

# CYBER RESILIENCE IN THE CASINO GAMING SPACE

*PRESENTED BY: RMC LEGAL*

*December 13, 2018*

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# MODERATOR

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**Robert R. Russell**  
Gaming Analyst  
Regulatory Management  
Counselors, P.C.

RMC assists businesses in navigating the legal, regulatory and financial systems governing commercial and tribal casino industries. RMC Legal also assists businesses with numerous compliance matters, including the review of company policies related to security and regulatory compliance.

Robert Russell is a governmental and business consultant whose practice primarily focuses on the casino gaming industry. Russell is an active member of the American Gaming Association, Association of Gaming Equipment Manufacturers, as well as the State Gaming Coalition. Russell attended Michigan State University.

[www.rmcllegal.com](http://www.rmcllegal.com)

# SPEAKERS

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**Tracy L. Lechner, Esq.\***

Law Offices of Tracy L. Lechner LLC

[tracy@tracylechnerlaw.com](mailto:tracy@tracylechnerlaw.com)

646.872.8594

\*Admitted in CO, CT and NY only.

Tracy L. Lechner founded the Law Offices of Tracy L. Lechner LLC in April, 2018. Prior to opening her own practice, Lechner led a prominent law firm's Cybersecurity and Technology Transactions, Licensing, Advanced Media and Privacy practice groups. Lechner has served as chief privacy officer, vice president and assistant general counsel to a multi-billion dollar media company, where she interfaced with business teams and senior management to identify and mitigate risk, ensure awareness of "best practices" on data privacy and data security issues and to develop strategic plans for the collection, use and sharing of data.

Lechner has also worked as Assistant Corporate Counsel for a digital advertising network owned by another major media conglomerate, providing strategic business and legal advice in connection with its online advertising, privacy and data collection practices. With more than a decade of in-house experience, Lechner has a unique, inside understanding of the complexities that organizations face in monetizing their data and protecting their assets. Lechner is a member of the International Association of Privacy Professionals ("IAPP") and is accredited by IAPP as a certified information privacy professional in the United States (CIPP/US). She serves as the co-chair of Denver/Boulder International Association of Privacy Professionals (IAPP) KnowledgeNet and is an Adjunct Professor at the University of Colorado School of Law.

# SPEAKERS

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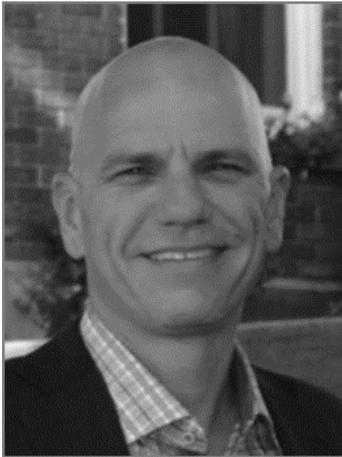
**Maureen Kaplan, CISSP, GSLC**  
Global Head of Sales  
Cloud & Security  
Vodafone Business  
Mobile: +44 7900 202272  
[maureen.kaplan@vodafone.com](mailto:maureen.kaplan@vodafone.com)

Maureen Kaplan has over 18 years of cybersecurity leadership experience, working with organizations to help build their cybersecurity capability, understand the threat landscape and address the risks to their business. She is actively involved in digital transformation projects to evolve legacy systems and embrace new digital ways of working with a focus on “disruptive” ideas. Prior to joining Vodafone, Maureen was Chief Operating Officer for Verizon’s global Managed Security Services.

Kaplan is a frequent presenter to c-level executives on cyber security and effective business risk mitigation strategies. Maureen holds an engineering degree from the University of Michigan, is a Lean Six Sigma Black Belt, and holds Certified Information Security Systems Professional and GIAC Security Leadership Certifications.

# SPEAKERS

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**Ryan Guzal, CISSP, CISM**

Technical Consultant

RMC Cyber | InterLAN Security

phone: 248-820-7767

[guzal@rmccyber.com](mailto:guzal@rmccyber.com)

Ryan Guzal is an information security professional with nearly 25 years experience assisting clients secure corporate infrastructures, implement cyber programs and achieve digital compliance. He recognizes the need for a radical shift in the way businesses view and consume cyber services. Ryan strives to understand the unique challenges his clients face and help them mitigate risk through sustainable solutions.

Guzal is a graduate of Michigan State University, a Certified Information Systems Security Professional (CISSP) and a Certified Information Security Manager (CISM). An emergent strategist, Ryan has consulted with organizations large and small to help them better understand and adapt their digital landscape to align with changing business needs.

