



Data Privacy... **Solved.**

## Why Your Privacy Matters

Brad Kelso & Steve Kerler,  
Co-Founders & Managing Partners

# Who Are We?

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**Brad Kelso**

Co-Founder & Managing Partner



**Steve Kerler**

Co-Founder & Managing Partner

## Privageo is Data Privacy solutions firm:

- **Addressing the full scope of the Privacy ecosystem**
- **Executing meaningful solutions for our clients**  
(versus strategy binders that sit on a shelf)
- **Delivering Data Privacy consulting and solutions**
  - A repeatable set of Privacy IP for consultants and clients
- **Founders of PrivacyOC Community in SOCAL**
  - Building an online education and networking community
  - Sponsor and organizer of in-person conferences

**PrivacyOC**

SoCal's Premier Data Privacy Event

 **privageo**

# Agenda

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- What data privacy means to YOU?
  - Why YOU should care!
- The latest issues in Privacy and Security?
  - Data Use, New Technologies and their impact
- Your Data - Legal Protections
  - Highlights from the new California Privacy Rights Act (CPRA)
- The NEW Commercial Landscape of Privacy
  - The responses from consumers and companies

# What Privacy Means to YOU

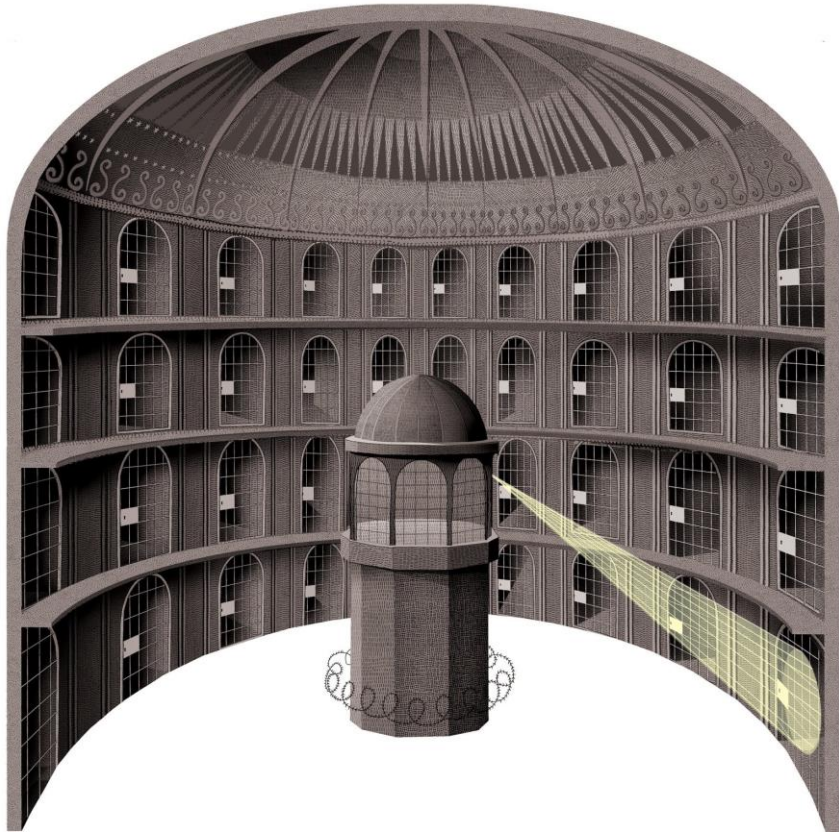
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... and why YOU should care!

**PRIVACY = FREEDOM**

# Panopticon – Jeremy Bentham

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**PRIVACY = A Human Right**

**PRIVACY = Personal Choice**

# Privacy's *Long Term* Impact – “Our” Kids

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**Technology adoption by Millennials is just... ‘water.’**  
...social media, photos, texts, shopping, communications, chat, memes, entertainment, news, streaming media, health, gaming, food delivery, collaboration, work from home, education, geo-location, investing...

What don't they know? They've created a lasting...

## Digital Identity

**Today?:** This footprint's use is limited to their digital and virtual interactions with people.

**Next 10 yrs?:** This digital ID (personal psychographic) will mature and directly influence live in real world.



# Privacy's even *Longer Term* Impact – Teens!

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“Teens are way too comfortable sharing data; they’ve never known a world otherwise.”

## **Downside?**

Depression – Addiction -- Anxiety -- Bullying -- Feeling Inadequate --Suicide

## **Warning?**

Long-term damage from unethical data use, privacy violations and algorithmic biases.

Hacks, identity theft, disinformation, misinformation and deep fakes are only going to increase in the coming decade. All users need to minimize the risks to protect our generation and future generations.”

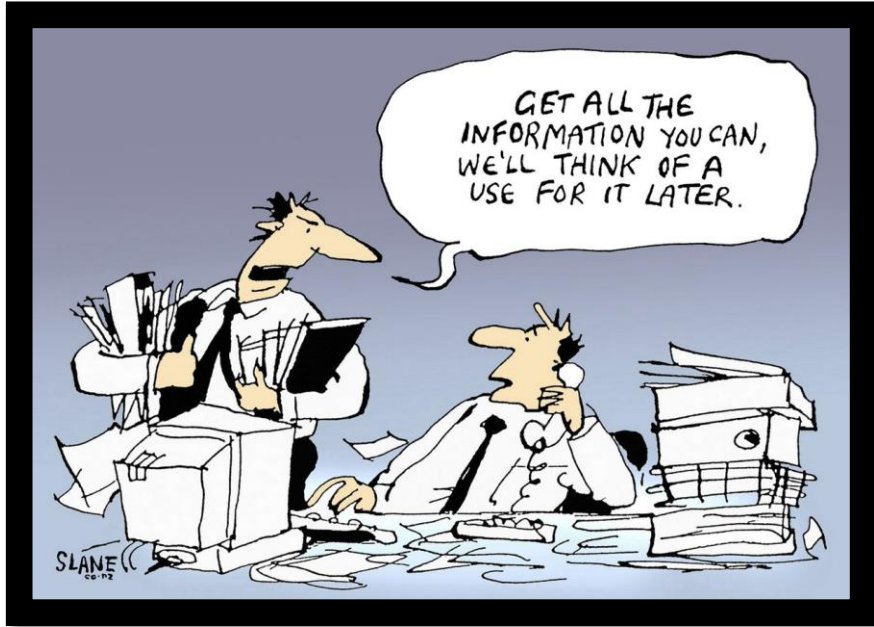
Ari Lighthouse, January 2021, Carnegie Mellon, Center for Machine Learning and Health

