



Mitigating Risk with Ongoing Cybersecurity Risk Assessment

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CSO50 Presentation

Caesars Entertainment Cybersecurity Risk Management

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AGENDA



Caesars Entertainment

- Business Environment
- Strategic, Market, Operational & Investment Drivers



Caesars Cybersecurity Risk Management Program

- Business Need
- How the Program Works
- Risk Assessment Benefits



CAESARS BRANDS DIVERSE OFFERING

GAMING, HOSPITALITY, ENTERTAINMENT, FOOD & BEVERAGE, AND RETAIL



CAESARS

Harrah's

HORSESHOE

THE CROMWELL

BALLY'S

Flamingo

THE LINQ

NOBU HOTEL

Paris

ph planet hollywood

rio

HARVEYS

TUNICA ROADHOUSE

WSOP

CAESARS REWARDS





CAESARS HAS A GLOBAL FOOTPRINT FOR GROWTH



- 115M+ ANNUAL GUEST VISITORS
- 55M CAESARS REWARDS MEMBERS
- 63K+ EMPLOYEES WORLDWIDE
- INTERNATIONAL EXPANSION
 - DUBAI
 - MEXICO
 - SOUTH KOREA
- 50+ PROPERTIES IN FIVE COUNTRIES
- #3 LARGEST LIVE ENTERTAINMENT PROMOTER



DIGITAL INNOVATION

MOBILE POINT OF SALE



MOBILE CHECK-IN



ADVANCED DIGITAL ASSISTANT



ESPORTS EVENTS & LOUNGES



REAL TIME LEADERBOARDS



INNOVATION ACCELERATOR





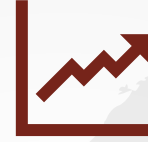
THE NEED FOR CYBER RISK MANAGEMENT



32% YoY increase

In vulnerabilities across industry

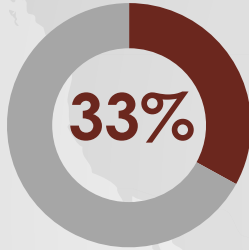
Challenge: Vulnerabilities increase the risk of Cyber attacks against the enterprise



31% YoY increase

In Cybersecurity threats across industry

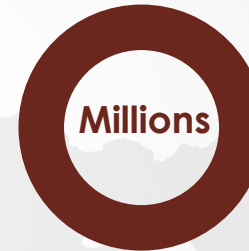
Challenge: Threats must be contained and remediated before impact to business occurs



Of 65K network devices are Windows based

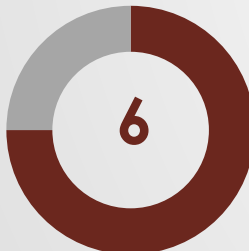
Challenge: Rapid growth in threats against exposed Windows servers

RISK ENVIRONMENT



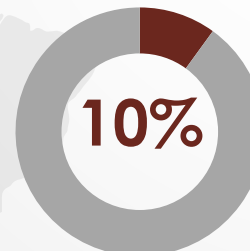
Active customer records

Challenge: Criminal organizations constantly targeting customer data



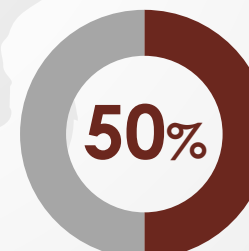
Major cloud platform transformations in past two years

Challenge: Cloud platforms require new security controls, processes, and policy



Staffing increase in past two years

Challenge: Recruiting, training and retaining talented Cyber professionals to keep up with the demand increase

