

RSA®Conference2018

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PRIVACY ESSENTIALS FOR SECURITY PROFESSIONALS

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Whose Lookin' At Yur Stuff?



- 84% American Users don't know how to secure email
- 41% of children's profiles visible to all
- 56% Millennials will share location for coupons

Today's Agenda



1. Why Should Security Officers Care About Privacy?

3. Privacy Laws and Common Principles

2. The Language of Privacy

4. Privacy Program Design



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**WHY SHOULD SECURITY OFFICERS CARE
ABOUT PRIVACY?**

We all have our Privacy “Line”



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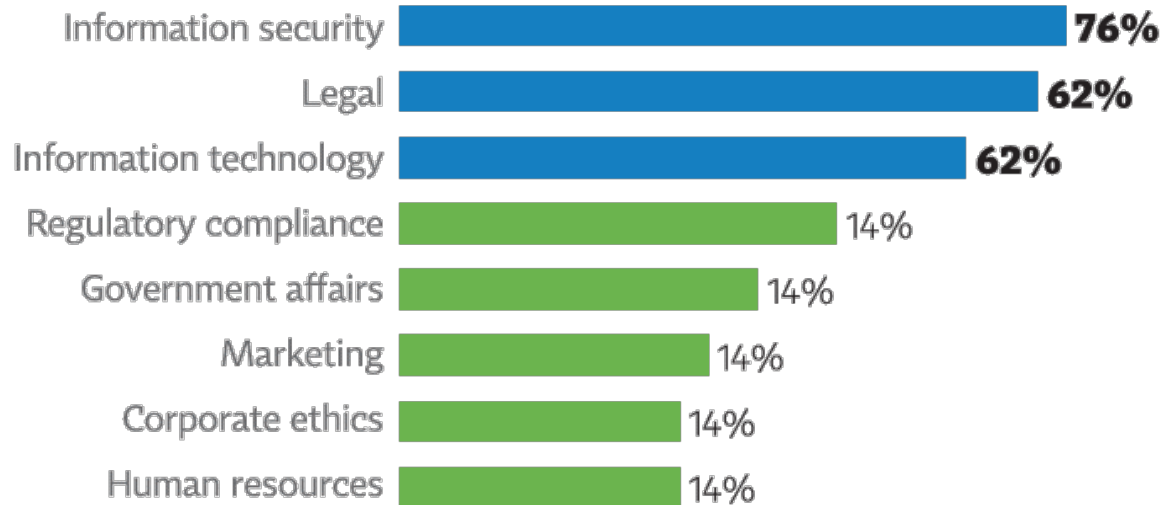
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The Fortune 1000 Is Investing in Privacy and Values Relationships To Information Security



Other Functions Seen as “Very Important” for Privacy Collaboration: Top Mentions

n=28



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Source: Benchmarking Privacy Management and Investments of the Fortune 1000,
IAPP 2014 Research

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The 2018 CISO Evolution



Leadership

Strategic Thinking

Business Knowledge

Risk Management

Communication

Relationship Management

Security Expertise

Technical Expertise



- Plan path away from operations
- Refine risk management processes to business language
- **Widen vision to privacy, data management and compliance**
- Build support network
- Create focus and attention of business leaders



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Source: Forrester Research: Evolve to become
2018 CISO or Face Extinction

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The New CISO will Need to Know Privacy



Regulatory
Compliance Era
Must hire security
officer

The Threat-aware
Cybersecurity, Socially-
Mobile CISO

1990s-2000

2000-2003

2004-2008

2008-2014

2015-20+

Non Existent
Security=Logon & Password
FIRST CISO 1995

The "Risk-oriented"
CISO emerges

The Privacy and
Data-aware CISO



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The Security Professional Has a New Set of Concerns To Address *Beyond Technology*

Lack of Global Trust

Data Location

New Regulations & Fines

Breach Notification

Location Tracking

Changing Responsibilities

Privacy Concerns Impact Our Daily Lives



Privacy Concerns Impact Our Daily Lives



Source: Several videos in this presentation from personal collection of Eugene Schultz, an unforgettable information security pioneer.



