Global Landscape- Governments Using Blockchain

- North America:

  - Canada

  - US: DARPA, FinCEN, NDAA, Naval Air System, Air Force, HHS, USPS, Homeland Security, FDA, IRS

  - Arizona, Delaware, Wyoming, Illinois, Vermont

- South America: Mexico, Argentina

- Africa: Ghana, Kenya, Liberia, Mauritius, Nigeria, Rwanda, Sierra Leona,South Africa, Tanzania, Uganda, Zambia

- Asia: China, South Korea, Singapore, Hong Kong, India, Malaysia, Thailand, UAE,

- Australia

- Europe

Opportunities
Universal

- Advocacy

- Literacy

- Privacy

- Cost reduction

- Financial Inclusion

- Digital Economy

- Purpose

- Sustainability

Opportunities
Unique by region/country (I)

- Countries with <u>more advanced</u> blockchain strategy & legislation:

  - Promote larger scale adoption for relevant industries/use cases

  - Enhance Interoperability

  - Performance Optimization

  - Development of certifications and quality control mechanisms

  - Creation of blockchain centers of excellence

  - Promote blockchain research

  - Promote blockchain certifications

Opportunities
Unique by region/country(II)

- Countries with no blockchain strategy:

  - Legal & Policy Advocacy

  - Digital Identity

  - Dynamic Consent

  - Blockchain Literacy & Fluency

  - Blockchain Education & Training

  - Encourage Pilot Blockchain Deployments for specific industries

Challenges
Universal

- Resistance to change

- Lack of education

- Confusion between blockchain technology & cryptocurrencies

- Cost & Prove ROI/ROA

- Customized Cyber-Security

- Legal

- Policy

- Privacy

- Taxation

- Lack of trained professionals

Lessons Learned

- Don't use the *word* " blockchain"

- Strict proactive data governance prior to deployment

- Address the crypto-myth

- Focus on industries where ROI is higher

- Focus on solving a major pain point for each industry

- Prove ROI

- Develop & Track KPIs real-time

Elements of Success

- Start with Advocacy

- Leverage Science Institutes and Technoparks

- Strict Feasibility Analysis

- Thorough Process & Failure Mode Analysis before accepting projects

- Human capital (training & development)

- Conservative Financial Projections

- Realistic timelines

- Involve largest or most vehement opponents early in the process…

Healthcare Specific Opportunities & Challenges

- Building Collaborative Healthcare Ecosystems Powered by Blockchain

  - Digital Identity

  - Informed Consent

  - Healthcare Exchange

  - Interoperability

Regulatory, Policy & Legislative Recommendations

- Overall harmonization healthcare ecosystem

- Data ownership

- Accountability/Liability for smart contracting

- Healthcare specific standards/certifications

- Healthcare specific architecture/infrastructure