# **Latest Issues in Data Privacy & Security**

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**Your Data is Being “Borrowed”!**

# ... or is it being **TAKEN?**



## Services



GEOFENCING



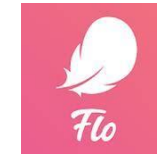
## Products



## Healthcare

**Privacy Concerns Continue To Prevent Contact Tracing App Use**

By Kayla Hui, MPH Fact checked by Ashley Hall  
November 28, 2020



**What Your Period Tracker App Knows About You**

These apps are popular, but they raise concerns about what happens to the very personal data they collect

By Dorina Rosato  
Last updated: January 28, 2020



# How Your Data Is Being **USED!**

# License Plate Scanning

NEWS

## Stanton Plans to Install License Plate Reading Cameras on Major Roadways In and Out of City



BY BRANDON PHO Jan. 26, 2021

Politics & Government

## Lake Forest Residents Invited To Learn About Police Technology

Lake Forest Police Chief Chad Taylor and others will answer public questions about helicopters, drones, and license plate reading technology



Michael Wittner, Patch Staff  
Posted Fri, Nov 27, 2020 at 12:26 pm PT



Drones



License Plate Scanning

In Your HOME

# Ring Doorbells - Privacy Invasion or Worthwhile?

## Amazon Doubles Down on Ring Partnerships With Law Enforcement

The company's top hardware executive told WIRED he's "proud" of the controversial program and hinted at a future with more facial recognition.



*Somebody's Watching: Hackers Breach Ring Home Security Cameras*

## LAPD Requested Ring Footage of Black Lives Matter Protests

BY [MATTHEW GUARIGLIA](#) AND [DAVE MAASS](#)  
FEBRUARY 16, 2021



TikToker catches boyfriend cheating through Ring doorbell

'When you find out your boyfriend's been cheating through Ring doorbell.'

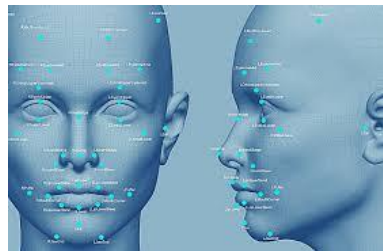
Mar 15, 2021, 10:10 am\* Internet Culture  Alexandra Samuels

# Using Your FACIAL IMAGE

## Facial Recognition Technologies: Clearview AI Case

### The Secretive Company That Might End Privacy as We Know It

A little-known start-up helps law enforcement match photos of unknown people to their online images — and “might lead to a dystopian future or something,” a backer says.



GIZMODO

#### Police Use of Clearview AI's Facial Recognition Tech Spiked After Capitol Raid

Alyse Stanley · 1/10/2021



#### ACLU sues facial recognition firm Clearview AI, calling it a 'nightmare scenario' for privacy

Alleging Clearview violated a well-known Illinois biometric privacy law

By Nick Statt | @nickstatt | May 28, 2020, 1:13pm EDT

"Thousands of local police officers and federal agents, including ICE agents, can pull up Clearview on their phones, take your photo, and know everything about you."  
—Jacinta Gonzalez, Mijente

TECH

#### Clearview AI, which has facial recognition database of 3 billion images, faces data theft

Mike Snider USA TODAY

Published 4:34 p.m. ET Feb. 26, 2020 | Updated 10:09 a.m. ET Feb. 27, 2020

#### Clearview AI's Misconduct Opens Larger Discussion Around Privacy and Use of Technology in Canadian Retail Locations

By Sean Lantry February 7, 2021



Facial Recognition

CANADA

#### RCMP used Clearview AI facial recognition tool in 15 child exploitation cases, helped rescue 2 kids



By Andrew Russell · Global News

Posted February 27, 2020 6:40 pm · Updated March 10, 2020 11:37 pm

#### Suit: Company built 'most dangerous' facial recognition AI database in nation

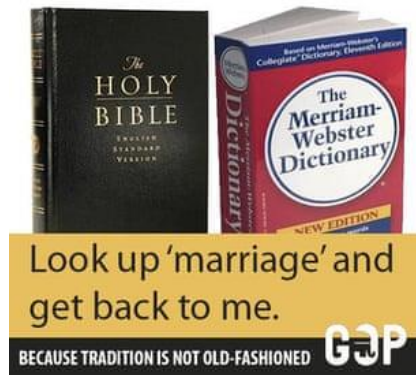
Published 5 days ago | Technology | Associated Press