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PRIVACY LAWS AND COMMON PRINCIPLES

The Right To Privacy Paper 1890



HARVARD LAW REVIEW.

VOL. IV.

DECEMBER 15, 1890.

NO. 5.

THE RIGHT TO PRIVACY.

"It could be done only on principles of private justice, moral fitness, and public convenience, which, when applied to a new subject, make common law without a precedent; much more when received and approved by usage."

WILLES, J., in *Millar v. Taylor*, 4 Burr. 2305, 2312.

THAT the individual shall have full protection in person and in property is a principle as old as the common law; but it has been found necessary from time to time to define anew the exact nature and extent of such protection. Political, social, and economic changes entail the recognition of new rights, and the common law, in its eternal youth, grows to meet the demands of society. Thus, in very early times, the law gave a remedy only for physical interference with life and property, for trespasses *vi et armis*. Then the "right to life" served only to protect the subject from battery in its various forms; liberty meant freedom from actual restraint; and the right to privacy secured to the in-



Warren



Brandeis

"Right to Life"... "Right to Property"... "Right to enjoy life"... "Right to Liberty"

'RIGHT TO BE LET ALONE'



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Early Privacy Laws and Regulations

1890	"The Right to Privacy" Warren and Brandeis
1947	Article 12 of Universal Declaration of Human Rights
1966	US Freedom of Information Act
1970	Fair Credit Reporting Act
1974	US Privacy Act
1978	France Data Protection Act
1980	Organization for Economic Cooperation and Development (OECD)
1981	Council of Europe Convention on the Protection of Personal Data

Sectoral Laws In US & Canada

Canada Personal Information Protection and Electronic Documents Act (PIPEDA or PIPED Act)

US Privacy Laws

Fair Credit Reporting Act

Health Information Insurance Portability and Accountability Act (HIPAA)

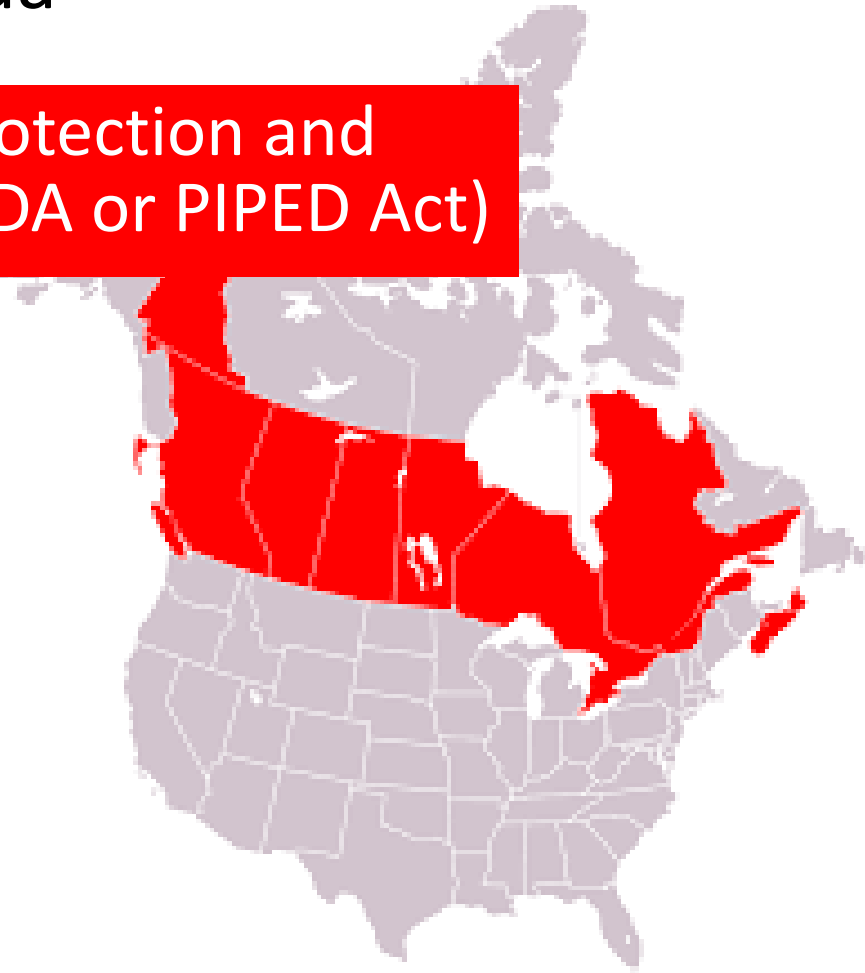
HITECH

State Breach Notification laws

Gramm-Leach-Bliley Act

Children's Online Privacy Protection Act (COPPA)

