

# Privacy Forms the Foundation of Freedom and Liberty

**Ann Cavoukian, Ph.D.**

**Executive Director  
Privacy and Big Data Institute  
Ryerson University**

**World Jurist Association  
Barcelona, Spain  
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# Let's Dispel Some Myths

# Privacy $\neq$ Secrecy

Privacy is *not* about having something to hide

**Privacy = Control**

# Privacy = Personal Control

- **User control is critical**
- **Freedom of choice**
- **Informational self-determination**

**Context is key!**

# Privacy is Essential to Freedom: A Necessary Condition for Societal Prosperity and Well-Being

- Innovation, creativity, and the resultant prosperity of a society requires freedom;
- Privacy is the essence of freedom: Without privacy, individual human rights, property rights and civil liberties – the conceptual engines of innovation and creativity, could not exist in a meaningful manner;
- **Surveillance is the antithesis of privacy:** A negative consequence of surveillance is the usurpation of a person's limited cognitive bandwidth, away from innovation and creativity.

# *The Decade of Privacy by Design*



# *Adoption of “Privacy by Design” as an International Standard*

## **Landmark Resolution Passed to Preserve the Future of Privacy**

By Anna Ohlden – October 29th 2010 - [http://www.science20.com/newswire/landmark\\_resolution\\_passed\\_preserve\\_future\\_privacy](http://www.science20.com/newswire/landmark_resolution_passed_preserve_future_privacy)

**JERUSALEM, October 29, 2010** – A landmark Resolution by Ontario's Information and Privacy Commissioner, Dr. Ann Cavoukian, was approved by international Data Protection and Privacy Commissioners in Jerusalem today at their annual conference. The resolution recognizes Commissioner Cavoukian's concept of Privacy by Design - which ensures that privacy is embedded into new technologies and business practices, right from the outset - as an essential component of fundamental privacy protection.

### **Full Article:**

[http://www.science20.com/newswire/landmark\\_resolution\\_passed\\_preserve\\_future\\_privacy](http://www.science20.com/newswire/landmark_resolution_passed_preserve_future_privacy)



# Why We Need *Privacy by Design*

Most privacy breaches remain undetected – as regulators, we only see the tip of the iceberg

**The majority of privacy breaches remain unchallenged, unregulated ... unknown**

*Regulatory compliance alone, is unsustainable as the sole model for ensuring the future of privacy*

# Privacy by Design: Proactive in 38 Languages!

1. *English*
2. *French*
3. *German*
4. *Spanish*
5. *Italian*
6. *Czech*
7. *Dutch*
8. *Estonian*
9. *Hebrew*
10. *Hindi*
11. *Chinese*
12. *Japanese*
13. *Arabic*
14. *Armenian*
15. *Ukrainian*
16. *Korean*
17. *Russian*
18. *Romanian*
19. *Portuguese*
20. *Maltese*
21. *Greek*
22. *Macedonian*
23. *Bulgarian*
24. *Croatian*
25. *Polish*
26. *Turkish*
27. *Malaysian*
28. *Indonesian*
29. *Danish*
30. *Hungarian*
31. *Norwegian*
32. *Serbian*
33. *Lithuanian*
34. *Farsi*
35. *Finnish*
36. *Albanian*
37. *Catalan*
38. *Georgian*

# Positive-Sum Model: *The Power of “And”*

*Change the paradigm  
from a zero-sum to  
a “positive-sum” model:  
Create a win-win scenario,  
not an either/or (vs.)  
involving unnecessary trade-offs  
and false dichotomies ...*

*replace “vs.” with “and”*

# *Privacy by Design:*

## *The 7 Foundational Principles*

1. *Proactive* not *Reactive*:  
Preventative, not Remedial;
2. Privacy as the *Default* setting;
3. Privacy *Embedded* into Design;
4. *Full* Functionality:  
Positive-Sum, not Zero-Sum;
5. End-to-End **Security**:  
**Full** Lifecycle Protection;
6. Visibility **and** Transparency:  
Keep it **Open**;
7. Respect for User Privacy:  
Keep it **User-Centric**.