# Using Your PERSONALITY!

## Artificial Intelligence Cambridge Analytica Case

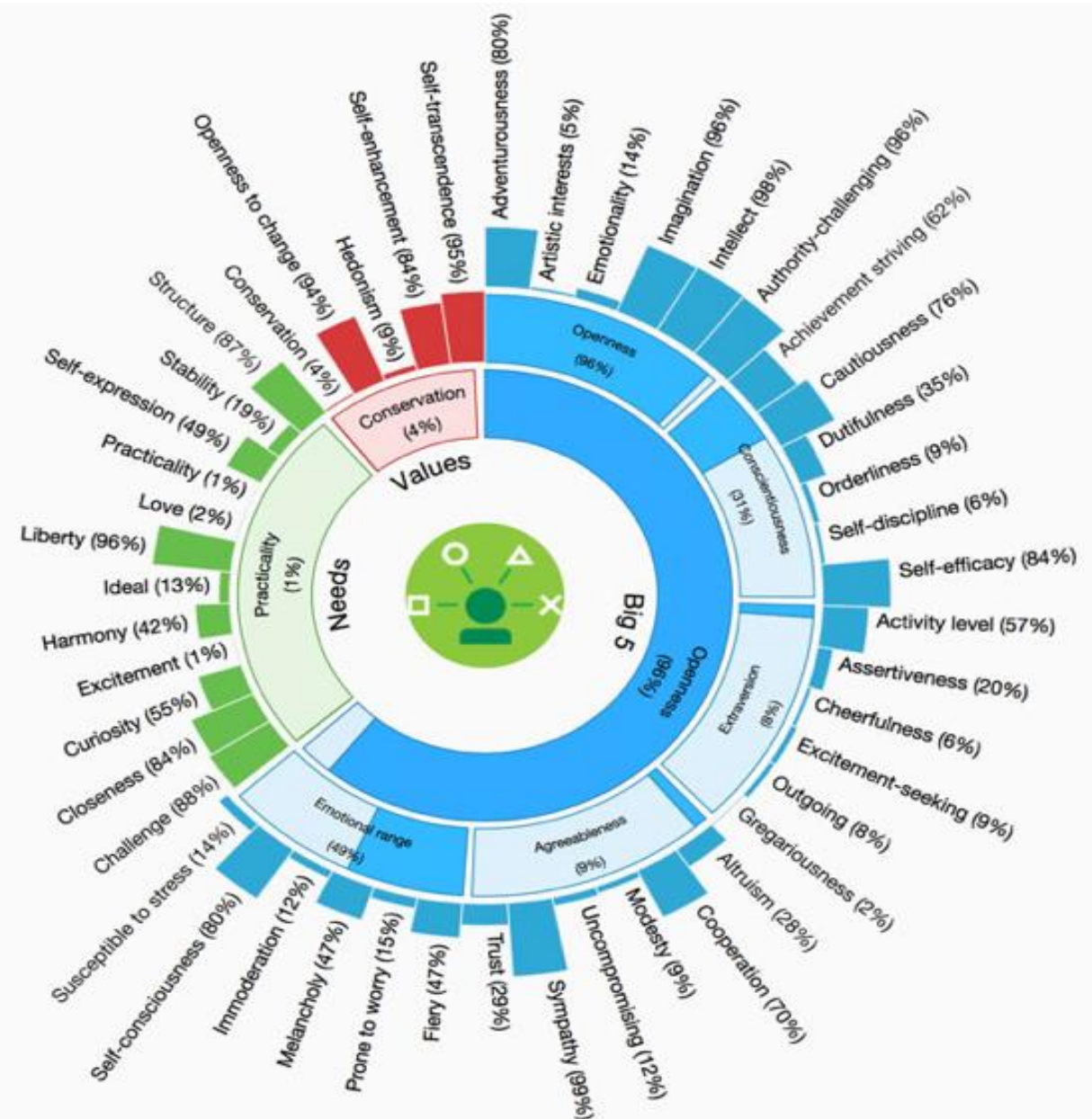


- 87 million Facebook users
- 5000 data points each!
- Personality quiz to determine personality profiles
  - Results from user's friends captured also
- **RESULT? \$5 Billion** penalty!
  - What Facebook makes in about 3 months!



### EXAMPLE:

Someone who is "Conscientious" " may get this compelling ad. Dictionary is a source of order and a conscientious person is deferential to order



