Commercial and Civic Tech and Safety by Design as a Path to Safe and Productive Use of Technology

Digital tools, products, and services are now embedded in nearly every part of daily life. They shape how people learn, work, trade, organize, and connect. As these tools become more powerful and more widely used, questions of safety are no longer peripheral. They are central to whether technology can be used productively, sustainably, and at scale.

- *92% of private sector actors supported by IREX in practical Safety-by-Design adoption reported increased awareness of technology-facilitated harms*
- *97% reported increased commitment to integrating Safety-by-Design*
- *Respondents represented organizations collectively reaching more than 3.1 million users today, with projected growth to over 10.8 million users by 2028*

Safety-by-Design is a practical approach that helps technology teams anticipate risk and reduce unintended harm as part of everyday product development. Rather than treating safety as an obligation, Safety-by-Design integrates risk awareness into decisions teams are already making about features, user experience, data, and scale. This does not require slowing innovation and often it involves modest design adjustments rather than major technical overhauls.

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- Safety-by-Design is a way of working, not a checklist.
- Prevention is cheaper - and often improves the product.
- Small design choices can deliver outsized impact.
- Trust and incentives unlock adoption.
- User and survivor perspectives reveal risks that metrics miss.
- Shared responsibility accelerates ecosystem change.

When safety is addressed only after harm occurs, the costs are high. Companies face reputational damage, user distrust, rushed fixes, and in some cases legal action and/or disengagement from the very communities they aim to serve.

The IBM Institute for Business Value, in partnership with Oxford Economics, found that companies mastering key capabilities, including AI governance, trust, and ethical design, reported approximately 13% higher ROI on AI investments compared with their less disciplined peers. While this finding comes from AI systems specifically, it illustrates a broader principle around Safety-by-Design: building safer, more reliable systems supports better financial outcomes.

Safety-by-Design offers more than improved safety, it drives business value and strengthens the broader digital ecosystem. Highlighting incentives early positions Safety-by-Design as a strategic advantage, not a regulatory burden.

Where and how can tech integrate Safety-by-Design?

- During product planning, when considering potential users and how different groups might experience risk differently
- In feature design, where small changes to defaults, reporting flows, or visibility settings reduce opportunities for misuse
- Through data and privacy decisions, including how information is collected, stored, and accessed

- In user experience design, where clarity, user control, and accessible support mechanisms make products safer and more trusted

Barriers to Safety-by-Design Adoption and the Enablers That Addressed Them

Barriers	Enablers
Limited Visibility into User Experiences and Risks	Better user engagement and perspectives data
Perception That Safety is Costly or Slows Innovation	Analysis of user engagement and retention data and return on investment combined with incremental design changes
A Reactive Compliance Mindset	Pivot to safety as a proactive strategy to better serve and retain customers
Limited Awareness of Safety-by-Design as a Framework	Industry-led, peer to peer learning, shared language and definitions
Lack of Practical Design Tools	Multilingual SbD curricula, prototyping workshops, and other professional education tools
Organizational Silos and Limited Decision-Making Authority	Organizational leadership engagement and mentorship programs
Unclear Incentives for Sustained Adoption	Recognition, visibility, and ecosystem momentum

Across contexts, barriers to Safety-by-Design adoption were rarely technical alone. They were shaped by incentives, norms, visibility into user experience, and access to practical support. The enablers that proved most effective combined listening, trust, clarity, and tangible tools.

Scaling Safety-by-Design in Commercial and Civic Tech: Next Steps

These actions are not exhaustive, nor are they prescriptive. They are designed to help tech and governments identify where they can start, strengthen, or sustain Safety-by-Design:

For Tech Companies

- Identify where safety and risk already show up in product decisions, such as reporting flows, data visibility, onboarding, or user controls.
- Use a structured risk assessment process to surface gaps and prioritize one or two design changes that can be implemented quickly.
- Create space for internal discussion about Safety-by-Design across product, engineering, and leadership teams using shared language.
- Integrate Safety-by-Design questions into product planning and iteration cycles.
- Participate in peer learning opportunities, mentorship, or showcases to learn from other teams and share progress.
- Engage users more intentionally, including women and marginalized groups, to better understand how products are experienced in practice.
- The experience across both countries shows that Safety-by-Design does not require starting from scratch. Small, early decisions can meaningfully reduce risk while strengthening trust and product quality.

For Regulators and Law Enforcement

- Create opportunities for dialogue with tech sector actors focused on prevention, not only post-harm response.
- Share regulatory priorities in ways that help developers understand how early design choices can reduce downstream risk.
- Participate in joint learning spaces with the tech sector and civil society to build shared understanding of risk and responsibility.
- Explore how regulatory guidance can support preventive design approaches while remaining flexible and context-aware.
- Where regulators and law enforcement engaged as partners, trust increased and collaboration became more productive.

For Universities and Institutions Preparing the Next Generation

- Introduce Safety-by-Design concepts into existing courses on software development, user experience, data, and AI.
- Use practical case examples and design exercises to help students understand how safety connects to real product decisions.
- Embed Safety-by-Design into innovation labs, hackathons, and capstone projects so that safety becomes part of professional identity.
- Partner with tech companies and civil society to expose students to lived experience and real-world design challenges.
- Universities play a critical role in shaping norms. When Safety-by-Design is taught early, future developers and innovators enter the workforce with shared expectations about responsibility, risk, and user trust.

For Funders and Donors

- Review funding criteria and procurement practices to identify where Safety-by-Design considerations can be encouraged without adding rigid requirements.
- Signal that safety is valued by supporting learning, experimentation, and peer exchange, not only compliance.
- Invest in capacity building, mentorship, and tools that help tech companies translate awareness into action.
- Support platforms that recognize and celebrate leadership in Safety-by-Design, helping shift norms across ecosystems.
- Use convening power to bring together tech companies, civil society, and public institutions in constructive dialogue.
- Funders are uniquely positioned to set incentives that shape behavior. When Safety-by-Design is framed as aligned with innovation and impact, adoption accelerates.