Confirmation bias in the privacy profession: common misreading of the NIST Privacy Framework

Privacy Engineering Practice and Respect 2023
NIST Privacy Framework:
A TOOL FOR IMPROVING PRIVACY THROUGH ENTERPRISE RISK MANAGEMENT

**Core**

The **Core** provides an increasingly granular set of activities and outcomes that enable an organizational dialogue about managing privacy risk.

**Profiles**

**Profiles** are a selection of specific Functions, Categories, and Subcategories from the Core that an organization has prioritized to help it manage privacy risk.

**Implementation Tiers**

**Implementation Tiers** support communication about whether an organization has sufficient processes and resources in place to manage privacy risk and achieve its Target Profile.
Appendix B Glossary

- **Data** - A representation of information, including digital and non-digital formats.

- **Privacy Risk** - The likelihood that individuals will experience problems resulting from data processing, and the impact should they occur.

- **Subcategory** - The further divisions of a Category into specific outcomes of technical and/or management activities.

- **Privacy Control** - The administrative, technical, and physical safeguards employed within an agency to ensure compliance with applicable privacy requirements and manage privacy risks. (NIST 800-53)
Confirmation bias is the tendency to search for, interpret, favor, and recall information in a way that confirms or supports one's prior beliefs or values. People display this bias when they select information that supports their views, ignoring contrary information, or when they interpret ambiguous evidence as supporting their existing attitudes. The effect is strongest for desired outcomes, for emotionally charged issues, and for deeply entrenched beliefs. - WIKIPEDIA
Common misreadings

Outcomes
Confused with Controls

Data
Confused with Personal Data or Personally Identifiable Information

Tiers
Confused with Maturity

Privacy Risk
Confused with Organizational Risk
NIST PF Outcomes ≠ Controls

**NIST PF Subcategory** - The further divisions of a Category into specific outcomes of technical and/or management activities. *(Source: NIST PF Appendix B)*

**Privacy Control** - The administrative, technical, and physical safeguards employed within an agency to ensure compliance with applicable privacy requirements and manage privacy risks. *(Source: NIST 800 53)*

Privacy professionals commonly equate the NIST privacy framework sub-categories to controls, leading to using the framework as a conformance or auditable standard. A control can help you achieve an outcome.
NIST PF Data ≠ PII

- **NIST PF Data** - A representation of information, including digital and non-digital formats. *(Source: NIST PF Appendix B)*

- **Personal Data** - any information relating to an identified or identifiable natural person (data subject).

- **Personally Identifiable Information (PII)** – Information that can be used to distinguish or trace an individual’s identity, either alone or when combined with other information that is linked or linkable to a specific individual. *(Source: NIST CSRC Glossary)*

NIST Privacy Framework applies to any data that can cause problems for individuals. Most privacy professionals narrow the scope of data to their own world view. **Personal Data, Personal Information, Personally Identifiable Information, Personal Health Information** are all subsets of data.
Implementation Tiers ≠ Maturity Levels

- **NIST PF Implementation Tier** - provide a point of reference on how an organization views privacy risk and whether it has sufficient processes and resources in place to manage that risk. (Source: NIST PF)

- **Maturity Level** - represent a staged path for an organization's performance and process improvement efforts based on predefined sets of practice areas. (Source: CMMI Institute)

Most privacy professionals read implementation tiers as organizational maturity levels, which leads to incorrect application in profile development. Implementation Tiers measure sophistication of risk incorporation, maturity levels measure formalization of processes and process improvement.
Privacy Risk ≠ Organizational Risk

- **NIST PF Privacy Risk** - The likelihood that individuals will experience problems resulting from data processing, and the impact should they occur. (Source: NIST PF Appendix B)

- **Organizational Risk** – includes the business, compliance, reputational, and other risks that collectively create uncertainty to the financial outcome of the organization.

Privacy risk is about risk to individuals where problematic data actions can be equated to normative harms and problems can be equated to tangible consequences. Most implementers focus on compliance or organizational risk. Privacy risk for individuals can be a source of organizational risk.
Online Misinformation

Articles/Blogs

- Confusing Outcomes with Controls
- Confusing Tiers with Maturity
- Confusing Data with Personal Data

Videos

- Confusing Outcomes with Controls
- Confusing Tiers with Maturity
- Confusing Data with Personal Data
Communication is Critical

Speaking common language with others in the organization and outside.

When interpreting someone else’s work, make sure you are understanding their interpretation and not yours.
Q&A