## Achieving Privacy Expectations in the Digital World

Technology and privacy professionals need simple and effective ways to represent individuals' expectations of privacy within any environment. The **IEEE Digital Privacy Model** is an evolving easy-to-understand visual representation that covers the broad and dynamic aspects of digital privacy. The model focuses attention on individuals and their expectations of privacy and brings together the factors that influence digital privacy in any physical or virtual environment.



## **EXPECTATIONS OF PRIVACY**

The **IEEE Digital Privacy Model** depicts individuals' expectations of privacy as a set of six characteristics that collectively represent digital privacy for individuals. The data and meta-data that reflect the six characteristics of expectations of privacy are:

Identities: Any identifiers uniquely associated with individuals

**Behaviors:** Patterns of behaviors by individuals in social or economic settings

**Inferences:** Inferences attributed to individuals by human or AI/ML algorithms (profiling or abstract representations)

**Transactions:** Transactions by individuals in any social or economic context within physical or virtual environments

**Confidentiality and Integrity:** Confidentiality and integrity of individuals' identities, behaviors, inferences, and transactions

**Access and Observability:** Access to and observability of their identities, behaviors, inferences, and transactions by individuals



## **INFLUENCES ON PRIVACY**

The **IEEE Digital Privacy Model** identifies seven environmental influences on the actions of various actors to achieve digital privacy and manage individuals' expectations of privacy.

**Technical** influences form the basis to establish technical standards and industry best practices for solutions that support expectations of privacy.

**Regulatory** influences drive rules for industries, government oversight, and enforcement of privacy regulations.

**Economic** influences shape organizational and individuals' decisions to achieve appropriate digital privacy outcomes.

**Legislative** influences help recognize issues and codify laws that affect expectations of privacy.

**Legal** influences set up legal standards for checks and balances to protect expectations of privacy.

**Individual** influences create privacy boundaries with individuals as the primary subject of data and metadata in any digital ecosystem.

**Societal and Cultural** influences represent the values that recognize and shape individuals expectations of privacy.





This evolving model makes Technical, Regulatory, Economic, Legislative, Legal, Individual, and Societal & Cultural influences on individuals' expectations of privacy more attainable by using Confidentiality & Integrity, and Access & Observability of individuals' Identities, Behaviors, Inferences, and Transactions in any digital ecosystem.

## **IEEE DIGITAL PRIVACY MODEL**

The **IEEE Digital Privacy Model** is a work in progress that combines the six characteristics of individuals' expectations of privacy—identities, behaviors, inferences, transactions, confidentiality & integrity, access & observability and seven primary influences—technical, regulatory, economic, legislative, legal, individual, and societal & cultural that impact the implementation of a robust digital privacy infrastructure. It is industry- and country-agnostic and recasts digital privacy as expressions of individuals' expectations of privacy. Using the **IEEE Digital Privacy Model**, businesses, government organizations, or other stakeholder entities can systematically map the gaps in their people, process, and technology capabilities to implement solutions that support individuals' expectations of privacy. The model encourages cross-functional exchange of ideas among environmental influences while ensuring a common understanding of individuals' expectations of privacy among all the actors engaged in building a digital privacy ecosystem.