# WEBINAR OVERVIEW

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1. Overview of the Cybersecurity Legal and Regulatory Environment
2. Review Cyber Readiness and Awareness of Risks
3. Call to Action – Understand your organization's Security Maturity and path to Cyber Resilience

# CYBERSECURITY: THE REGULATORY ENVIRONMENT

*AN OVERVIEW FOR THE GAMING INDUSTRY*

*Presented By:*

Tracy L. Lechner. Esq.

# US REGULATORY ENVIRONMENT (FEDERAL)

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**US has a patchwork framework that is largely structured around industry.**

1. **Gramm-Leach-Bliley Act** requires financial institutions to protect the security and confidentiality of customers' personal information. Unauthorized access to sensitive customer information requires an investigation and prompt notification of affected customers.
2. **Securities and Exchange Commission (SEC)** uses its civil law authority to bring cybersecurity-related enforcement actions to protect investors, hold bad actors accountable and deter future wrongdoing.
  - SEC guidance calls on public companies to be more forthcoming in disclosing cybersecurity risks even if no breach has occurred and warns corporate insiders not to trade shares based on cybersecurity issues that are not public yet. The guidance stresses the importance of maintaining comprehensive policies and procedures related to cybersecurity risks and incidents.



# US REGULATORY ENVIRONMENT (STATES)

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**Various states have regulations in place addressing the protection of financial and consumer information. California is recognized as having some of the most robust legislation.**

## **California Consumer Privacy Act**

**Effective:  
January 1,  
2020**

Creates a private right of action for consumers whose personal information “is subject to an unauthorized access and exfiltration, theft, or disclosure as a result of the business’ violation of the duty to implement and maintain reasonable security procedures and practices appropriate to the nature of the information.

**Extraterritorial Reach** – applies to any for-profit business that (1) “does business in the state of California”; (2) collects consumers’ personal information and alone, or jointly with others, determines the purposes and means of the processing of consumers’ personal information; and (3) satisfies one or more of the following: (i) has annual gross revenues in excess of \$25 million, (ii) annually buys, receives for the business’s commercial purposes, sells, or shares for commercial purposes, the personal information of 50,000 or more consumers, households or devices, and/or (iii) derives 50 percent or more of its annual revenue from selling consumers’ personal information. (Consumers are natural persons who are California residents)

Data handled pursuant to GLBA is exempt.

**California Data Breach Report 2016** published by Kamala D. Harris (fmr. Attorney General California Department of Justice)

All organizations that collect or maintain personal information should meet all 20 controls in the Center for Internet Security’s Critical Security Controls. **The failure to implement all the Controls that apply to an organization’s environment constitutes a lack of reasonable security.**

Organizations should use multi-factor authentication to protect critical systems and data, and should also make it available on consumer-facing online accounts that contain sensitive personal

Organizations should consistently use strong encryption to protect personal information on laptops and other portable devices and should consider it for desktop computers.

Organizations should encourage individuals affected by a breach of Social Security numbers or driver’s license numbers to place a fraud alert on their credit files and make this option very prominent in their breach notices.

# US REGULATORY ENVIRONMENT (STATES)

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**In the US, 50 states (plus Washington, D.C., Puerto Rico, Guam and the U.S. Virgin Islands) have data breach notification laws)**



## **Each state law has its own deadlines and requirements**

- States have different definitions for what data constitutes “personal information”
- Some states require alternative means of notice when direct contact information is unavailable
- Some states require notification of residents based upon “unauthorized access”
- Some states require a risk of harm analysis
- Some states protect electronic records, not paper records
- South Dakota requires companies to notify consumers of a breach within 60 days of discovery or face fines of up to \$10,000 per day per violation.
- Alabama has a 45-day notification requirement and allows for fines of up to \$5,000 per day.
- Other states, including Arizona, Colorado, Louisiana and Oregon, have amended their laws to address credit freezes, expand the definition of personal information and shorten notification deadlines.

# US REGULATORY ENVIRONMENT (INDUSTRY REGULATION)

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**Payment Card Industry Data Security Standard (PCI DSS)** is a set of security standards that are applicable to all companies that accept, process, store or transmit credit card information and are designed to ensure a secure environment.

Source: <https://www.pcisecuritystandards.org/documents/PCI%20SSC%20Quick%20Reference%20Guide.pdf>

This chart provides supplemental information that does not replace or supersede PCI SSC Security Standards or their supporting documents

Goals	PCI DSS Requirements
Build and Maintain a Secure Network	1. Install and maintain a firewall configuration to protect cardholder data 2. Do not use vendor-supplied defaults for system passwords and other security parameters
Protect Cardholder Data	3. Protect stored cardholder data 4. Encrypt transmission of cardholder data across open, public networks
Maintain a Vulnerability Management Program	5. Use and regularly update anti-virus software or programs 6. Develop and maintain secure systems and applications
Implement Strong Access Control Measures	7. Restrict access to cardholder data by business need to know 8. Assign a unique ID to each person with computer access 9. Restrict physical access to cardholder data
Regularly Monitor and Test Networks	10. Track and monitor all access to network resources and cardholder data 11. Regularly test security systems and processes
Maintain an Information Security Policy	12. Maintain a policy that addresses information security for all personnel