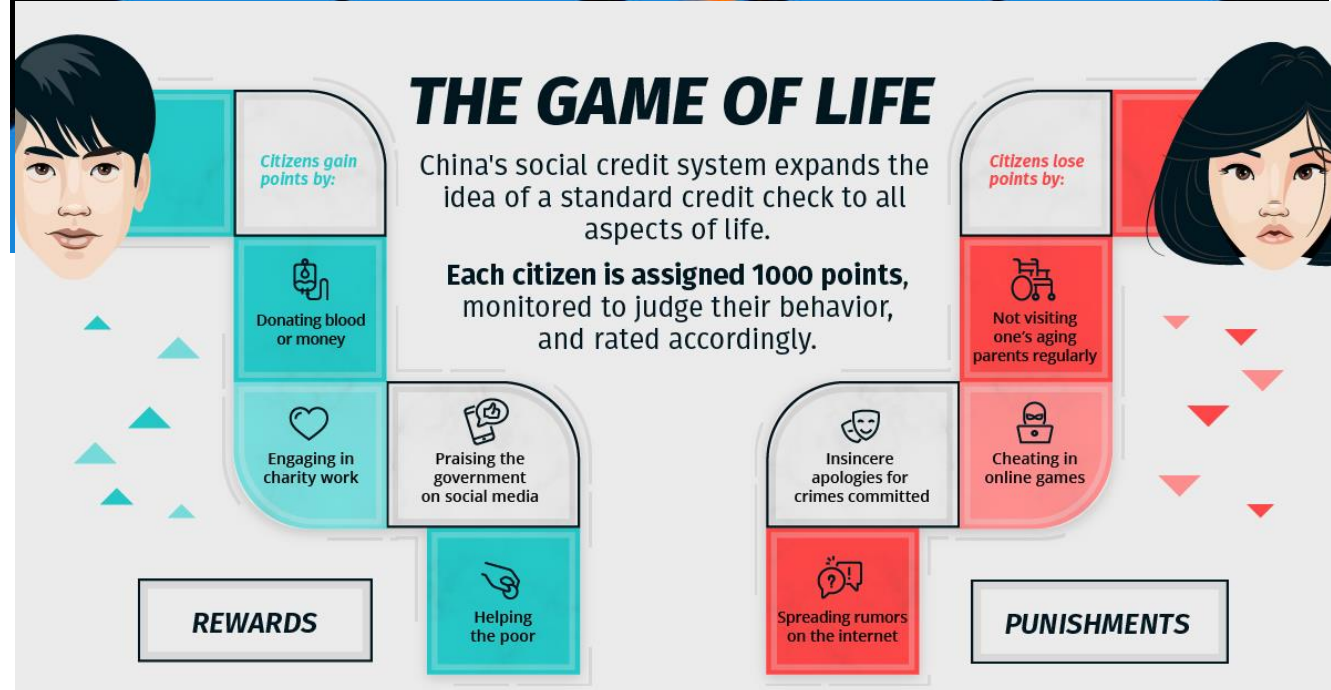
IBM Watson personality prediction



## Defining YOU!

# Now 'Who' Are You?

- Old YOU - Entrenched Scores:
  - “Fair Isaac” plus each of 3 bureaus
  - “Income” (now +/-15% accuracy)
  - “Psychographics” (propensity to buy)
  - “Lifestyles” 66 per Experian
  - “Rank” GPAs, SAT’s, Class, DMV, BBB
  - Chinese? Social Credit Score
- New YOU - New subjective
  - Sift: “Can you be trusted?” (Airbnb, OK Cupid)
  - Zeta: Do you have \$ to spend? (BMW)
  - Retailer Equation: Will you return purchases?
  - My Life: Personal Reputation? (employment, dating)
  - OCEAN: How ‘persuadable’ are you? (Politics)
  - Riskified: How ‘crooked’ are you? (fraud)



**Your Data Has Been **STOLEN!****

	Product	Avg.Price (US\$)
<b>Cards</b>	Cloned Mastercard with PIN	\$25
	Cloned American Express with PIN	\$35
	Cloned VISA with PIN	\$25
	Credit card details, account balance up to \$5,000	\$240
	Stolen online banking logins, minimum \$100 on account	\$40
	Stolen online banking logins, minimum \$2,000 on account	\$120
	Israel hacked credit card details with CVV	\$65
<b>Payment</b>	Stolen PayPal account details, minimum \$1,000	\$120
<b>Social Mec</b>	Hacked Facebook account	\$65
	Hacked Gmail account	\$80
	LinkedIn company page followers x 1000	\$12
<b>Hacked</b>	Netflix account – 1 year subscription	\$44
	Adobe Creative Cloud 1 year	\$160
	eBay account with good reputation (1,000+ feedback)	\$1,000
<b>Forged</b>	US valid social security number	\$2
	Fake US Green Card	\$150
	AAA emergency road service membership card	\$70
	Wells Fargo bank statement	\$25
	Wells Fargo bank statement with transactions	\$80
	US driver's license	\$100
	US, Canada, or Europe passport	\$1,500
	<b>Email DB's</b>	Private USA dentists database 122k
	USA Voter Database (various states)	\$100
<b>Malware</b>	Global low quality, slow speed, low success rate x 1000	\$50
	USA, CA, UK, AU low quality, slow speed, low success rate x 1000	\$900
	USA high quality x 1000	\$1,900
	CA high quality x 1000	\$1,400
	Premium x 1000	\$5,000

# Are “You” for Sale?

Yes, your data is being bought and sold by nefarious actors in the dark web.

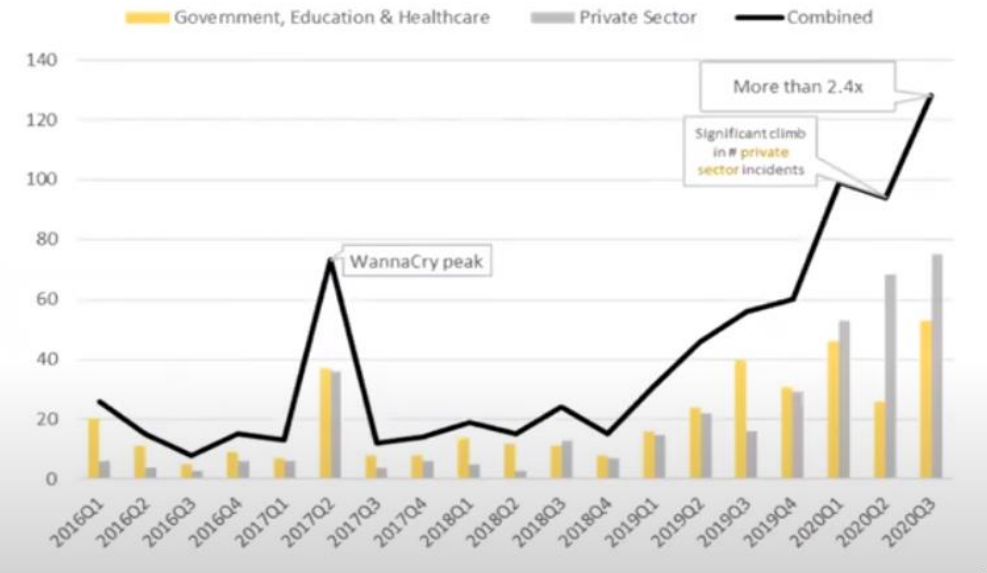
- Credit Cards
- Payment Processing accounts
- Social Media Hacks
- Forged Documents
- User Names / Passwords
- Email Databases
- Malware on Endpoints

# Ransomed 2020!

Your Files are Encrypted. You have 5 DAYS to

to submit payment, or your data will be LOST!