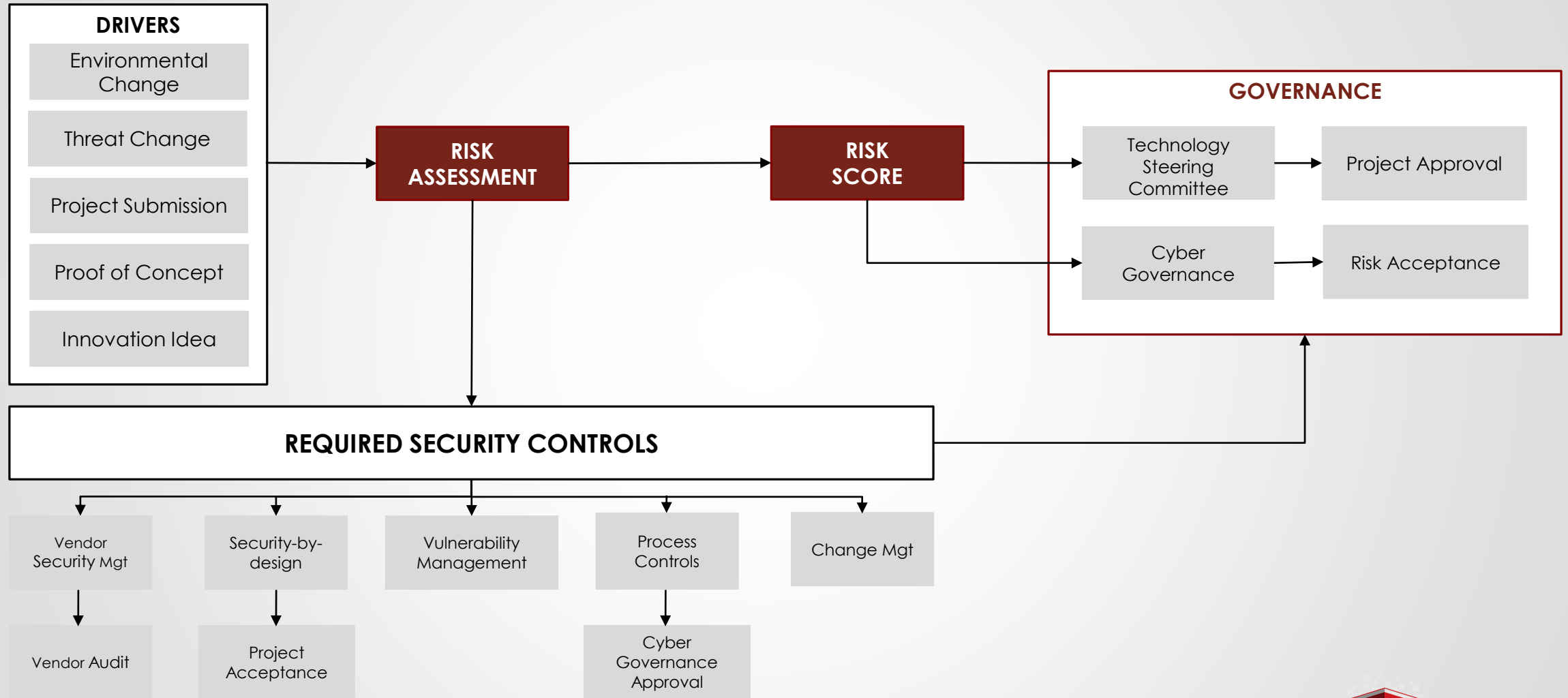


increase in board level inquiries

Challenge: Are the board members asking the best questions or responding to media