1974 Privacy Act /FOIA



Co-Regulatory Approach: Australia “the Privacy Amendment (Notifiable Data Breaches) Act of 2017”

“Only required to notify when there is a data breach likely to result in serious harm to any individual the information relates”

Kinds of information

Sensitivity

Protection (Encryption/Access control)

Kinds of persons accessing information



22%

**Australian Small/Medium
Businesses Impacted
By Ransomware**

Source: Malwarebytes, 2nd Annual State of Ransomware Report:
Survey Results for Australia, July 2017



**1995/98 EU Data Directive
2016 General Data
Protection Regulation
(Compliance May 2018)**

European Union Applies a
Comprehensive Data Privacy Approach

EU General 2016 Data Protection Regulation (GDPR) Changes Privacy in May 2018 By...



- Increased Territorial Scope
- Penalties up to 4% revenue or 20 Million Euro
- Consent must be intelligible and accessible
- Breach notification 72 hours
- Right of access – free copy
- Right to be forgotten
- Data Portability
- Privacy By Design
- Data Protection Officers requirements

Organization for Economic Co-operation and Development (OECD) 8 Privacy Principles



- Collection Limitation
- Data Quality
- Purpose Specification
- Use Limitation
- Security Safeguards
- Openness
- Individual Participation
- Accountability



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#1: Collection Limitation Principle



There should be limits to the collection of personal data and any such data should be obtained by lawful and fair means and, where appropriate, with the knowledge or consent of the data subject.

#2: Data Quality Principle



Personal data should be relevant to the purposes for which they are to be used, and, to the extent necessary for those purposes, should be accurate, complete and kept up-to-date.



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#3: Purpose Specification Principle



The purposes for which personal data are collected should be specified not later than at the time of data collection and the subsequent use limited to the fulfilment of those purposes or such others as are not incompatible with those purposes and as are specified on each occasion of change of purpose.



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#4: Use Limitation Principle



- Personal data should not be disclosed, made available or otherwise used for purposes other than those specified in accordance with Paragraph 9
- except:
 - a) with the consent of the data subject; or
 - b) by the authority of law.



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#5: Security Safeguards Principle



Personal data should be protected by reasonable security safeguards against such risks as loss or unauthorized access, destruction, use, modification or disclosure of data.



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#6: Openness Principle



There should be a general policy of openness about developments, practices and policies with respect to personal data. Means should be readily available of establishing the existence and nature of personal data, and the main purposes of their use, as well as the identity and usual residence of the data controller.



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#7: Individual Participation Principle



Right to obtain
confirmation
DATA STORED

REASONABLE
MANNER,
COST and
FORM

Ability to
challenge
denials

REASONABLE
TIME

If denied, be
provided a
reason

Right to erase,
rectify
complete, or
amend
information

#8: Accountability Principle



A data controller should be accountable for complying with measures which give effect to the principles stated above.



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THE LANGUAGE OF PRIVACY

Privacy Language Can Be Foreign To Business Environment...





Source: Several videos in this presentation from personal collection of Eugene Schultz, an unforgettable information security pioneer.



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EU Defines Personal Data



- "Personal data shall mean any information relating to an identified or identifiable natural person ('data subject'); an identifiable person is one who can be identified, directly or indirectly, in particular reference to an identification number or to one or more factors specific to his physical, physiological, mental, economic, cultural or social identity."
- **Sensitive Personal Data** or 'special categories of personal data' are generally prohibited from processing (some exemptions).
- **De-Identified (non-personal) data** – laws generally do not apply after identifying elements removed.