## Ransomware Incident Volume

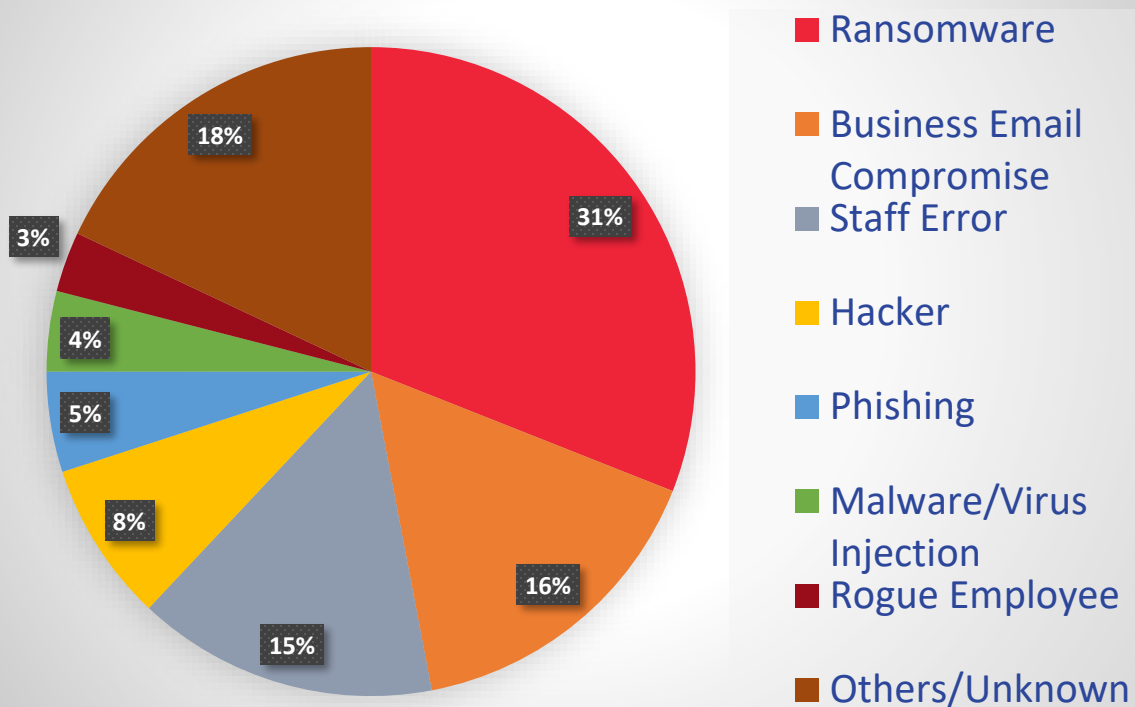


### 700% increase in Ransomware Attacks since 2018

- Increasingly patient (7-9 months)
- Smarter: they're corrupting your back-ups
- Exfiltrating data/interrupting Ops
- They often return to ransom using side-doors

Insurance is Paying – Est'd \$20B in 2020

## 2019 Claims by Loss Type For Small and Mid Size Enterprises



Source: Net Diligence Cyber Claims Study 2020

# Top Causes of Loss

## Preventing Loss tactics:

1. Segregate and encrypted offline back ups
2. Create, maintain and practice a Cyber Incidence Response plan
3. Scan for vulnerabilities regularly
4. Patch and update software
5. Enable security on devices
6. Use Multi-factor Authentication
7. Train Employees...continuously
8. Disable Server Message Block