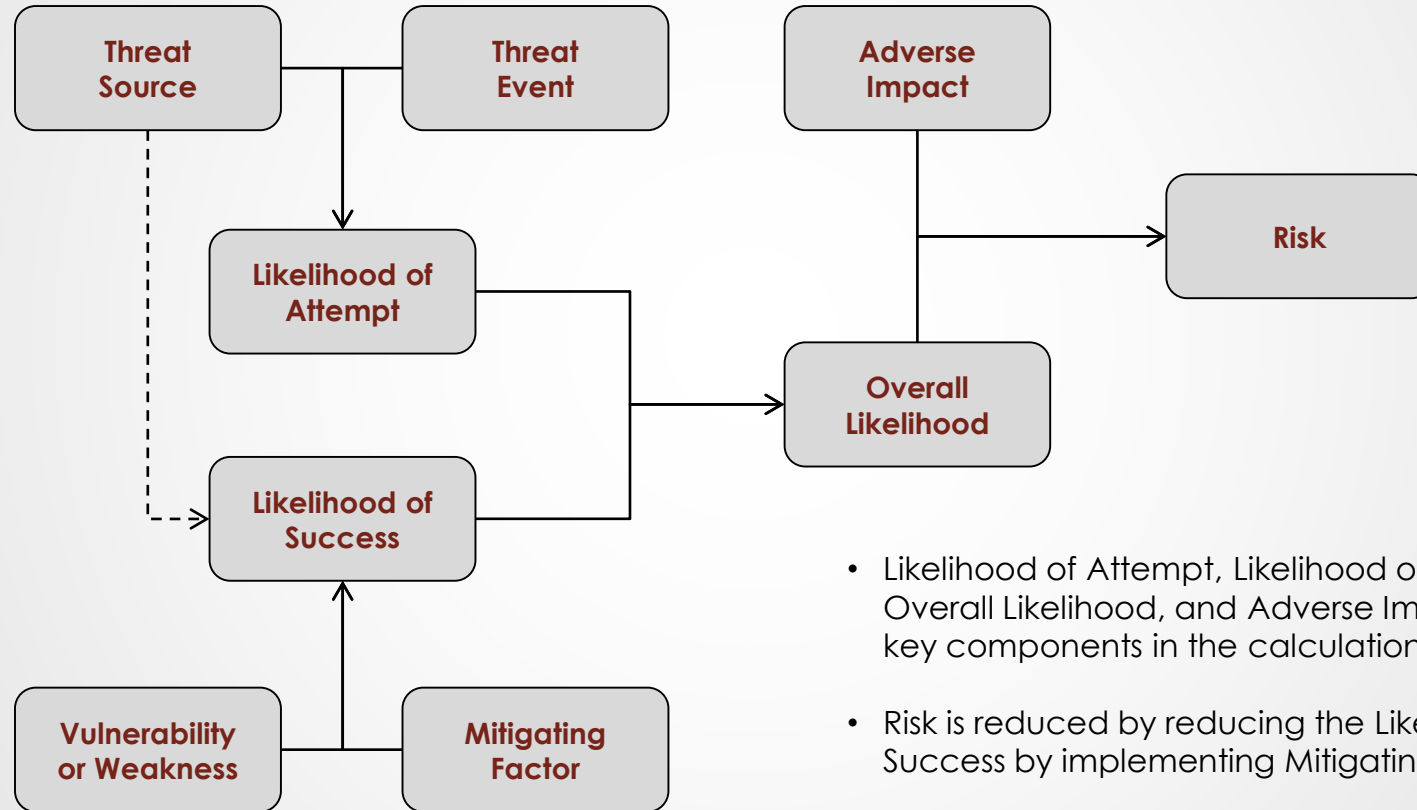
RISK MANAGEMENT PROGRAM





ENTERPRISE RISK ASSESSMENT PROCESS

NIST 800-30 METHODOLOGY WAS USED TO ASSESS THE CORPORATE SHARED ENVIRONMENT AND THREE REPRESENTATIVE PROPERTIES



- Likelihood of Attempt, Likelihood of Success, Overall Likelihood, and Adverse Impact are key components in the calculation of risk.
- Risk is reduced by reducing the Likelihood of Success by implementing Mitigating Controls.