Personal Information Elements



Name

Gender

Age

DOB

Marital Status

Citizenship

Nationality

Languages
Spoken

Veteran Status

Disabled
Status

IP Address

Demographics



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Sensitive Personal Information



EUROPE

UNITED STATES

- Racial or Ethnic Origin
- Political opinion
- Religious or philosophical beliefs
- Trade-union membership
- Health or sex life
- Offenses or criminal convictions

- Social Security Number
- Financial Information
- Driver's License Number
- Medical Records

Data Protection Roles



- Enforcement
- Reporting



Data
Protection
Authority

Data
Subject



Data
Controller

Data
Processor

- Processes on behalf of data controller



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Privacy Policy and Notice



PRIVACY NOTICE

- Initially, periodically
- Clear and conspicuous
- Accurate and complete
- Readable, plain language

- **Privacy Policy** – Internal statement directing employees
- **Privacy Notice**- statement to data subject for collection, use, retention and disclosure of information
- Contracts, application forms, web pages, terms of use, Icons, signs, brochures



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Example Privacy Policy – How the Information is Used



- Which ads you find more useful
- People who matter most to you online
- Videos you like
- Language you speak
- We may associate your phone number with your device
- We Automatically collect and store “certain” information in our server logs

Privacy Policy

Last modified: December 19, 2014 (view archived versions)

There are many different ways you can use our services – to search for and share information, to communicate with other people or to create new content. When you share information with us, for example by creating a Google Account, we can make those services even better – to show you more relevant search results and ads, to help you connect with people or to make sharing with others quicker and easier. As you use our services, we want you to be clear how we’re using information and the ways in which you can protect your privacy.

Our Privacy Policy explains:

What information we collect and why we collect it.

How we use that information.

The choices we offer, including how to access and update information.

We’ve tried to keep it as simple as possible, but if you’re not familiar with terms like cookies, IP addresses, pixel tags and browsers, then read about these key terms first. Your privacy matters to Google so whether you are new to Google or a long time user, please do take the time to get to know our practices – and if you have any questions consult this page.

Information we collect

We collect information to provide better services to all of our users – from figuring out basic stuff like which language you speak, to more complex things like which ads you’ll find most useful, the people who matter most to you online, or which YouTube videos you might like.

We collect information in two ways:

Information you give us. For example, many of our services require you to sign up for a Google Account. When you do, we’ll ask for personal information, like your name, email address, telephone number or credit card. If you want to take full advantage of the sharing features we offer, we might also ask you to create a publicly visible Google Profile, which may include your name and photo.

Information we get from your use of our services. We collect information about the services that you use and how you use them, like when you watch a video on YouTube, visit a website that uses our advertising services, or you view and interact with our ads and content. This information includes:

Device information

We collect device-specific information (such as your hardware model, operating system version, unique device identifiers, and mobile network information including phone number). Google may associate your device identifiers or phone number with your Google Account.

Log information

When you use our services or view content provided by Google, we automatically collect and store certain information in server logs. This includes:



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Privacy Consent



OPT-OUT

- Processed unless data subject objects
- Box pre-checked to accept or check box to opt-out

OPT-IN

- Information processed only if data subject agrees
- Active affirmation



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OPT-IN or OPT-OUT ?



A. DO YOU WANT TO RECEIVE ADDITIONAL INFORMATION?

☒ YES ☐ NO

B. ☐ CHECK BOX IF YOU DO NOT WANT TO RECEIVE MORE INFORMATION

C. DO YOU WANT TO RECEIVE ADDITIONAL INFORMATION ?

☐ YES ☐ NO

D. ☒ PLEASE SEND MORE INFORMATION ABOUT YOUR PRODUCTS



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PRIVACY PROGRAM DESIGN

Privacy Information Life Cycle



Collection

- Limits
- Lawful and fair means
- Consent
- Identified purpose
- Proportionate

Use

- Purposes identified in notice
- Implicit or explicit consent

Retention

- Retain only as long as necessary for purpose
- Securely dispose, destroy, return