# REGULATORY ENVIRONMENT (ABROAD)

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## There are at least 91 countries with data protection laws

- **The EU General Data Protection Regulation (GDPR)** became effective as of May 25, 2018 and affects companies that collect or processes personal data from EU residents.
  - The law overhauls how data and privacy is regulated in the EU and imposes strict new requirements on any entity that collects or processes personal data from the EU.
  - Non-compliance can result in fines as high as 4% of a company's global revenue.
  - Any person who has suffered "material or non-material damage" as a result of a breach of GDPR has the right to receive compensation (Article 82(1)) from the controller or processor.



## Canada's Personal Information Protection and Electronic Documents Act (PIPEDA)

Principle 4.7: "Personal information shall be protected by security safeguards appropriate to the sensitivity of the information." Canadian courts have upheld extraterritorial application of PIPEDA to companies involved in the collection of personal information in Canada through the offer and provision of services to Canadians.

# REGULATORY ENVIRONMENT FOR EUROPEAN UNION CITIZENS

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## EU: General Data Protection Regulation (GDPR)

- 72-hour data breach reporting requirement.
- Requires that companies who collect personal data from data subject implement appropriate technical and organizational measures to ensure a level of security appropriate to the risk, including:
  - the pseudonymization and encryption of personal data;
  - the ability to ensure the ongoing confidentiality, integrity, availability and resilience of processing systems and services;
  - the ability to restore the availability and access to personal data in a timely manner in the event of a physical or technical incident;
  - a process for regularly testing, assessing and evaluating the effectiveness of technical and organizational measures for ensuring the security of the processing.
- GDPR takes into account “the state of the art and the costs of implementation” and “the nature, scope, context, and purposes of the processing as well as the risk of varying likelihood and severity for the rights and freedoms of natural persons.”
- Adherence to an approved code of conduct or an approved certification mechanism — as described in Article 40 and Article 42, can be used to demonstrate compliance.



# DATA PROCESSING

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"We rarely back up our data. We prefer not to keep a permanent record of everything that goes wrong around here."

The GDPR holds companies responsible for how they **AND** their third-party vendors and service providers process, use, and protect personal data.

- Data Controllers that contract with Data Processors must:
  - Describe what info will be processed, duration and purpose of the processing.
  - Establish the processor's responsibilities.
  - Maintain and exercise audit rights to verify the processor's compliance with contractual obligations and restrictions.
  - Clearly require the processor to comply with security obligations, maintain qualified personnel to protect data privacy, and respect the rights of data subjects (e.g., right of access and right to be forgotten).
  - Keep and require processors to keep records of data processing activities.

**Due diligence, compliance oversight, and appropriate contractual provisions are key!**

# PRACTICAL STEPS TOWARDS COMPLIANCE

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- **Data Mapping & Security Controls.** Determine what data is being collected, how it is being used, why it was collected, how, under what authority, how long it will be retained, how secure it is, and whether it is and/or should be shared with third parties. Identify and redress compliance gaps. Ensure that appropriate security controls are in place.
- **Review and update privacy notices.** Ensure that the company has a legal basis for collecting and processing personal information. Identify and address gaps between the company's data collection and processing practices and what the company has disclosed to data subjects. **Don't misrepresent what the company is doing.**
- **Update contracts, policies and procedures.** Ensure that company policies and procedures are up to date, that consumer contracts and contracts with service providers and vendors contain appropriate disclosures and requirements.
- **Employee Training.** Train employees at regular intervals on security best practices and on company policies and procedures to ensure that they are properly implemented.
- **Incident response preparedness.** Ensure that the company has adequate procedures in place to detect, report, investigate and mitigate a data breach.



# ASSEMBLE EXTERNAL RESOURCES

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## OUTSIDE COUNSEL

Outside counsel can retain and oversee third party service providers to provide breach investigative and response services, advise on breach communications, and put a company in a better position to maintain privilege.

## FORENSIC INVESTIGATORS

Forensic investigators can help identify the cause of a breach, mitigate the breach, and suggest measures to help prevent future breaches.

## PR/GR FIRMS

Public relations firms and government relations firms can help manage the media coverage of and government/consumer perception of a breach.

## CREDIT MONITORING

Identity theft protection and credit monitoring companies can offer better rates if approached before a breach occurs.

## INSURANCE

Insurance companies can provide coverage and resources to help mitigate risk and liability.