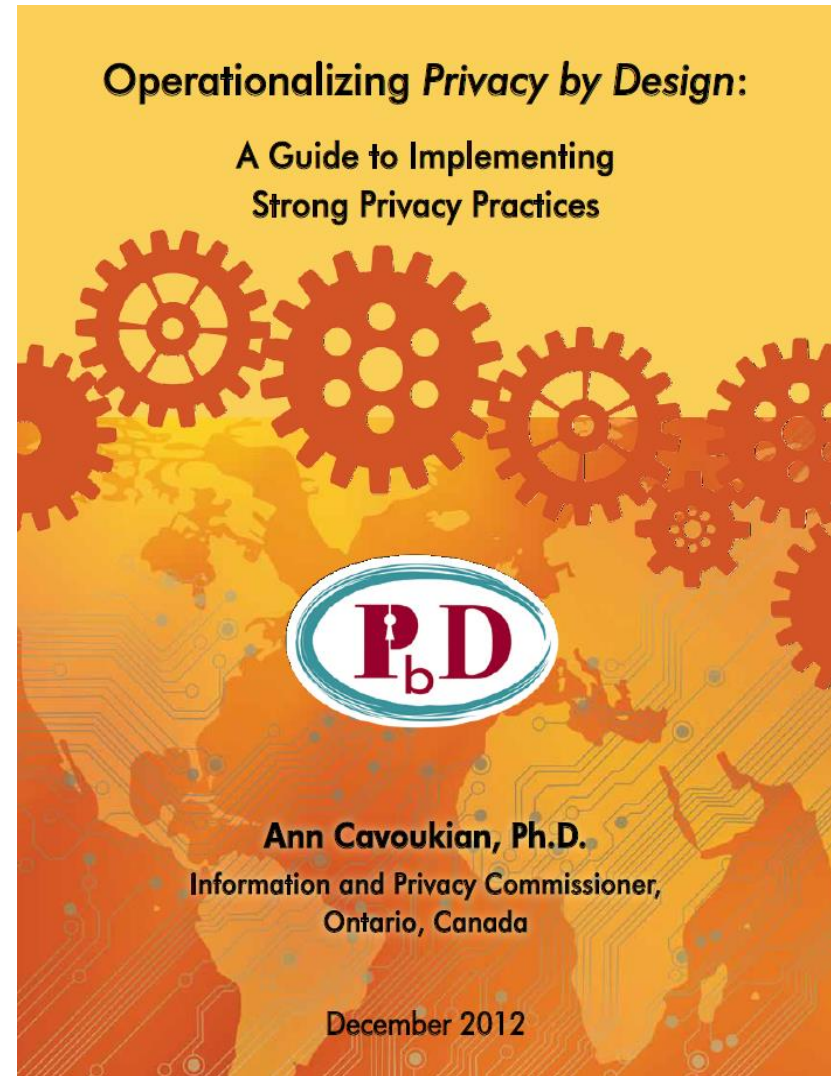


[www.ipc.on.ca/images/Resources/7foundationalprinciples.pdf](http://www.ipc.on.ca/images/Resources/7foundationalprinciples.pdf)

# Operationalizing *Privacy by Design*

## 9 *PbD* Application Areas

- CCTV/Surveillance cameras in mass transit systems;
- Biometrics used in casinos and gaming facilities;
- Smart Meters and the Smart Grid;
- Mobile Communications;
- Near Field Communications;
- RFIDs and sensor technologies;
- Redesigning IP Geolocation;
- Remote Home Health Care;
- Big Data and Data Analytics.



# *Cost of Taking the Reactive Approach to Privacy Breaches*

**Proactive**



**Class-Action  
Lawsuits**

**Damage to  
One's Brand**



**Reactive**

**Loss of Consumer Confidence  
and Trust**

# *Letter from JIPDEC – May 28, 2014*

*“Privacy by Design is considered one of the most important concepts by members of the Japanese Information Processing Development Center ...*

*We have heard from Japan’s private sector companies that we need to insist on the principle of Positive-Sum, not Zero-Sum and become enlightened with Privacy by Design.”*

— Tamotsu Nomura,  
Japan Information Processing Development Center,  
May 28, 2014

# Recent Developments



# Pew Research Internet Project

- **Public Perceptions of Privacy and Security in the Post-Snowden Era: November 2014**
  - There is widespread concern about surveillance by both government and business:
    - 91% of adults agree that consumers have lost control over their personal information;
    - 80% of social network users are concerned about third parties accessing their data;
    - 80% of adults agree that Americans should be concerned about government surveillance;

# Pew Research Internet Project (Cont'd)

- Most Americans are aware of the government's monitoring of communications;
  - Only 5% have heard “nothing at all” about government surveillance;
- There is little confidence in the security of common communications channels;
  - 81% feel “not very” or “not at all secure” using social media to share private information.

