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- Computer Networks Engineering (RCC) & Civil Engineering (Conestoga)
- Consultant Engineering & Technology Sector (20 Years)
- Professional Regulation (10 years)
 - Institute for Engineering Technology Ontario (Certification and Licensing)
 - Technology Professionals Canada (Certification & Licensing)
- Innovation & Economic Development (Government of Yukon, NGO/NFP)
- Currently Live in the Yukon and work across Canada

The Technological Imperative



The concept that new technologies are inevitable, essential and that they must be developed and accepted for the good of society



**For this discussion technology is not strictly limited to digital technologies*

So is Technology Fundamentally Neutral?

Technology is often described as neutral or agnostic. With human behavior being the determining factor in whether technology realizes positive or negative societal impacts. As we have discussed and reflected today this assumption does not properly address the interdependency between technology, society and values?

Technology and Human Evolution are fundamentally connected

Technology is pervasive and exponentially advancing, blurring the lines between discrete systems (technical and social) and creating new ethical challenges

Unintentional impacts of the development and deployment of technology are extensive

The Provocation



Humanities relationship with technology and unintended consequences from its adoption can and will be destructive to society without the intentional efforts to ensure the desired end state is achieved.



Regulation models must evolve and adapt if they are to continue to serve the public interest

Status Quo = Failure

Engineers, technicians and technologists have a long and often complex history with the development and deployment of technology. While we claim to be the protectors of public interests and safety we must ask ourselves:

- Do we have tools necessary to ensure that the technology we are deploying is for good of society? (Technical and Social)
- What role/responsibility do we have in addressing the social challenges in addition to the technical?
- Do we adequately reflect on the ethical and larger ethos challenges we face in our daily practices?
- Are/Can we keeping pace with the rate of change?

What are we doing?

Development of Technology Stewardship Principals and Practice as a mandatory part of licensing and certification

- Continual Professional Development
- Micro-Credentialing
- Development of Deliberate Values to guide Ethics/Ethos
- Employer Awareness & Recognition

Developing Diversity, Equity and Inclusion thinking and teaching social problem solving skills as well as technical skills to Engineers, Technicians and Technologist

- Scenario planning
- Social Labs

Changing the narrative with respect to technology and role it plays in influencing social-economic conditions

- Academic Research
- Universal Access
- Professional Guidance Documents and Publications

Engaging with Engineering and Engineering Adjacent Communities to update and evolve governance, regulations and licensing practices.