## CYBER ADVISERS

Outside consultants can offer additional industry expertise in identifying and mitigating risk.

# Questions?

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**Tracy L. Lechner, Attorney & Founder \***

Law Offices of Tracy L. Lechner, LLC

**[Tracy@tracylechnerlaw.com](mailto:Tracy@tracylechnerlaw.com)**

**646.872.8594**

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# CYBER READINESS

## *CYBER READY BAROMETER RESEARCH*

*Presented By:*

Maureen Kaplan, CISSP, GSLC

# THE CYBER READY BAROMETER RESEARCH

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**Objective:** To assess security readiness across businesses and its affect on success

**4,809** IT leaders, employees and consumers surveyed



Across **9** countries



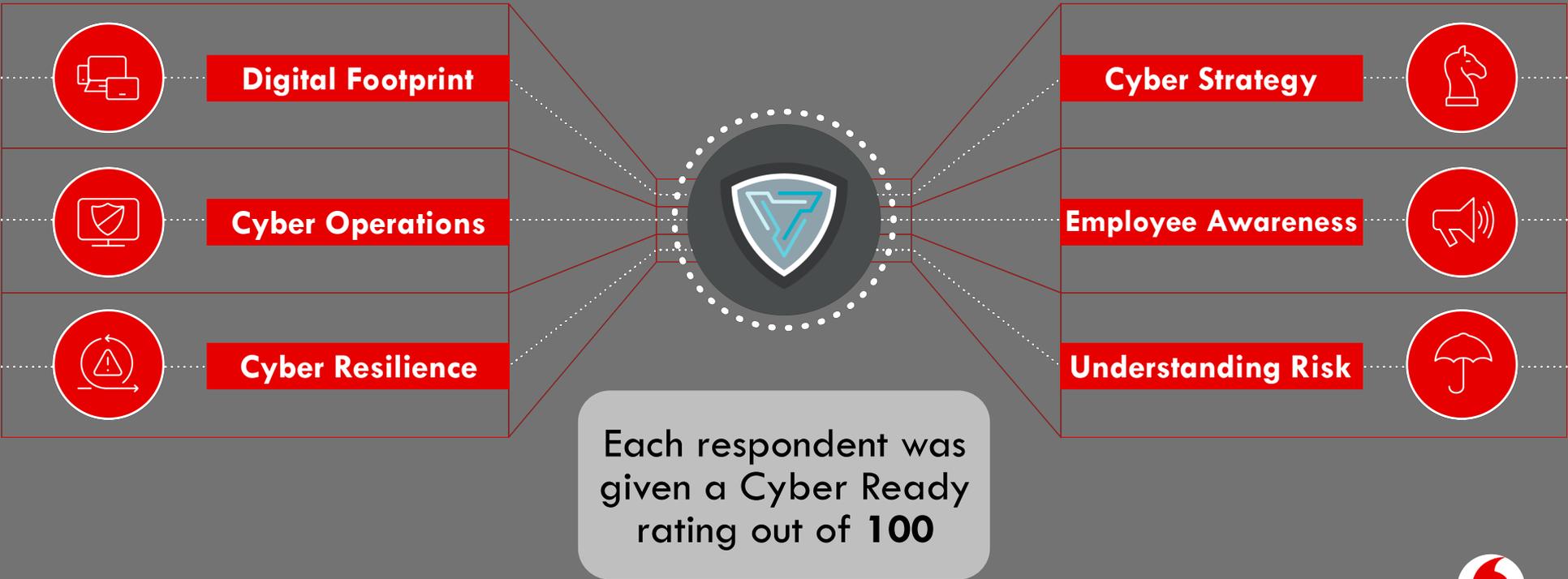
and **8+** verticals including

- Technology & media
- Healthcare & Pharmaceutical
- Financial services
- Transport & logistics
- Retail
- Construction
- Public sector
- Manufacturing



# CYBER READY INDEX: SIX CRITERIA

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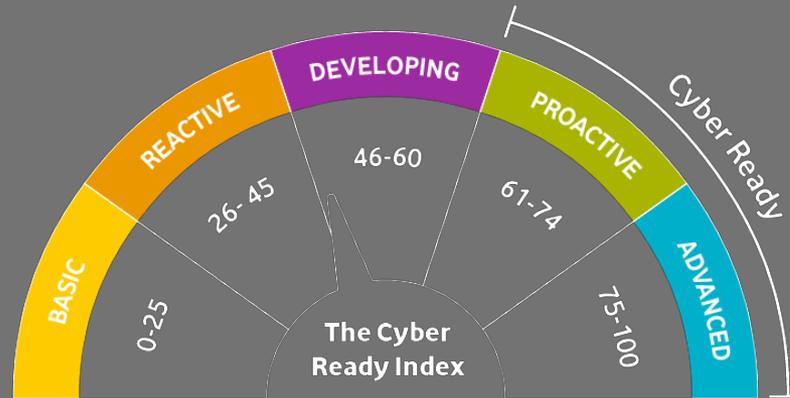


# FIVE LEVELS OF CYBER READINESS

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## 46/100

The average score across all businesses is 46 - Developing readiness.



