



***Embed Privacy Into Your
Business Practices:
Positive-Sum, Not Zero-Sum***

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Presentation Outline

- 1. The Future of Privacy: Positive-Sum
NOT Zero-Sum*
- 2. The Next Wave: From PETs to PETs Plus,
... to Transformative Technologies*
- 3. Privacy by Design: Focus for 2009*
- 4. Conclusions*



The Future of Privacy:

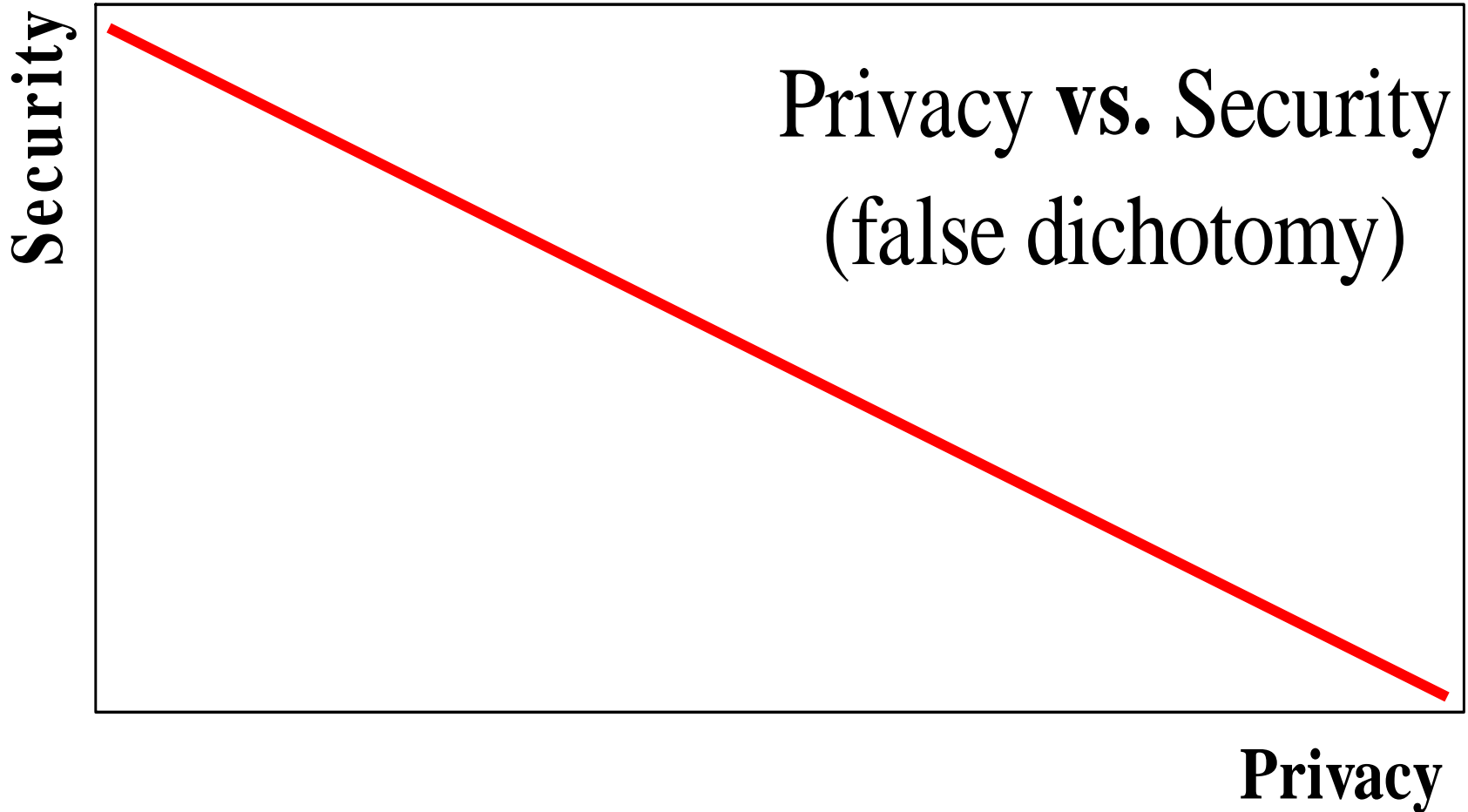
Positive-Sum

NOT

Zero-Sum



Privacy OR Security: *A Zero-Sum Game*





*We Need to
Change
The Paradigm*



Positive-Sum Paradigm

- A **Zero-Sum Paradigm** describes a concept or situation in which one party's gains are balanced by another party's losses – win/lose; either/or; enhancing security often comes at the expense of privacy – the more you have of one, the less you can have of the other;
- A **Positive-Sum Paradigm**, in contrast, describes a situation in which *all* participants may gain together (win-win);
- To achieve a positive-sum model, privacy must be proactively built into the system so that privacy protections are engineered directly into the technology, right from the outset;
- The effect is a minimization of the unnecessary collection and use of personal data by the system, while at the same time, strengthening data security, and empowering individuals to exercise greater control;
- This can result in technologies that achieve strong security *and* privacy, delivering a “win-win” outcome.