Disclosure

- Rights maintained on transfer of data
- New purposes subject to consent



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Privacy By Design – 7 Principles



**IT Practices
Business
Physical**

1. Proactive/ Preventive

2. Privacy By Default

3. Embedded In Design

4. Positive-Sum Not Zero-Sum

5. End-End Lifecycle Protection

6. Visibility/Transparency

7. Respect for Users



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FINAL THOUGHTS/NEXT STEPS

Data+Privacy+Security+Risk= New Focus



Regulatory
Compliance Era
Must hire security
officer

The Threat-aware
Cybersecurity, Socially-
Mobile CISO

1990s-2000 2000-2003 2004-2008 2008-2014 2015-20+

Non Existent
Security=Logon & Password
FIRST CISO 1995

The 'Risk-oriented'
CISO emerges

The Privacy and
Data-aware CISO



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Today We Explored...



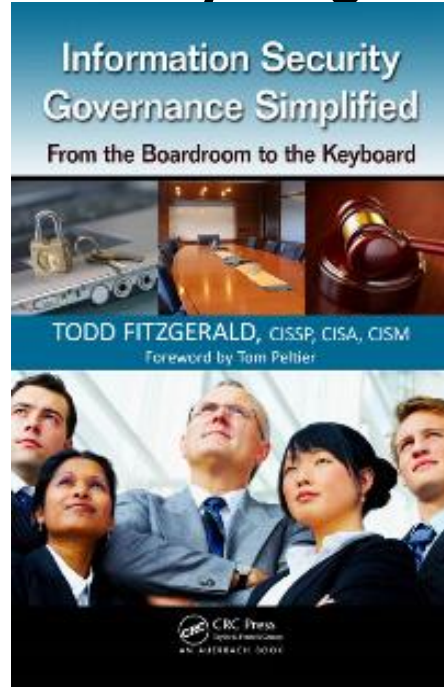
- Why Privacy should be Important to the security officer
- 8 information OECD Privacy Principles
- Global laws impacting privacy
- Building a program through Privacy By Design Principles
- Understanding the data elements and language of privacy

Resources to Further Information Security Program (Available in RSA Book Store)



2 Books
Available To
BUILD and
LEAD your
Information
Security
Program
**SIGNING IN RSA
BOOKSTORE**

Steps To Build An Information Security Program



CISO Leadership Skills To Lead Program – Insight by Industry Experts & Pioneers



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Apply What You Have Learned Today

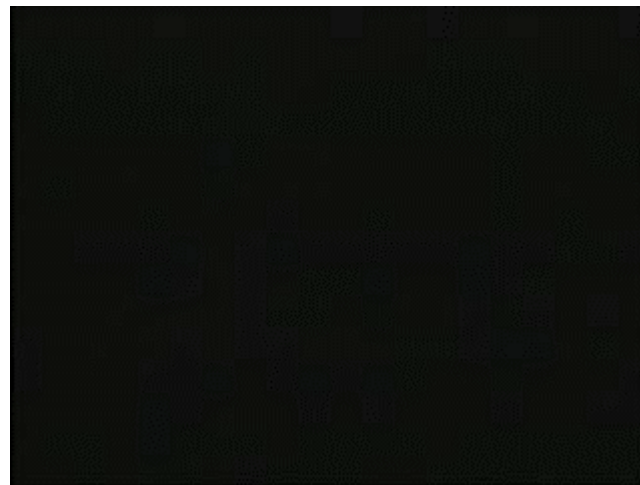


- Next week you should:
 - Schedule a meet n greet with the privacy officer or legal dept.
- In the first three months following this presentation you should:
 - Read the EU Data Protection Directive and any local laws
 - Visit the International Association of Privacy Professionals (IAPP) website at www.privacyassociation.org
 - Examine your organization's privacy policies
- Within six months you should:
 - Go forward with a privacy certification
 - Drive an assessment project (with the privacy officer) to determine where the privacy gaps are
 - Begin educating the workforce on privacy principles with regional meetings

Will This Be Your Security Program's Future?



Will This Be Your Security Program's Future?



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Thank You Very Much For Your Participation!



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