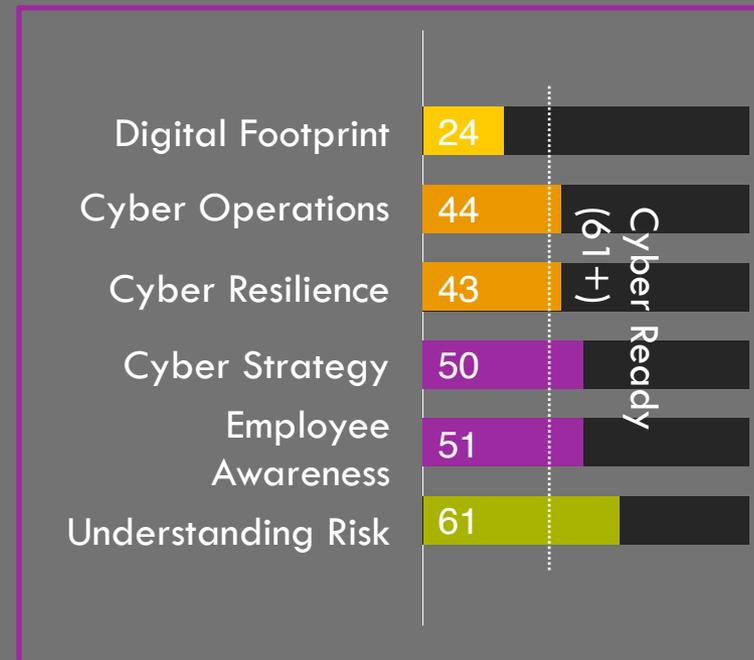
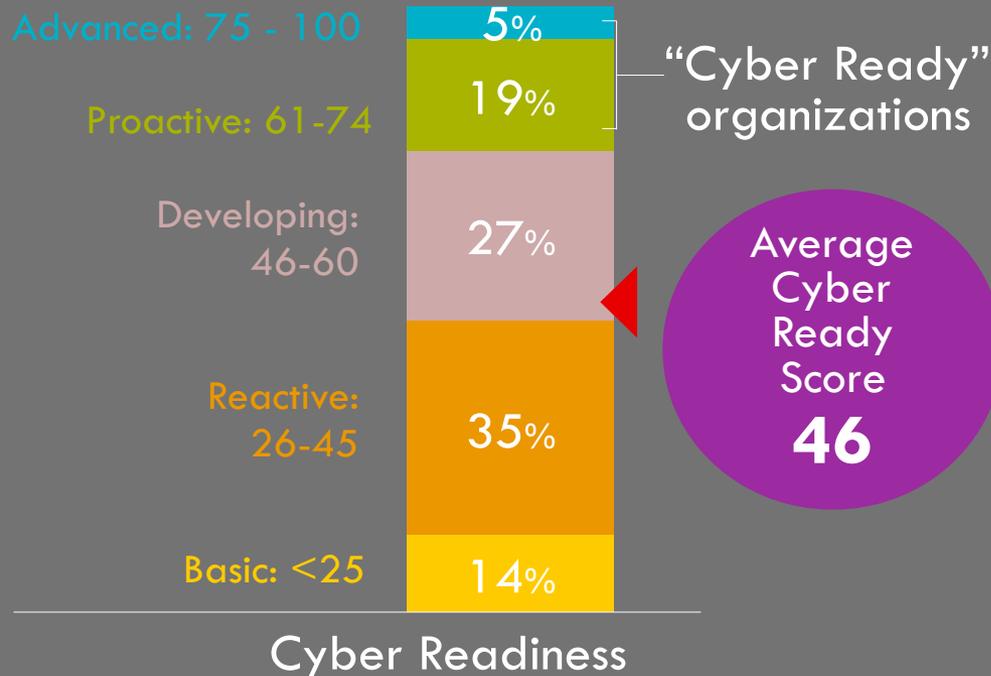
## Only 1 in 4

businesses are Cyber Ready and larger firms are Ready than smaller businesses



# 1. AWARENESS OF CYBER RISK IS INCREASING

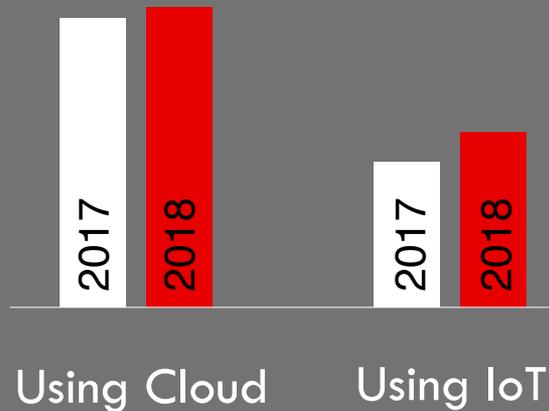
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# 2. CHALLENGE OF EVOLVING DIGITAL FOOTPRINTS