Source: Cybersecurity and Infrastructure Security Agency

# Your Data - Legal Protections

# The LEGAL Response

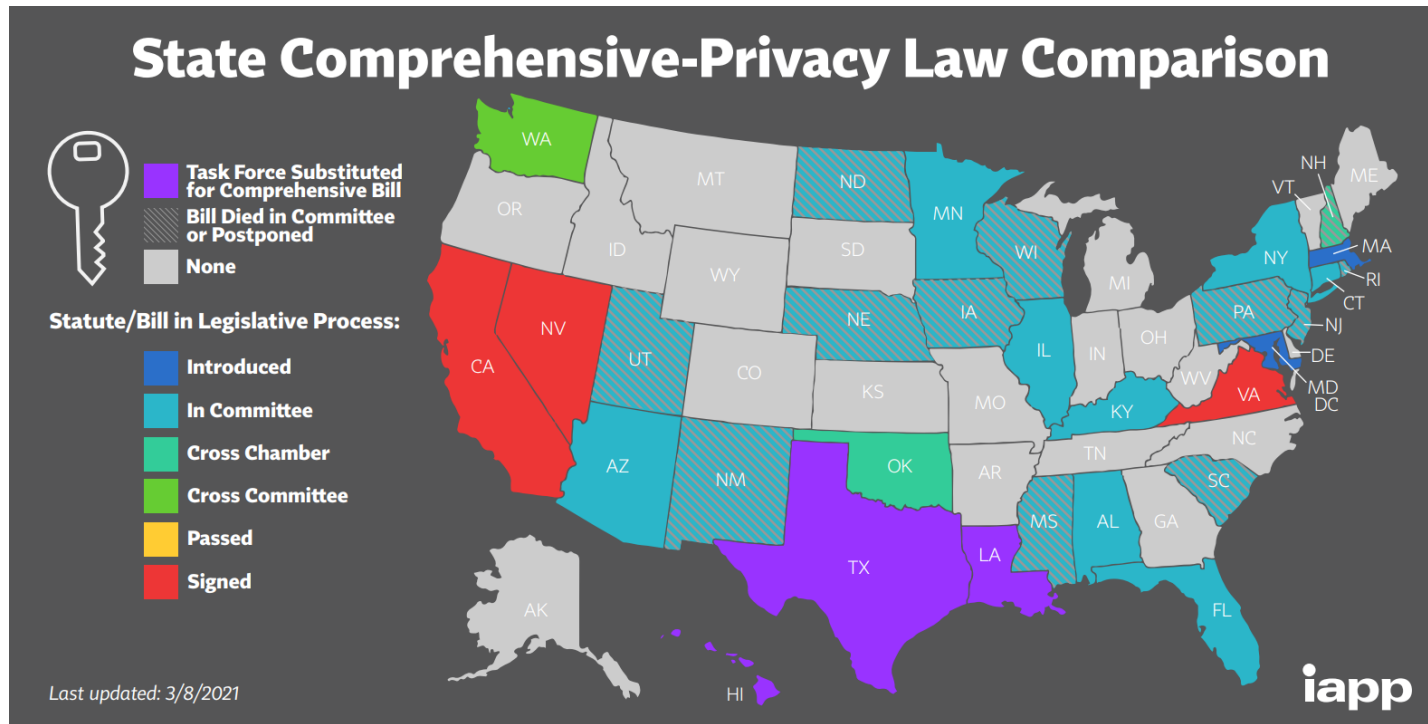
**In the U.S.**  
*(by sector or state)*



**Globally!**  
*(by country)*



... and others



Europe (GDPR)



Brazil



~~Privacy Shield~~



Canada

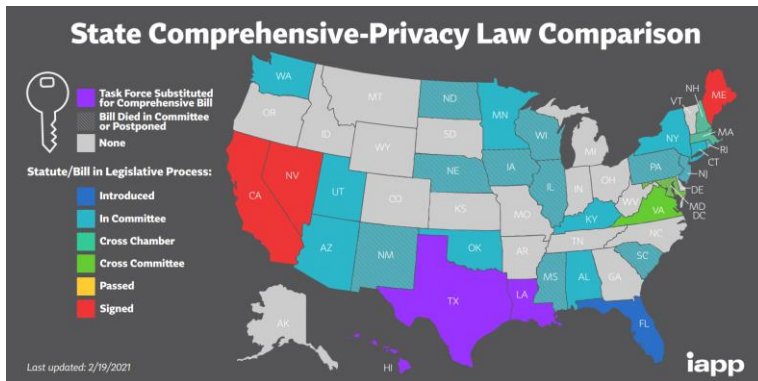
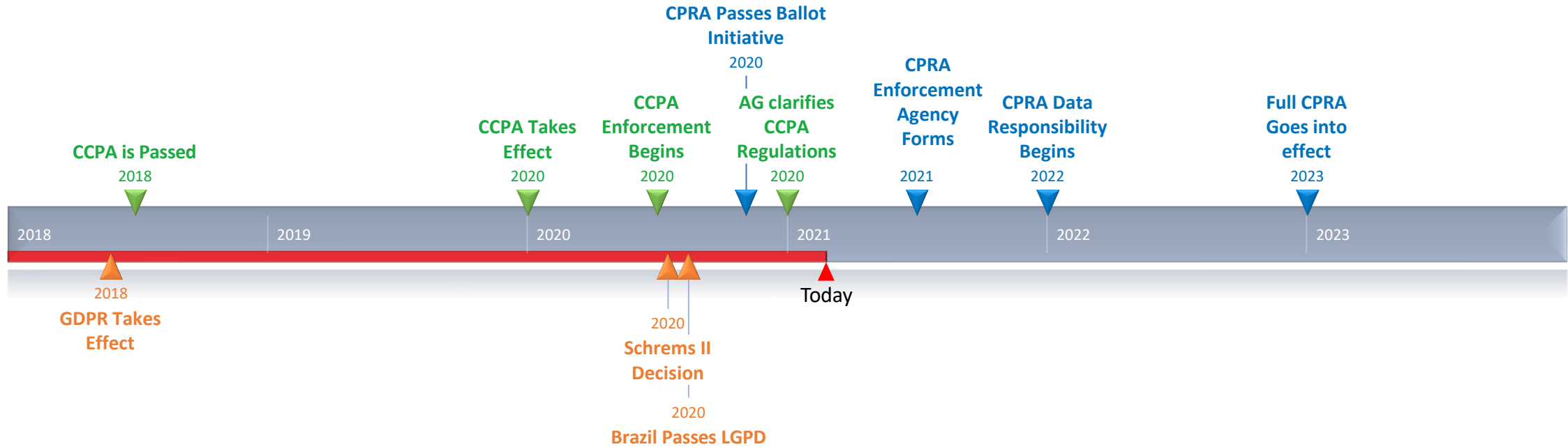


South Africa

... and More!



# Data Privacy Regulation Timeline



5 CCPA Revisions Passed

21 CPRA Regulations to Draft

# New Consumer Rights

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1. To **Know** what personal data the business has collected about them
2. To **Delete & Correct** their personal data used by the business
3. To **Disclosure** of their personal data in a “portable format”
4. To **Opt-out** of the **SALE** of their data
5. To **Seek Damages**
6. To **Equal Service** (consumer can’t be offered different pricing, quality, features, etc.)

