Achieving the SDGs with Emerging Technologies – and the Important Role of the Legal Profession

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WORKSHOP OBJECTIVES

• Develop familiarity with the Sustainable Development Goals (SDG) and how they relate to all organizations and individuals
• Explore how emerging technologies can be leveraged to address the SDGs
• Learn a framework for putting the SDGs within a shared context for purposes of solutioning and collaboration as well as legal relevance
• Discuss the top ways in which the legal community can enable the implementation of the SDGs and sustainability of solutions, “Advocacy for Good”
WHAT ARE THE United Nations SDGs?

The idea of **sustainable development**, reflected in 17 Sustainable Development Goals (SDGs), is to move beyond traditional indicators such as GDP growth and per capita income to a richer set of objectives such as well-being, social fairness and environmental sustainability.
WHY THE SDGs MATTER

• Every **individual** has basic rights. Every individual matters.
• The stability and success of a **society** depends not just on economic growth, but social trust, fairness, equality and sustainability.
• Stable and successful nations strengthen the **global market**.

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**Sustainability**

“Meeting the needs of the present without compromising the ability of future generations to meet their own needs.”

(United Nations Environment Programme)
TECHNOLOGY IS ESSENTIAL TO ACHIEVE THE SDGs

What If…

- AI-enabled wearables could detect early signs of diseases such as diabetes
- AI and drones could maximize agricultural yields and blockchain could track pesticide use
- AI and drones could catch wildlife poachers or blockchain could track the movement of endangered species
- Blockchain could enable peer-to-peer trading of excess water resources
- AI could be used to detect lead in pipes
- Drones to deliver medicines to rural areas

- AI and IoT devices could prevent crime and help with policing and tracking criminals
- IoT sensors could help with predictive maintenance and safety of public infrastructure
- Virtual reality, 3D printing and robotics could create immersive learning
- Adaptive learning technology and gamification could personalize and engage content for students to improve learning
A USE CASE: TRACKING WILDLIFE POACHERS WITH AI

**STEP 1: OFFLINE NEURAL NETWORK TRAINING ON ANIMALS AND POACHERS**

**STEP 2: DRONES FLY OVER WILDLIFE AREAS AND CAPTURE IMAGES**

**STEP 3: VIDEOS AND IMAGES ARE TRANSMITTED TO A COMPUTER**

**STEP 4: IMAGES ARE PRE-PROCESSED FOR BETTER DETECTION**

**STEP 5: VIDEO AND IMAGES ARE PROCESSED USING NEURAL NETWORK**

**STEP 6: NEURAL NETWORK ANNOTATIONS ARE OVERLAID ON THE ORIGINAL IMAGE TO IDENTIFY POACHERS WHEREABOUTS**

Source: McKinsey
But more importantly, how do we put those technologies into a framework that allows us to match them to needs and facilitate global collaboration?
A FRAMEWORK FOR MATCHING NEEDS...

SDG  
(Why)

CAPABILITY  
(What)

SOLUTION  
(How)

A GLOBAL COMMON REFERENCE FOR GOVERNMENT AND SOCIETY  
(BIZBOK® GUIDE)
...AND FACILITATING GLOBAL COLLABORATION

Learning Content Management

NEEDS

SOLUTIONS

CONSIDERATIONS

POLICIES & ETHICS

GOVERNMENT SERVICES

NGOs

CORPORATIONS

STARTUPS AND INNOVATION

GLOBAL COLLABORATION PLATFORM

SDGs

OTHER OBJECTIVES

Policies & Ethics
AN EXAMPLE: A GLOBAL EDUCATION APPROACH

Facilitates education transformation
(student experience-focused, self-directed learning journey, seamless classes, immersive, life skills, etc.)

FROM: A siloed approach focused on individual responsibilities…

TO: An end-to-end focus on outcomes and value

FROM: Local approaches and resources…

TO: Leveraging the global community, technology and best practices

Note: Small subset for example purposes only.
BUILDING A GLOBAL CATALOG OF SOLUTIONS

The global common reference framework unites technologies with needs to accelerate and scale for education – and every other SDG-related category.
BENEFITS OF A DIFFERENT APPROACH

Getting serious about achieving the SDGs requires scale, collaboration, new mindsets and the foresight to envision a world that serves and protects people and planet. This approach…

• **Increases the effectiveness of addressing SDG needs** by shifting the perspective from a technology context to a shared, global society context. It also illuminates new patterns for leveraging solutions across SDGs that would otherwise be hard to identify from a technology-only perspective.

• **Achieves scale by creating a global community** by leveraging the full power of global collaboration for matching needs to solutions and sharing best practices, which connects everyone: communities, governments, NGOs, businesses and even individual contributors.

• **Aligns with human motivation** by taking a market-based approach to solving problems which not only activates businesses in developed nations, but stimulates economic growth in emerging nations through entrepreneurship and opportunities – which further contributes to SDG achievement. This approach also provides opportunities for greater meaning through human connection and contribution, helping to address spiritual poverty.
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- **Addresses needs and opportunities holistically and systemically** by bringing all contributors and stakeholders together around an integrated, shared context that is oriented around value and results – not individual missions and motivations.

- **Ensures legal engagement at the right place and time** by leveraging a structured framework that highlights where policies and legal considerations apply as well as where legal professionals are most needed to contribute. This approach also facilitates global collaboration and best practice sharing around common legal topics.
LEGAL CONSIDERATIONS AND IMPLICATIONS

- Personal information and privacy (e.g. causing harm or embarrassment)
- Bias and fairness (e.g. discrimination, exacerbating inequalities)
- Safe use and security (e.g. misdiagnosis)
- What concerns you most?
MAKING IT REAL

**Government**
- Encourage R&D and innovation (incentives, public sector adoption)
- Ensure infrastructure coverage and quality (e.g. broadband, public wifi)
- Develop policy and regulations (e.g. data rights and usage, privacy)

**Business**
- Reimagine the corporation (profit + purpose, stakeholder-driven versus shareholder-driven)
- Develop products and solutions to address SDG gaps (new markets)

**NGOs**
- Build capacity and deliver on missions
- Identify, highlight and act upon opportunities to apply technology for good
- Raise awareness and hold governments accountable to commitments
- Facilitate collaboration and partnerships to deliver on SDGs

**Individuals / Civil Society**
- Build and participate in a technology / solutions for good ecosystem
- Apply public pressure and advocate for change and outcomes
THE LEGAL PROFESSION IS A KEY ENABLER

The legal profession can be a key enabler to achieving the SDGs and a steward for a better world.

- SDG 16 (Peace and Justice, Strong Institutions) is particularly relevant to the legal community, but legal support and advocacy is necessary to support all SDGs with the ultimate goal of eradicating poverty and creating a more equitable global society. It requires full, active participation from the international legal community.

- Robust legal systems:
  - Safeguard human rights
  - Uphold the rule of law
  - Ensure equality, non-discrimination, safe use, security, privacy
  - Maximize commercial benefits and growth of developing economies
As a legal community, where should we go from here? How can we maximize our impact to achieve the SDGs and be a steward for our communities and our world?

Advocacy For Good

Policy Making

Pro bono assistance to provide greater access to justice for all

International Partnerships and Collaboration

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