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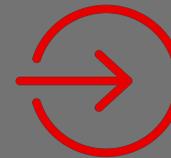
More businesses are using cloud services and IoT devices



The average consumer household uses



**9**  
connected devices



**11**  
online services



# 3. EMPLOYEES AND BUSINESSES HAVE DIFFERING VIEWS

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## Employee engagement needs more focus



47%

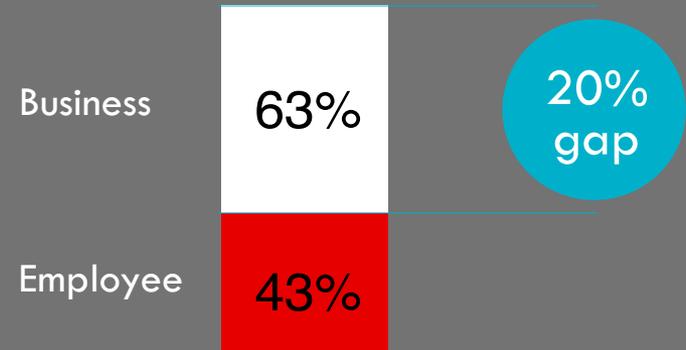
said official policy is followed by all staff



39%

said security is a box-ticking exercise

## Disconnects exist between decision-makers and employees



% staff using "bring your own device" (BYOD) for work



# 4. BUT THE MORE CYBER READY, THE BIGGER THE ADVANTAGE

Advanced



Proactive

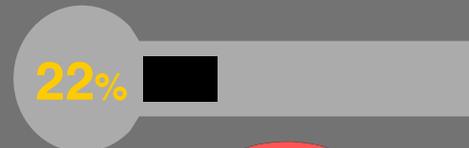


Basic

Stakeholder Trust

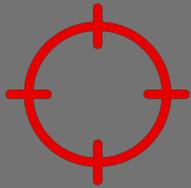


Revenue Growth >5%



# 5. THE CONSUMER SECURITY ADVANTAGE

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**70%**

consider themselves at risk of cyber attack



**43%**

don't trust security measures of companies they use



**63%**

have stopped using an online service due to security concerns

**59%** of consumers would pay more for better security - but just **29%** of businesses think they can charge more



# Questions?

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**Maureen Kaplan, CISSP, GSLC**

**Global Cybersecurity Lead,  
Vodafone Group**

**[maureen.kaplan@vodafone.com](mailto:maureen.kaplan@vodafone.com)**

**+44 7900 202272**

# UNDERSTANDING YOUR ORGANIZATION'S SECURITY MATURITY — *THE PATH TO CYBER RESILIENCE*

*Presented By:*

Ryan Guzal, CISSP, CISM

# SITUATIONAL NOTES

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## **Experts predict cybercrime damages will reach \$6 Trillion for 2021\***

*\*2017 Official Annual Cybercrime Report, Cybersecurity Ventures*

- Losses per incident cost in excess of \$3 Million on average
- Industry facing a shortage of 3 Million resources globally in Information Security

Represents "the greatest transfer of economic wealth in history...will be more profitable than the global trade of all major illegal drugs combined."

Cybercrime is "not just about more sophisticated weaponry, it's as much about the growing number of human and digital targets." And bogeys.

# SITUATIONAL NOTES

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## **Data: The world's 'new natural resource'**

*"We believe that data is ... the new basis of competitive advantage, and it is transforming every profession and industry. If all of this is true—even inevitable—then cybercrime, by definition, is the greatest threat to every profession, every industry, every company in the world."*

*-Ginni Rommety, President and CEO of IBM*

*"It is possible to do a good job at your security...and still get compromised."*  
*-Troy Hunt*

## **From Brian Krebs:**

*Reality #1: Bad guys already have access to personal data points that you may believe should be secret...including your credit card information, Social Security number, mother's maiden name, date of birth, address, previous addresses, phone number, and yes even your credit file.*

*Reality #2: Any data point you share with a company will in all likelihood eventually be hacked, lost, leaked, stolen or sold usually through no fault of your own. And if you're an American...your recourse to do anything about that...is limited or nil.*

