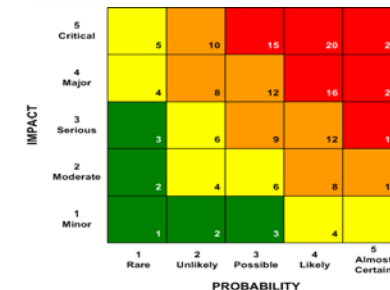
The Risk Management Process Flow Chart describes the iterative risk management process tasks to be performed by the key risk management stakeholders including risk identification, risk assessment, risk response planning and control and monitoring.



## ✓ Roles and Responsibilities Matrix

The Roles and Responsibilities Matrix is a table describing the roles and responsibilities for each position with regard to the key project risk management tasks. This matrix provides guidance regarding ownership for specific tasks, responsibilities for executing the work, and supporting roles.

	W&A Initiator	General Manager	Project Manager	Construction Manager	Construction Engineer	W&A Expert	Project Team Members
<b>1.0 Risk Planning</b>							
1.1 Establish Risk Tolerances		A	R	R	S	S	S
1.2 Develop Project Risk Management Plan		A	A	A	R	C	I
<b>2.0 Risk Identification</b>			A		R	C	S
2.1 Identification of potential risks			A	R	S	R	S
2.2 Assignment of Risk Owners			A/R	C	C	I	I
<b>3.0 Risk Assessment</b>			A		R	C	S
3.1 Quantify the probability and impact of identified risks			A	C	S	R	R
3.2 Management of the risk register and risk prioritization			A	A	R	S	S
<b>4.0 Risk Response Planning</b>			A		R	C	S
4.1 Creation and implementation of risk response plans			A	A	S	R	S





**Insurance**

# Insurance/Risk Management, Captives and OCIPs/CCIPs

## Emerging issues

**Tax Reform Looming:** Large self-insurance reserves with DTAs attached to them are prime territory for captive transactions, since the value of these DTAs could shrink significantly with the expected decline in federal corporate income tax rates.

**Uptick in Insurance Rates (maybe):** Following long-term decline in rates spanning over 15 years, most major lines, including commercial property and commercial auto, saw rate increases in May 2017. May also saw an increase in workers' compensation costs for the first time in recent quarters.

**Debate on Insurable Risk Rages On:** Tax Court ruling in favor of taxpayer in *R.V.I. Guaranty v. Commissioner* expands the possibilities for defining and insuring the risks of your business.

**Cyber Insurance becoming mainstream and expanding:** Cyber insurance is expanding beyond personally identifiable and sensitive information, and new policies now include linked property/business interruption/cyber coverages.

**Micro captives under the scope:** Waiting for decision on *Avrahami*, and IRS Notice 2016-66, which makes 831(b) captives a "transaction of interest"