# 2014 Survey of Canadians on Privacy

## Office of the Privacy Commissioner of Canada

- 90% of Canadians expressed concern about the protection of their privacy;
- 78% feel at least somewhat likely that their privacy may be breached by someone using their Credit/Debit Card or stealing their identity;
- 70% of Canadians are concerned about the use of genetic testing for non-medical purposes;
- 73% feel they have less protection of their personal information than ten years ago;
- 60% have little expectation of privacy because there are so many ways it can be compromised.

# Trends and Challenges: *An Epidemic of Breaches*

- From 2005 to 2013, there were 4,167 reported breaches involving 663,587,386 individual records;
- 30% of those whose records are breached will become victims of identity theft.

— [Privacy Rights Clearinghouse](#)

- The average cost of breach per record/individual in 2013: \$201

— [Ponemon Institute](#)

*“Data breaches are a fact of life in the United States.”*

— [Mallory Duncan](#),

Vice President, National Retail Federation

# EU Article 29 Working Party

- **Recommendations on the Internet of Things:**
  - **Make privacy the default setting ... follow Privacy by Design;**
  - Delete all raw data after processing;
  - Respect a user's self-determination over their own data, and seek consent in a user-friendly way;
  - Be transparent about how a user's data is being used;
  - When sensors are continuously collecting one's personal data, remind users of this surveillance activity;
  - Ensure that data published to social platforms remain private, by default;
  - Users should not be penalized for failing to consent;
  - Data should be De-Identified, except when necessary.

# Privacy Commissioners Declaration

## 36<sup>th</sup> Int'l Conference of Data Protection and Privacy Commissioners on the Internet of Things

- The value of Internet of Things (IoT) is not only in the devices, but in the services that arise from their use;
- Connectivity is ubiquitous: it is the joint responsibility of all actors to ensure trust in connected systems : Transparency is Key;
- Protection should begin from the moment data that is collected;
  - **“Privacy by Design should be the key selling point of innovative technologies”**
- Strong, active and constructive debate is necessary to overcome the huge challenges presented by the developers of IoT.

-September, 2014  
Mauritius

# European Union Court of Justice : EU-US Safe Harbor Framework Invalid

“The Court of Justice of the European Union (CJEU) has in its decision today declared that transfers of personal data from the EU to the US cannot rely on the Safe Harbor framework agreement.”

Privacy Laws & Business

October 6, 2015

[http://www.privacylaws.com/Int\\_enews\\_6\\_10\\_15](http://www.privacylaws.com/Int_enews_6_10_15)

# GDPR

## General Data Protection Regulation

- Strengthens and unifies data protection for individuals within the European Union
  - Gives citizens control over their personal data and simplifies regulations across the EU by unifying regulations
- 
- Proposed – January 25<sup>th</sup> 2012
  - Passed - December 17, 2015
  - Adoption – Spring 2016
  - Enforcement – Spring 2018



# E.U. General Data Protection Regulation

- The language of “Privacy/Data Protection by Design” and “Privacy as the Default” will now be appearing for the first time in a privacy statute, that was recently passed in the E.U.
  - Privacy by Design
  - Data Protection by Design
  - Privacy as the Default

# The Similarities Between PbD and the GDPR

“Developed by former Ont. Information & Privacy Commissioner, Ann Cavoukian, Privacy by Design has had a large influence on security experts, policy makers, and regulators ... The EU likes PbD ... it’s referenced heavily in Article 23, and in many other places in the new regulation. **It’s not too much of a stretch to say that if you implement PbD, you’ve mastered the GDPR.**”

Information Age  
September 24, 2015

# Concluding Thoughts

- Privacy risks are best managed by proactively embedding the principles of *Privacy by Design* – prevent the harm from arising – avoid the data breach;
- Focus on prevention: It is much easier and far more cost-effective to build in privacy, up-front, rather than after-the-fact;
- Abandon zero-sum thinking – embrace doubly-enabling systems: Big Data **and** Big Privacy: Yes, we can;
- Get smart – lead with *Privacy – by Design*, not privacy by chance or, worse, *Privacy by Disaster!*

# Contact Information

**Ann Cavoukian, Ph.D.**  
**Executive Director**  
**Privacy and Big Data Institute**  
**Ryerson University**

**285 Victoria Street**  
**Toronto, Ontario**  
**M5B 2K3**

**Phone: (416) 979-5000 ext. 3138**  
**[ann.cavoukian@ryerson.ca](mailto:ann.cavoukian@ryerson.ca)**



[ann.cavoukian@ryerson.ca](mailto:ann.cavoukian@ryerson.ca)



[twitter.com/AnnCavoukian](https://twitter.com/AnnCavoukian)