# THE CAUSE: RAMPANT EXPOSURE & BREACHES

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- **HSBC** password stuffing - “Hapless Security: Become Compromised” - estimated 1% or roughly 12,000 users
- **Pakistan** debit card breach - reported as “all banks” were hacked. It was actually credit card skimming - 20,000 users affected
- **Google+** - 50 Million users affected
- **Marriott** - 500,000,000 affected
- **India AmEx** - 700,000 users affected - unencrypted DB
- **Facebook** - 50 million users affected, lager found another 80,000+ via another hack.
- **Under Armor** - 150 million
- **Twitter** - 330 million
- **Cathay Pacific** - 9.4 Million



# THE EFFECT: NO CARROT, NEW STICK

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## **Casinos have some unique aspects:**

- Vendor dependent with plug in systems – hotel, gaming systems, and this will expand with Free Play marketing sites and ultimately online gaming
- Data rich environments
- Public policy issues with gaming regulators

## **The regulators are coming:**

*“The SEC has identified public companies’ failure to detect and mitigate effects of cyber fraud as a significant compliance issue warranting robust enforcement.”*

## **Gaming is not far behind:**

- New Jersey’s Division of Gaming Enforcement regulates that all gaming facilities in Atlantic City must have an information security officer.
- GDPR mandates the appointment of a Data Protection Officer if, “your core activities require large scale, regular and systematic monitoring of (EU) individuals.”

# SECURITY MATURITY

	<b>Basic Organizations</b>	<b>Progressing Organizations</b>	<b>Advanced Organizations</b>
<b>Philosophy</b>	Cybersecurity is a "necessary evil."	Cybersecurity must be more integrated into the business.	Cybersecurity is part of the culture.
<b>People</b>	CISO reports to IT. Small security team with minimal skills. High turnover and burnout rate.	CISO reports to COO or other non-IT manager. Larger security team with some autonomy from IT. Remain overworked, understaffed and under-skilled.	CISO reports to CEO and is active with the board. CISO considered a business executive. Large, well-organized staff with good working environment. Skills and staff problems persist due to global cybersecurity shortage.
<b>Process</b>	Informal and ad-hoc. Subservient to IT	Better coordination with IT, but processes remain informal, manual and dependent upon individual contributors.	Documented and formal with an eye toward more scale and automation.
<b>Technology</b>	Elementary security technologies with simple configs. De-centralized security organization with limited coordination across functions. Focus on prevention and regulatory compliance.	More advanced use of security technologies and adoption of tools for incident detection and security analytics.	Building an enterprise security technology architecture. Focus on incident prevention, detection and response. Continual evaluation of new technologies and adding elements to deal with emerging threats and new usage patterns.

# A LOOK AT CONTROLS

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## Basic

- 1 Inventory and Control of Hardware Assets
- 2 Inventory and Control of Software Assets
- 3 Continuous Vulnerability Management
- 4 Controlled Use of Administrative Privileges
- 5 Secure Configuration for Hardware and Software on Mobile Devices, Laptops, Workstations and Servers
- 6 Maintenance, Monitoring and Analysis of Audit Logs

## Foundational

- 7 Email and Web Browser Protections
- 8 Malware Defenses
- 9 Limitation and Control of Network Ports, Protocols, and Services
- 10 Data Recovery Capabilities
- 11 Secure Configuration for Network Devices, such as Firewalls, Routers and Switches
- 12 Boundary Defense
- 13 Data Protection
- 14 Controlled Access Based on the Need to Know
- 15 Wireless Access Control
- 16 Account Monitoring and Control

## Organizational

- 17 Implement a Security Awareness and Training Program
- 18 Application Software Security
- 19 Incident Response and Management
- 20 Penetration Tests and Red Team Exercises

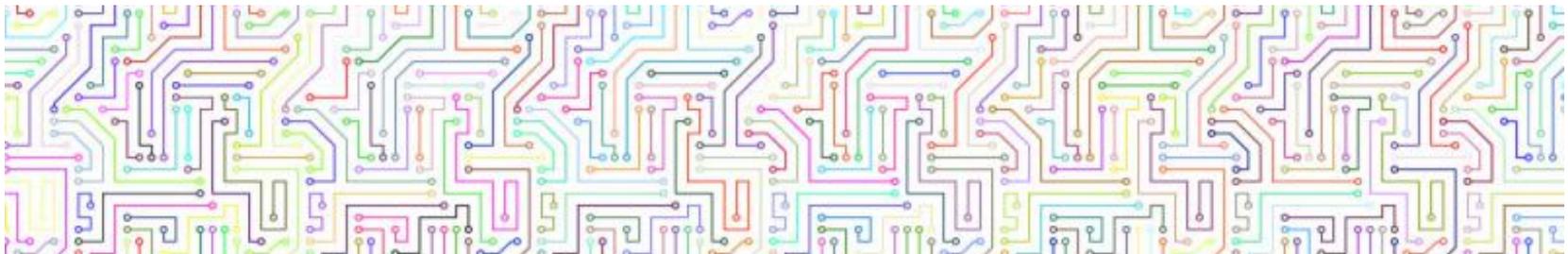
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# THE PATH TO RESILIENCE