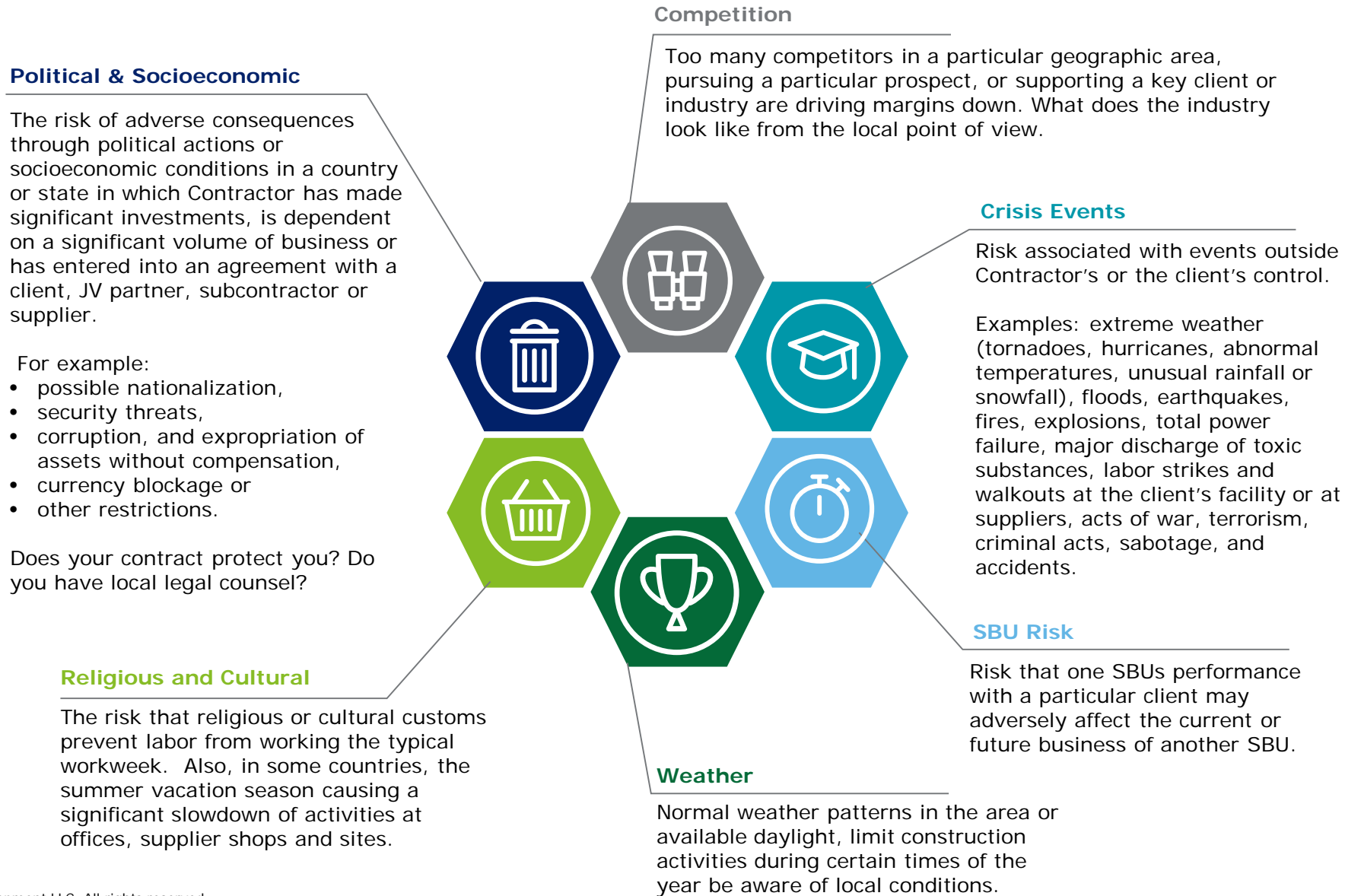
**Proliferation of captive domiciles, and anxiety over self-procurement premium tax:** They're linked. It is resulting in a dilution of captive expertise among regulators, increased risk of poorly-designed or conceived programs, and potential damage to captives' reputation as a legitimate risk management solution.

**Cubs win the World Series:** Proof that anything can happen. You'd better buy insurance, just in case. But can it happen again in our lifetimes?

# Government contracting

**Geographic expansion**

# International business risks



# International business risks

## Reputation – Fraud, FCPA

The risk that Contractor may lose clients, key employees or its ability to compete, due to perceptions that it does not deal fairly with clients, suppliers and stakeholders, does not know how to manage its business, or does not perform on its projects (safety, cost, schedule, quality). This is a real world result of having an FCPA issue or other fraud “news”—bad news travels fast.

## Outsourcing & Competition

Risk that strategic business processes outsourced will ultimately create competition for the outsourcing organization because the know-how shared with the consultant will be later exploited by the consultant or given to a competitor.

## Disaster Recovery

The inability to sustain operations, provide essential products and services, or recover operating costs as a result of a major disaster (accident, sabotage, work stoppages, network downtime, loss of data). The inability to recover from such events could damage Contractor’s reputation, ability to obtain capital, or investor relationships. What are your evacuation plans to get your workforce home?

## Bonding & Guarantees

Risk that significant partners, subcontractors or suppliers are not sufficiently bonded to limit Contractor’s exposure.

Risk associated with allocating Contractor’s bonding, parent company guarantee or letter of credit capacity to a long term project which does not bring expected returns. What are the local market conditions for bonding, LOC, insurance products?

