The **Innovation** Engine

The Internet is the largest and most rapidly evolving complex adaptive system in human history. It connects us all. It helps to feed the human soul and our desire for knowledge, learning and exchange. We can observe it, we can harness it, and we can envision some of what it can bring, but we cannot predict the tremendous wave of global innovation it continues to unleash.
All of us are architects of its destiny.

We can all take steps to protect the Internet and its many unfolding benefits, while also seeking to address some of the resulting risks.

Starting Assumptions

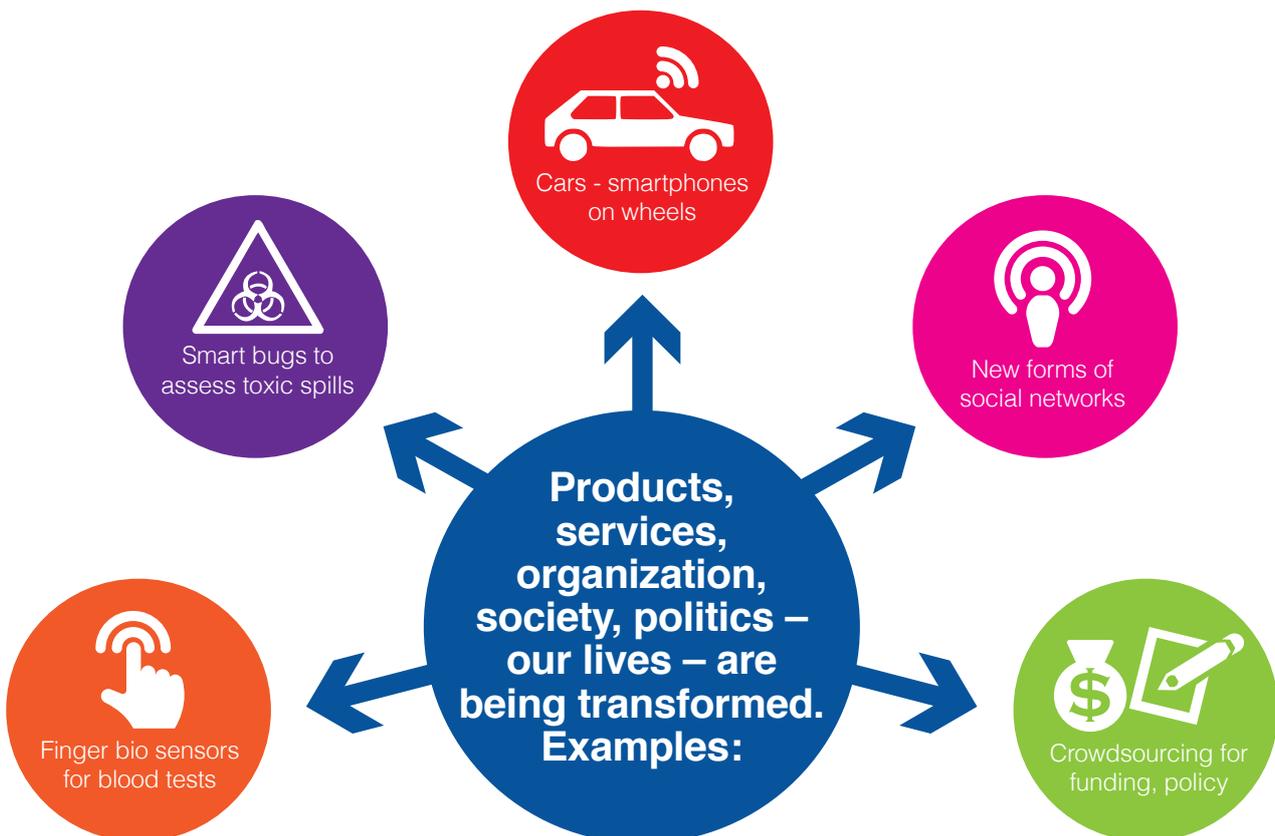The lines between the 'real world' and the 'online world' are blurring.

Openness and transparency drive economic growth.

The multi-stakeholder model is the best governance approach.

Leveraging distributed networks is more effective than building centralized hierarchies.

Smart bugs to assess toxic spills

Cars - smartphones on wheels

New forms of social networks

Products, services, organization, society, politics – our lives – are being transformed. Examples:

Finger bio sensors for blood tests

Crowdsourcing for funding, policy

Recommendations For Leaders

	Opportunities	Risks	Recommendations
Enhance Cyber Security	• A secure and resilient environment is the foundation of economic and social gain • Capabilities and resilience can be developed	• Misunderstanding of the dynamic nature of the challenge could lead to ineffective efforts • Centralized programs may increase risk • Unbridled security can reduce civil liberties	• Review and sign the Forum's 'Partnering for Cyber Resilience Principles & Guidelines' • Foster a rich ecosystem network of cyber capabilities and organizations • Invest in 'Centres of Excellence': hubs to develop leading practices in specialist capabilities, industry-specific dialogue and issue-specific networks • Build institutional capabilities, including full criminal justice chain training, adaptation of criminal law, judicial review and procedural protections/due process
Build Multi-stakeholder Capabilities	• Strengthen sense of civic participation • Multi-stakeholder approach taps into broader base of expertise • Continue to include civil society, companies and governments together in decision making • An open, balanced Internet eco-system drives economic growth, employment and innovation	• Ignoring or undermining multi-stakeholder groups threatens economic, social and internet innovation and the benefits for society • Closed door policies erode trust and innovation	• Keep the Internet open and interoperable globally • Foster multi-stakeholder processes and organizations to develop balanced, sustainable and therefore effective policies and investment priorities • Use these processes to guide standards, policies and infrastructure investment decisions at local, national and global levels
Foster the Internet of Things	• Connected devices – with ability to both sense and communicate – open up unprecedented opportunities for new business models and social good. E.g. connected car for safety, transport, environmental, insurance, health • Saving energy	• Poor understanding and practices around collection, storage, use and sharing of data could lead to erosion of trust and missed opportunity • Anything connected must be secured • Proprietary mindset limits the 'network effects' and true benefits	• Develop scenarios of impact of Internet of Things on your society. • Use Multi-stakeholder Institutions to analyze issues and implications
Data – Big, Open and Personal	• Better decision making - new insights • Improved responsiveness and agility – new solutions • Better engagement with citizens – crowdsource solutions	• Abuse of personal data – by governments or companies – results in large scale loss of trust	• Use Multi-stakeholder Institutions to analyze issues and implications (e.g. Big Data) • Develop user consent models that are contextually-driven
Continue to Promote Internet Access	• Drive economic growth • An informed, engaged and equitable society	• Some social groups might be excluded without protection or active outreach • Filtering or monitoring Internet access limits individuals' political choices rights and engagement	• Develop policies that protect and promote equitable access to the open Internet
Engage Civil Society	• Properly enshrined rights provide basis for society • Established international human rights provide a basis for good policy making	• Lack of understanding of need to re-examine/re-define key rights for digital environment can lead to uninformed declarations • Lack of open and inclusive process can lead to uninformed policymaking	• Ensure that established civic protections, eg. human rights framework, are adapted and upheld for digitally ubiquitous environment • Use multi-stakeholder frameworks and engagement to develop framework
Build Venture Countries	• Pro-actively planning economic incentives to encourage an entrepreneurial, educated Internet knowledgeable workforce can help drive competitiveness and employment	• Two-tiered society • Protectionist / 'race to the bottom'	• Develop 'Smart policy' frameworks – targeted, adaptive and integrated policy basket, including immigration, investment, tax, infrastructure and institutional capabilities