# Business Requirements

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1. Ability to **Access** a consumer's personal information
2. Ability to **Provide** a consumer with the personal information you have
3. Ability to **Delete** & **Modify** a consumer's personal information
4. Process to manage consumer **Consent**
5. Process to ensure there is **No Discrimination** / preferred treatment
6. Ensure proper use by **Third Parties**
7. **New Notice** Obligations (collection, privacy policy, etc.)
8. **Data Minimization** requirements
9. **Demonstrated Compliance** – (audit, response)



**New Funded  
Enforcement Agency  
Begins July 1<sup>st</sup> 2021**  
With \$10 million in annual  
funding!

# The New Commercial Landscape

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# Consumers' Attitudes toward Privacy

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## The Data Trade?

- 81% say the **potential risks** from data collection by companies **outweighs the benefits and** yet they don't believe it's possible to go through daily life without companies collecting data on them (*Pew Research Center*)
- 46% feel they've **lost control** over their own data (*Salesforce*)

## Churn?

- 48% have **stopped buying** from a company over privacy concerns (*Tableau*)
- 39% would likely **walk away** if asked to provide highly personal data (*akamai*)
- 53% would **get their information back** if afforded the option (*PwC*)

## Trust?

- 64% **blame the company - not the hacker** - for a loss of personal data (*RSA*)
- 45% say the **federal government** should be responsible for protecting data privacy (*Cisco*)
- 88% say their **willingness to share** personal information is based on how **much they trust a company** (*PwC*)

Consumers Stop Buying  
from Companies they  
Don't Trust!

# The Business Response

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## Privacy?

- [Most U.S. companies](#) are now actively working to comply with multiple privacy laws. *(TrustArc) yet*
- [77% of IT professionals](#) say they don't have an enterprise-wide cybersecurity incident response plan. *(IBM)*

## Risk?

- The average company has [534,465 files](#) of sensitive data
- [53% of companies](#) have over 1,000 sensitive files open to every employee. *(Varonis)*

## Breach?

- [45% of Americans](#) had their personal information compromised by a data breach in the last five years. *(RSA),*
- Average cost of a breach [\\$150 per record lost](#) with average total per breach costs [\\$3.92 million](#). *(IBM)*

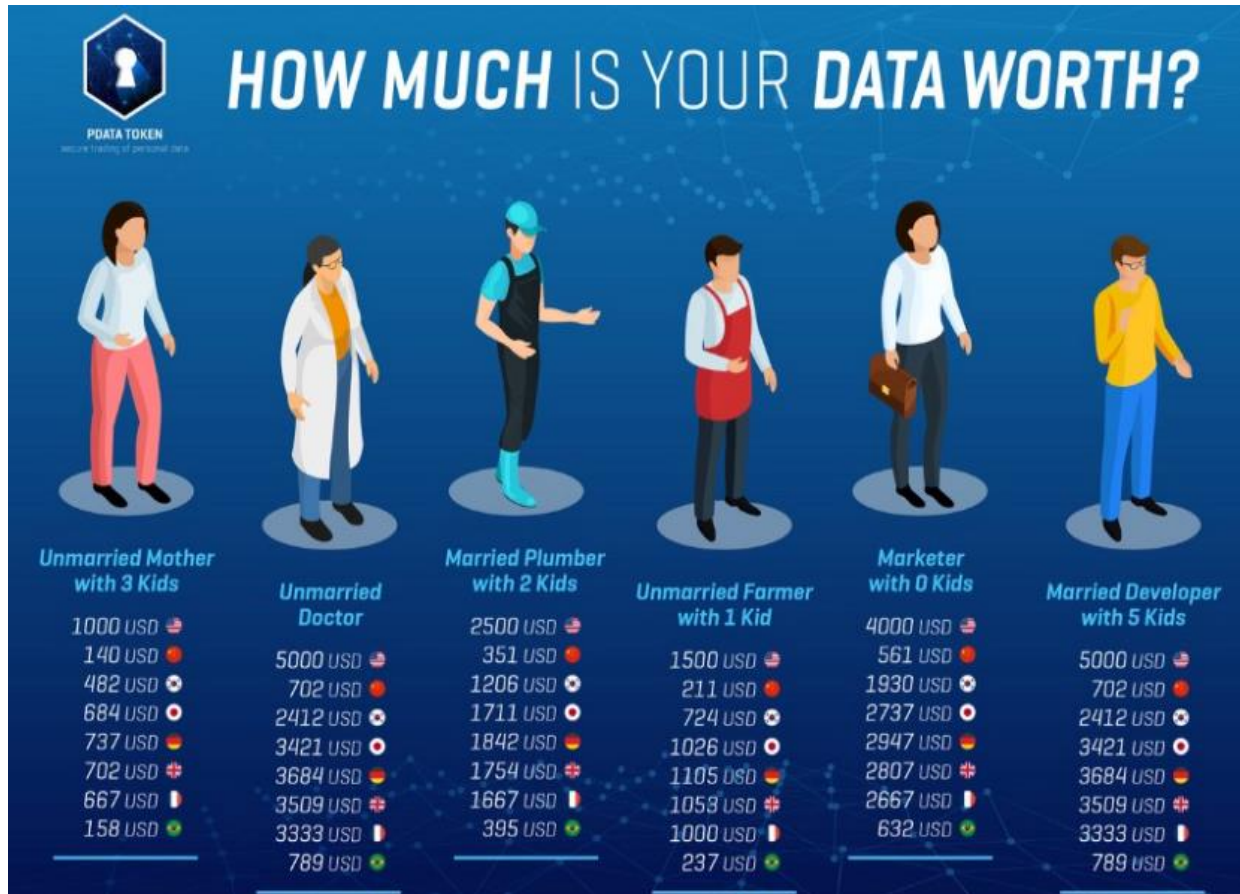
## ROI ?