## Third Party Risk

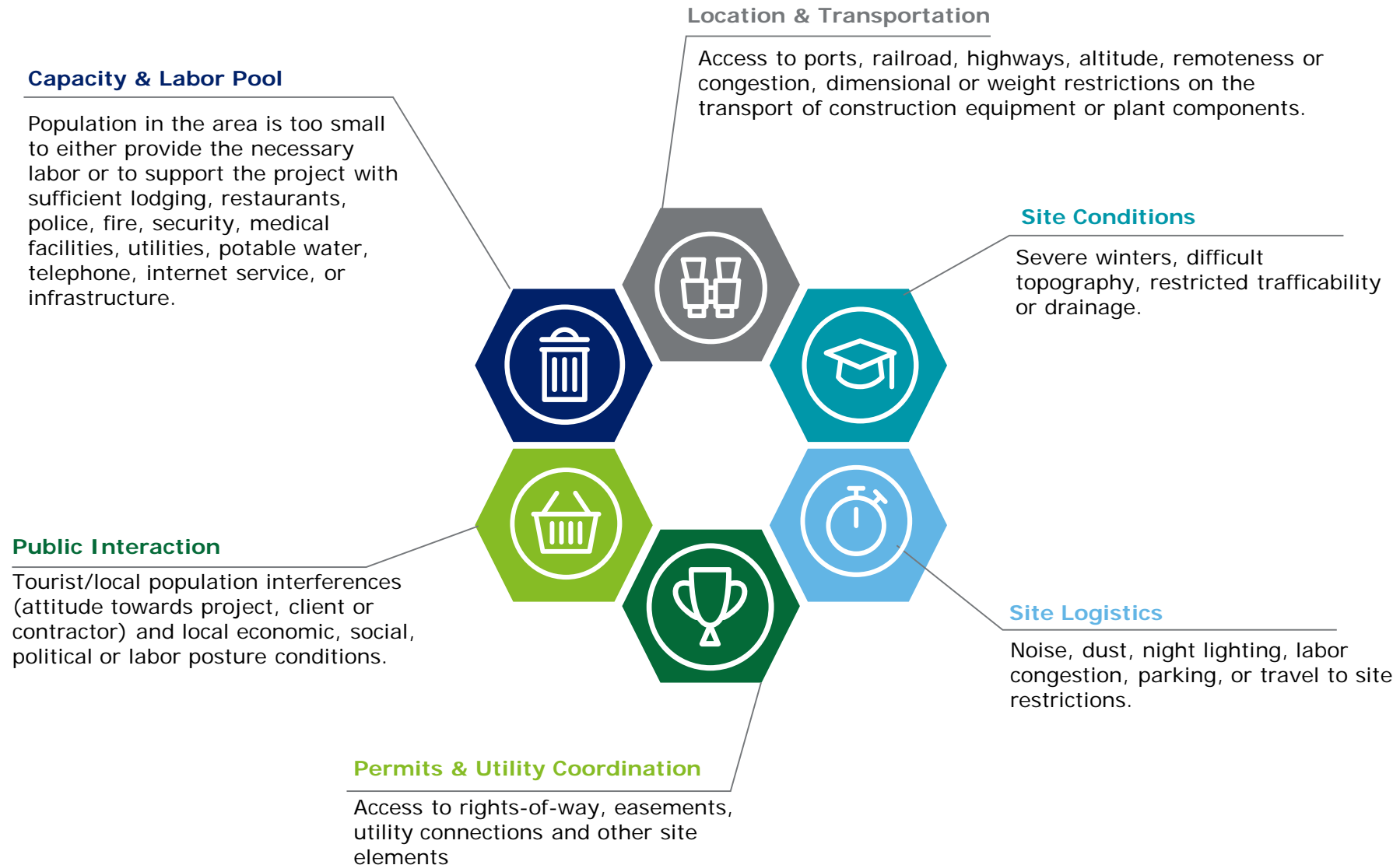
Risk that outside service providers (Third Party Administrators, local or foreign partners, consultants or agents) will not act within their defined limits of authority and will not perform in a manner consistent with the values, strategies and objectives of the company.

## Outsourcing - Loss of Profits

Risk of not outsourcing non-core activities when financially advantageous to Contractor or when higher value can be obtained by involving outside consultants.



# International business risks — Project site



**Jeopardy**



Government Contracting	Financial and Project Management	Insurance and Captives	Geographic Expansion
<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
<u>200</u>	<u>200</u>	<u>200</u>	<u>200</u>
<u>300</u>	<u>300</u>	<u>300</u>	<u>300</u>
<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>
<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>

## Question:

This the most important step when receiving a contract from the US Government.

