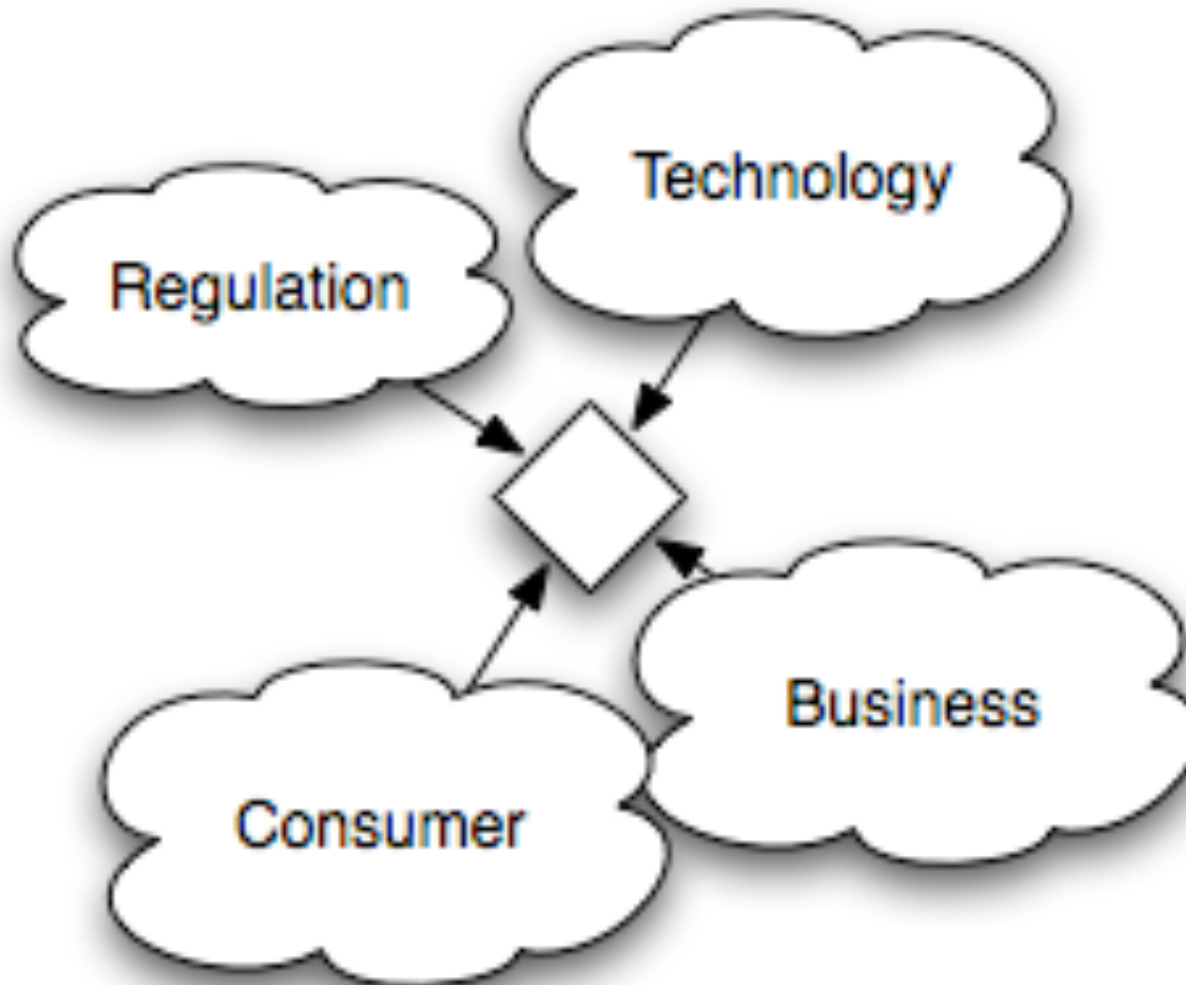


Hannes Tschofenig

**“The Internet was not designed
with Privacy in mind.
We need to redesign it.”¹**

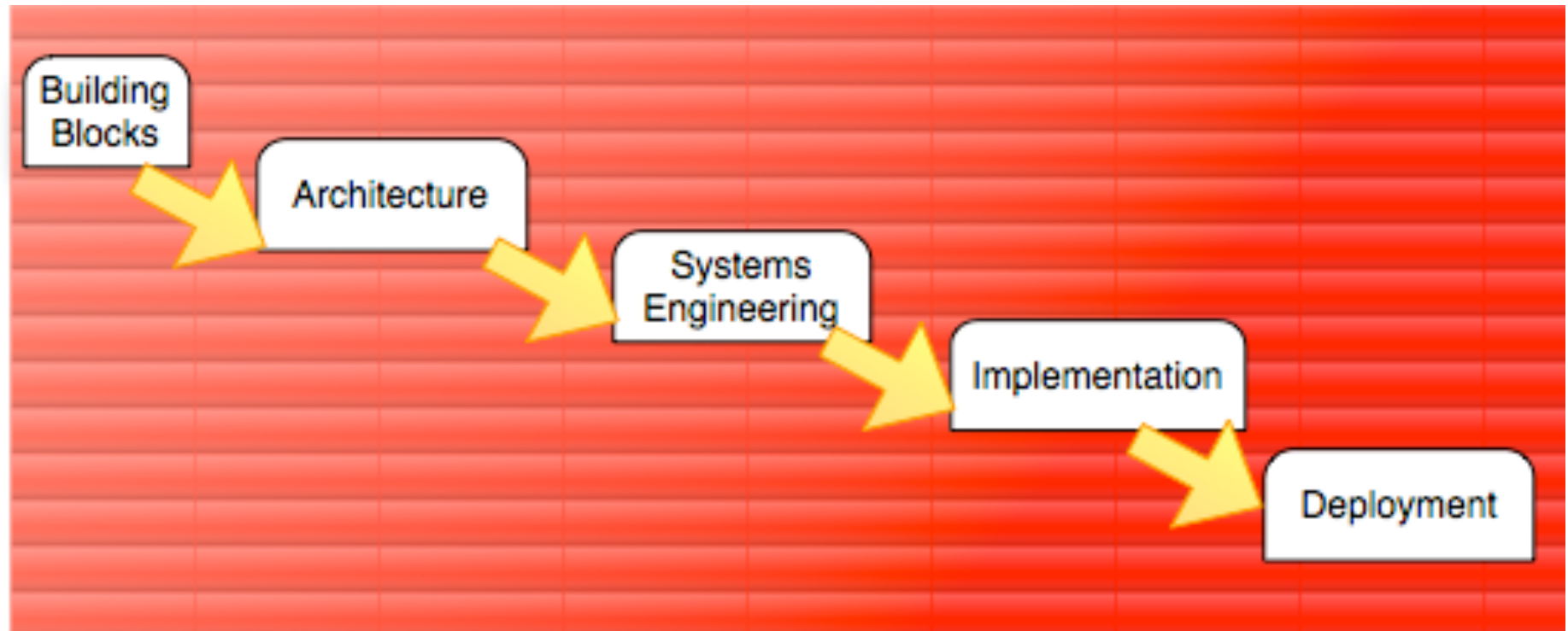
¹) Common statement in Future Internet Architecture proposals.

Complex Eco-System



Business > Consumer Interest > Policy Makers > Technology ?

Understanding Privacy Principles in a Technology Context



- Example: Notice and Consent”
 - Before the collection of data, the data subject should be provided: notice of what information is being collected and for what purpose and an opportunity to choose whether to accept the data collection and use.

Role of SDOs

- **The consensus process of standards development is time consuming**
- **To ensure speed of innovation focus is on building blocks rather than specific standards**
 - See Web development
- **Considering privacy in SDOs requires a certain governance structure and commitment.**
 - Example: W3C geolocation API
- **Privacy communities are present not in SDOs**
 - Education and awareness problem.

Is Data Minimalization the Wrong Paradigm?

- **Idea: Make only a limited amount of information available to other communication partners.**
- **Steps:**
 1. Do a privacy impact assessment on the application (e.g. road pricing)
 2. Analyze what information needs to be exchanged (e.g. location)
 3. Design Communication Architecture appropriately (multi-party computation)
- **Problems:**
 - Standards are getting more generic → difficult to do the PIA
 - Voluntary sharing of data increases (see also cloud computing)
 - Web architecture is not helping
 - Not in the business interest

Outlook

- **With privacy we are still at an early stage of the process.**
 - Compare with security
- **No agreement in the standards community what to design for**
- **Themes designed by lawyers are not well understood**
 - Example: Privacy by Design™
- **IAB Approach: Community-wide discussion about privacy needed**
 - Speaking the same language: Privacy Terminology
 - Helping protocol designers: Public Policy / Privacy Considerations for Internet Protocols
 - Education: Getting the privacy community involved
 - What can technology do? Internet Privacy workshop (8th and 9th December, 2010) organized by MIT, IAB, ISOC and W3C.