- [40%+ of companies](#) see benefits at least 2X of their privacy spend with overall returns \$2.70 for each \$1 spent *(Cisco)*
- [97% of companies](#) have seen benefits like a competitive advantage or investor appeal from investing in privacy. *(Cisco)*
- [42% of companies](#) say that investing in privacy has enabled agility and innovation in their organizations. *(Cisco).*

Business are  
Prioritizing  
Security &  
Privacy

## Emerging Businesses

# Taking Back Your Data Trade



### ▪ Data for Dough – Today’s ‘Trades’

- Car Insurance trackers - \$100-300/yr.
- Fitness data to Insurers - \$200-350/yr.
- Facebook: \$45-190/mo. per user
- Google: \$5000/user yr.

### ▪ Emerging Private Data Marketplace: “Opiria”

- Uses Blockchain Ethereum
- Creates a ‘PDATA’ token...Benefits:
  - You choose data to share → Sell
  - Secure sales platform → Consumer control
  - Validated → Buyers get Quality Data
  - Removes middleman → Transparent
  - Value → Consumer gets \$100-5000/year



Who are YOU  
specifically to  
an Advertiser?

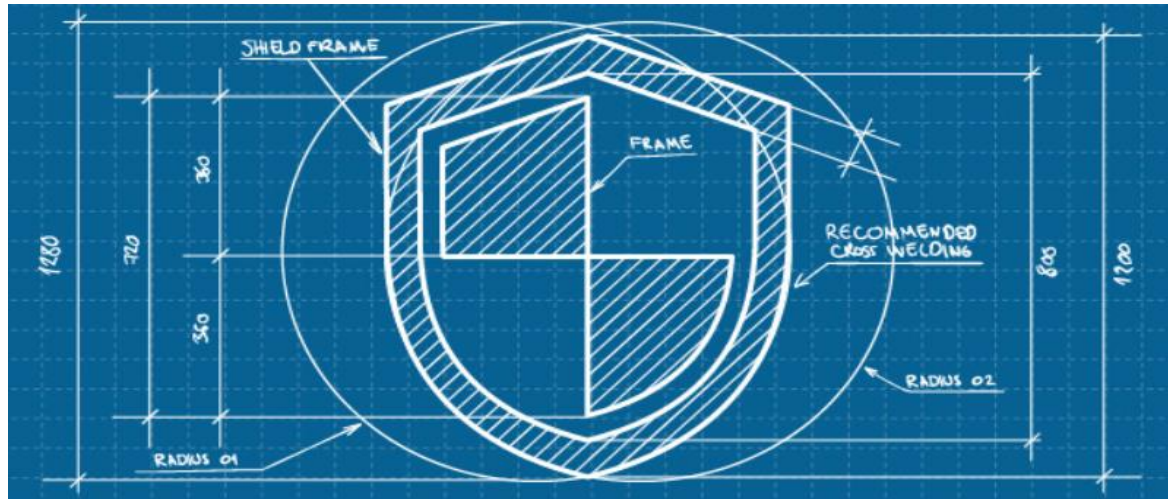
## The Cookie-less Browser?

- Google seeks to replace 'cookies' tracing that today;
  - Tracks individual browser histories
    - Pixel images, embedded codes, IP address
  - Can turn-off cookies – but most don't
  - Drives the \$77B in Ad-tech space today (eMarketer)
- A “Federated Learning of **Cohorts**” (FLoC)
  - Anonymized 'groups' labeled by similar browsing
    - ' e.g. Refinance shopper'
    - Re-calcs (defines) weekly
    - Each person has a unique ID
    - AI driven – **unsupervised algorithm**
    - No consumer control – can't opt out.
- Issues
  - Monarchy control and definition – Sensitive 'Cohorts' -- Opt-out control.

## What's Privacy by Design (PbD)

### Seven Founding Principles

- **Extends 'Fair Information Practices'**
  - Raises bar in defining best practices to imbed Privacy
  - Addresses 10 key Privacy principles (FIP)
    - Consent, Accountability, Purpose, Collection
    - Use Disclosure, Accuracy, Security
    - Openness, Access, Compliance



#### Privacy is made "Proactive"

1. High level management commitment
2. Culturalized through the enterprise
3. Cognizant awareness of 'Poor' Privacy Design

#### Privacy as "Default"

1. Rights are automatic
2. Day 1 - privacy protected
3. Specific and limited use

#### "Embedded in Design"

1. Not a Bolt-on
2. Integrated as core without core functional loss

#### "Positive Sum"

1. No trade-offs (zero-sum)
2. Committed to optimized

#### "Protected End to End"

1. Data's lifecycle
2. Security responsibility
3. Core Security practices

#### "Transparent and Managed"

1. Assured to all stakeholders
2. Open Policy and Procedures
3. 'Managed' compliance'

#### "User Centric"

1. Real Respect for individual's PI
2. Empowers user to take an active role

## Emerging Approaches

# Privageo's Privacy Framework




1. Consumer Trust And Consent
2. Legal and /Risk Mgt
3. Third Parties
4. Data Management
5. Data Protection
6. Leadership and Control
7. Communication and Training


# Privacy = Good Business!

“The companies that do the best job on managing a user’s privacy will be the companies that ultimately are the most successful – Fred Wilson

# THANK YOU

We welcome the opportunity to partner with you.

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