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1. Establish a Security Program
  1. Understand your Risk (Risk Assessment / Register)
  2. Adopt a Framework
  3. Maintain a System of Internal Controls
  4. Work the Plan (build out and continuously reassess controls)

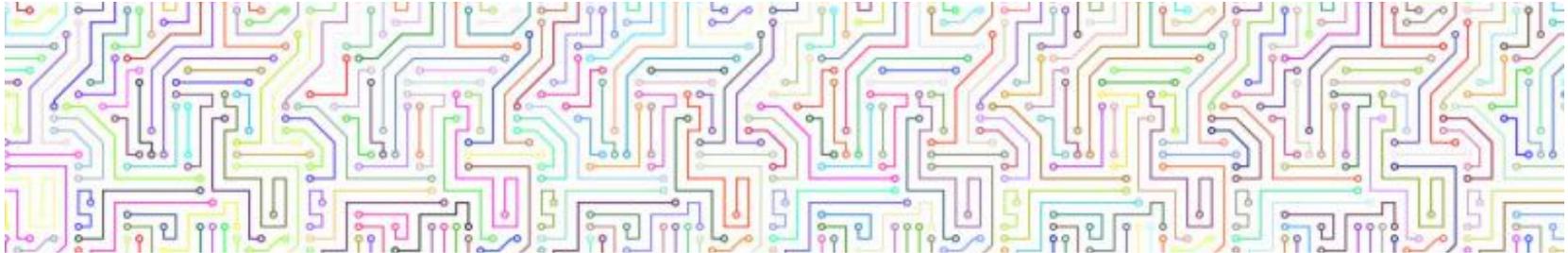


Credit: GDJ/Pixabay

# THE PATH TO RESILIENCE

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Credit: GDJ/Pixabay



2. Focus on the high impact areas
  1. Threat Vulnerability Management (patching, etc)
  2. Business Continuity/DR (backups)
  3. Access Management (especially Privileged Access)
  4. Third Party connections
  5. User Awareness Training

# Questions?

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**Maureen Kaplan**, CISSP, GSLC

Global Cybersecurity Lead, Vodafone Group

[maureen.kaplan@vodafone.com](mailto:maureen.kaplan@vodafone.com)

+44 7900 202272

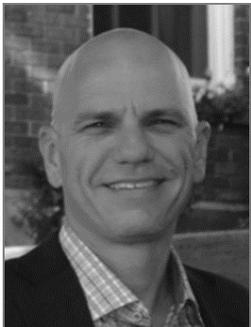
**Tracy L. Lechner**, Attorney & Founder \*

Law Offices of Tracy L. Lechner, LLC

[Tracy@tracylechnerlaw.com](mailto:Tracy@tracylechnerlaw.com)

646.872.8594

\* Admitted in CO, CT and NY only.



**Ryan Guzal**, CISSP, CISM

InterLAN Security | RMC Cyber

[guzal@rmccyber.com](mailto:guzal@rmccyber.com)

248.820.7767

**Robert Russell**

Gaming Analyst,

Regulatory Management Counselors, P.C.

[russell@rmclegal.com](mailto:russell@rmclegal.com)

517.507.3858



# Submit Your Questions

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available at [www.casinowebinar.com](http://www.casinowebinar.com)*

# RESOURCES

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## **National Institute of Standards and Technology (NIST)**

<https://www.nist.gov/cyberframework>

## **Security Program Primer**

<https://www.linkedin.com/pulse/security-program-idea-ryan-guzal/>

## **CIS Risk Assessment Method**

<https://learn.cisecurity.org/cis-ram>

## **Brian Krebs**

<https://krebsonsecurity.com/>

## **HIBP**

<http://www.haveibeenpwned.com>

Created by Troy Hunt, HIBP is a website that tracks breaches and individual email accounts that have been compromised.

## **Vodafone Cyber Ready Barometer**

[https://img.en25.com/Web/VodafoneGroupPLC/%7b1dd2abd4-17b9-4e81-9b23-347f2b41f338%7d\\_Vodafone-Cyber-Ready-Barometer-research-report-2018.pdf](https://img.en25.com/Web/VodafoneGroupPLC/%7b1dd2abd4-17b9-4e81-9b23-347f2b41f338%7d_Vodafone-Cyber-Ready-Barometer-research-report-2018.pdf)