ENTERPRISE RISK ASSESSMENT

DISCOVERY AND ASSET IDENTIFICATION PHASE – SENSITIVE DATA ONLY

- Customer PII, Employee PII, Financial, Legal/Contracts, Company Strategy

DOCUMENTATION REVIEWS, BUSINESS INTERVIEWS, CONTROL REVIEWS

- Architectural and project information as well as Cybersecurity technology
- Meetings with business data and process owners

SECURITY CONTROL MATURITY ASSESSMENT

- Based on NIST CSF both at corporate and property level

ASSESSMENT OF IMPACT AND EVENT LIKELIHOOD

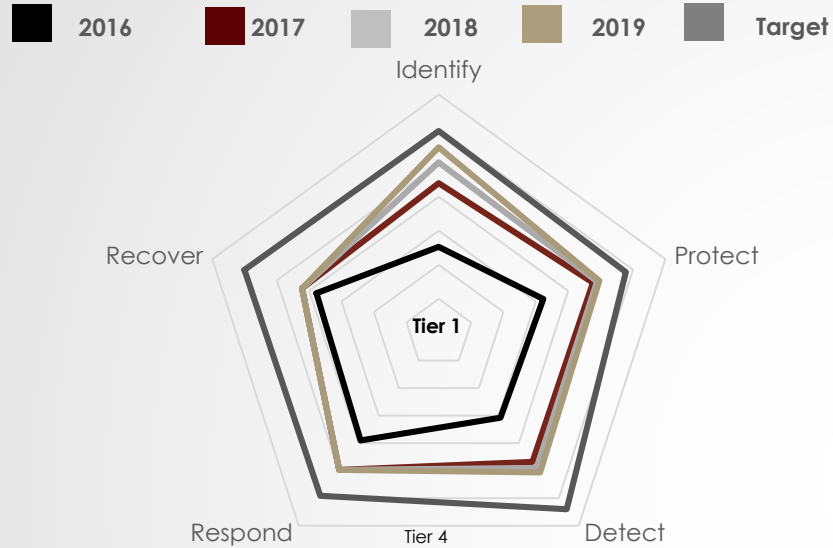
- Threat event impact based on modified CVSS 2.0 with a 3-tier qualitative

RESULTS: RISK REGISTER AND REMEDIATION RECOMMENDATIONS

- Over 3,900 risk entries (95 assets, 18 threat sources, 58 threat events, 41 potential vulnerabilities/exposures)
- 35 prioritized remediation recommendations



CYBERSECURITY MATURITY



108 Cyber Security Framework Controls: *NIST

*NIST Tiers of Cyber Security Readiness

Tier 1	Tier 2	Tier 3	Tier 4
<ul style="list-style-type: none"> Controls not Implemented Ad hoc reaction to cyber threats 	<ul style="list-style-type: none"> Controls partially implemented Formal cyber security policies exist, but not enterprise wide 	<ul style="list-style-type: none"> Controls fully Implemented Security teams can react to cyber events 	<ul style="list-style-type: none"> Controls implemented, enterprise cyber aware & can recover fully from an attack

Example maturity projects

- Security Operating Platform
- Security Incident Orchestration
- Automate vulnerability remediation
- Strengthen password authentication
- Biometric authentication
- Implement multi-factor authentication
- Implement data governance
- Security-by-design/Privacy-by-design
- Application Penetration Testing
- Privileged user certification
- M&A Cyber risk assessments



TAKEAWAYS

A DEFENSIBLE CYBERSECURITY PROGRAM RELIES ON RISK MANAGEMENT

- Focus limited resources both people and budget
- Address the most important risks first

RISK ASSESSMENTS MUST HAVE BUSINESS ENGAGEMENT

- Business identifies data and system criticality as well as the impact of events

REMEDATION ITEMS MUST BE PRIORITIZED, RESOURCED AND EXECUTED

- The list can be overwhelming so prioritization is the essential

USE THE RESULTS EFFECTIVELY TO INFORM AND INFLUENCE THE BUSINESS

- Key metrics/KPIs can influence the SMT and BoD
- Key business leaders and data owners should understand the results
- Results can influence prioritization of resources and projects



QUESTIONS & DISCUSSION

CYBERSECURITY RISK MANAGEMENT