Government Contracting  
100 Points



Answer:

What is Read the Contract?

Government Contracting  
100 Points



## Question:

The US Government customer who “has a warrant” to spend the government’s money.

Government Contracting  
200 Points



Answer:

Who is the Contracting Officer?

Government Contracting  
200 Points



## Question:

The two most important steps to avoid at-risk efforts

Government Contracting  
300 Points



Answer:

What is Communicate with the Customer and  
Communicate Internally?

Government Contracting  
300 Points



## Question:

The allowability of costs associated with preparing a Request for Equitable Adjustment (REA).

Government Contracting  
400 Points





Answer:

What is allowable?

Government Contracting  
400 Points



## Question:

The allowability of costs associated with preparing a Claim.

Government Contracting  
500 Points



Answer:

What unallowable?

Government Contracting  
500 Points



## Question:

The stage in the project life cycle at which risk management begins.

Financial and Project Management  
100 Points



Answer:

What is the bidding stage?  
(Or What is the Go/No-Go Decision?)

Financial and Project Management  
100 Points



## Question:

The technique which companies implement to identify and mitigate risks throughout the organization.

Financial and Project Management  
200 Points



Answer:

What is Enterprise Risk Management?

Financial and Project Management  
200 Points



## Question:

A frequently used tool to actively monitor risks and risk response plans throughout the project life cycle.

Financial and Project Management  
300 Points





Answer:

What is a Risk Register?

Financial and Project Management  
300 Points



## Question:

A statistical tool used to quantify the probability and impact of risks on achieving cost and schedule goals.

Financial and Project Management  
400 Points



Answer:

What is a Monte Carlo simulation?

Financial and Project Management  
400 Points



## Question:

A list of examples include:

- Misalignment of owner's scope and budget expectations
- Limited or incomplete design
- Poor performance by subcontractors
- Political influence on project goals
- Integrated schedule management across all stakeholders

Financial and Project Management  
500 Points



Answer:

What are common construction risks?

Financial and Project Management  
500 Points



## Question:

Workers' compensation, general liability, and sub-contractor default are three lines of coverage that are often "wrapped" into this insurance structure.

Insurance and Captives  
100 Points



Answer:

What is a Contractor-Controlled Insurance Program (CCIP)?

Insurance and Captives  
100 Points



## Question:

DTA is the acronym for this item on your balance sheet that will shrink if corporate income tax rates decline.

Insurance and Captives  
200 Points





Answer:

What is a deferred tax asset?

Insurance and Captives  
200 Points



## Question:

If your screens go dark, you'd better hope you have this emerging insurance coverage.

Insurance and Captives  
300 Points



Answer:

What is cyber-insurance?

Insurance and Captives  
300 Points



## Question:

This type of insurer is designed more to meet the risk management needs of its non-insurance parent, rather than its own profitability.

Insurance and Captives  
400 Points



Answer:

What is a captive insurer?

Insurance and Captives  
400 Points



## Question:

This is the key ingredient of a loss event that the IRS thinks is necessary for a risk to be considered an insurable risk.

Insurance and Captives  
500 Points



Answer:

What is fortuity?

## Insurance and Captives 500 Points



Question:

This Act causes US companies doing business overseas to reconsider the “practices” of their trusted business partners and subcontractors

Geographic Expansion  
100 Points





Answer:

What is Foreign Corrupt Practices Act?

Geographic Expansion  
100 Points



Question:

US companies may consider little value is gained from this but it's a significant revenue generator for most foreign nations and is often manipulated by wrong doers.

Geographic Expansion  
200 Points



Answer:

What is a Value Added Tax or VAT

Geographic Expansion  
200 Points



Question:

Over \$2.7 billion US is paid daily around the world for this?

Geographic Expansion  
300 Points



Answer:

What is the daily cost of bribes around the globe  
According to the World Bank

Geographic Expansion  
300 Points



Question:

This job that isn't about rainfall but it's what you call a good job to collect bribes?

Geographic Expansion  
400 Points



Answer:

What is a “Wet” government job?

Geographic Expansion  
400 Points



Question:

Loan Assembler, Procurement Advisor, Soil Expeditor, Solar Accessibility Engineer, Ice Diver

Geographic Expansion  
500 Points





Answer:

What are factious job titles used to commit fraud—yeah they actually billed for an Ice Diver on a project in Malaysia

Geographic Expansion  
500 Points





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