Positive-Sum Model

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



Privacy by Design: “Build It In”

- I first developed the term “Privacy by Design” in the 1990’s, as a response to the growing threats to online privacy that were beginning to emerge;
- “Privacy by Design” seeks to build in privacy – up front, right into the design specifications; into the architecture; embed privacy right into the technology used – *bake it in*;
- Data minimization is key: minimize the routine collection and use of personally identifiable information – use encrypted or coded information whenever possible;
- Use privacy-enhancing technologies (PETs) where possible: give people maximum control over their own data.



*The Next Wave:
From PETs to PETs Plus,
to
Trans Tech*



Background:

Privacy-Enhancing Technologies (*PETs*)

- The IPC coined the concept and methodology recognized around the world today as *privacy-enhancing technologies* (PETs);
- In 1995, the IPC and the Dutch Data Protection Authority published the landmark study, *Privacy-Enhancing Technologies: The Path to Anonymity* (Vols. I & II).

Vol. I - www.ipc.on.ca/index.asp?layid=86&fid1=329

Vol. II - www.ipc.on.ca/images/Resources/anoni-v2.pdf



Time For A Change...

*... from PETs to PETs Plus,
to ...*

Transformative Technologies



Transformative Technologies

**Surveillance Technology + Positive-Sum Paradigm +
Privacy-Enhancing Technology =
Transformative Technology**

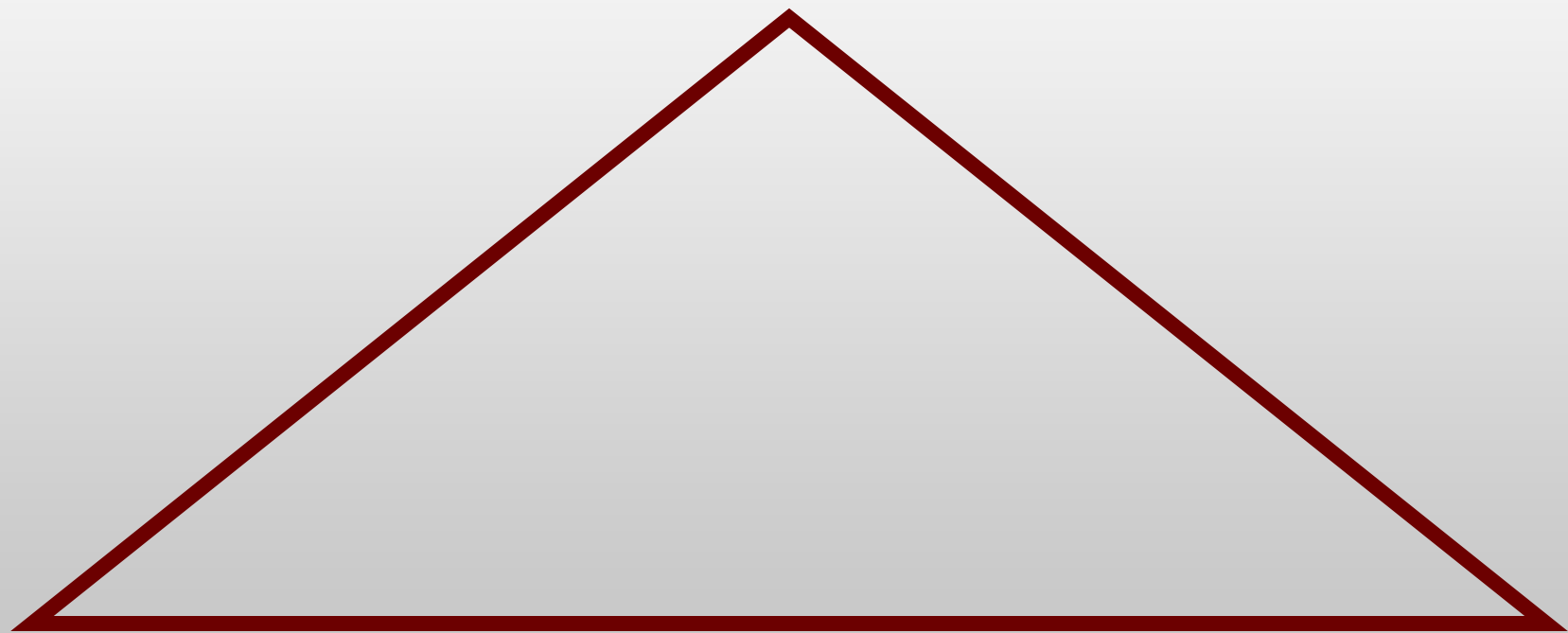
Common characteristics of Transformative Technologies:

- Minimize the unnecessary collection, disclosure, use and retention of personal data;
- Empower individuals to participate in the management of their own personal data;
- Enhance the security of personal data, if collected/used;
- Promote public confidence and trust in personal data governance structures;
- Promote/facilitate the commercialization and adoption of these technologies.



Privacy by Design: The Trinity of Applications

Information Technology



Business Practices

Physical Design



Privacy by Design: *Focus for 2009*

- **Technology** – Building privacy directly into technology at the developmental stage;
- **Business Practices** – Incorporating privacy into competitive business strategies;
- **Physical Design** – Ensuring privacy and security in health care settings.



Conclusions

- Let's lead with privacy by design – change the paradigm from a zero-sum game to a positive-sum model, where both privacy and security are embedded directly into the technology;
- Change the paradigm and you think differently: Make it privacy **AND** security, not the mutually exclusive “either/or;”
- Let's make sure that privacy lives well into the future!



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