Practitioner Perspectives

Framing the AI Bill of Rights

1. Can AI really be platform “agnostic”?  
2. Do we have the right to allow robots to “bear arms” for us?  
3. If we don’t “house” AI, how do we know where it is and what it is doing?  
4. AI’s “unreasonable search” capabilities are inherent – how do we protect personal data?  
5. To what extent do we trust Blockchain to protect “life, liberty, and property”?  
6. What “rights” govern the use of AI-generated data in prosecution or crime prediction analytics?  
7. Who serves in the “trial by jury” when disputes arise in AI-scored acquisitions?  
8. How are bids evaluated to fairly account for “cruel and unusual punishment” of FTEs versus Bots without conversion and efficiency rates?  
9. How do we deal with the untold “other rights” and innovations as AI evolves?  
10. What role does “power to the States” play in regulating, buying, investing in, and governing AI – like the recent fights on 5G and autonomous vehicles?

The Fourth Industrial Revolution

- Artificial Intelligence (AI) is at the forefront of the 4th Industrial Revolution, increasing capacity in ways never possible before.  
- AI encompasses everything from simple scripts to highly complex machines with vision, motion, and cognitive processes.  
- The federal budget for discrete AI has been small but is growing; enabling the warfighter and IC applications is the immediate focus.  
- AI is evolving faster than any technology in recent memory by virtue of its autonomous processing, which may slow federal adoption.  
- There is intensive study and diverse opinion in the legal and academic community on AI societal impact, rights, ethics, and privacy.  
- AI is becoming part of mainstream bids, making specifications, bidding, acquisition, and evaluation more challenging than ever before.

The Revolution is Here

The pull toward self-determination that instigated the American and French Revolutions is echoed today in the systems and automated processes that run our modern life. The self-driven, independent learning aspects of Artificial intelligence now dominate a Fourth Industrial Revolution. The clarion call from the tech industry that “the AIs are coming” has sprouted whole cottage industries of software vendors and service providers focused on a multitude of AI approaches, including robotic process automation (RPA), machine learning (ML), cognitive processing, and predictive analytics. The Federal Government also sees AI as a key element of its digital transformation. Efforts to maintain the competitive edge of the US are driving demand for mainstream commercial solutions in major acquisitions.

Some of the key elements include:

- Mechanization  
  - Rapid Urbanization  
  - Factory Growth  
  - Steam-powered Transportation  
- Mass Production  
  - Assembly Line  
  - Electricity  
  - Scientific Innovation  
  - Oil-Based Power  
- Automation  
  - Mass Globalization  
  - Electronics  
  - Dawn of IT  
- Cyber-Physical  
  - Data Science  
  - Interoperability  
  - Cloud Computing  
  - Machine Learning

These elements will continue to shape the future of the Fourth Industrial Revolution. The challenge for government contractors will be to understand how to find, bid, and win AI opportunities.

A New National Experience

While the historic federal spend for discrete AI, ML, and RPA is not well defined, independent estimates from commercial market sources predict the DoD spend on AI will exceed $4 billion by 2020 – driven by AI augmentation of discrete business processes, IT service, warfighter enablement, and intelligence processing. The market will likely far exceed this, however, as federal agencies prioritize AI-enabled digital services to improve the citizen experience. In declaring our acceptance of AI, prudence must dictate how the government buys and applies AI and organizes its powers to affect the safety and happiness of the governed. Acquisition shops must account for contract changes necessary to buy AI solutions, rather than disparate systems, platforms, labor, and services, while contractors must understand how to find, bid, and win AI opportunities.

Articles of Governance

Life in an AI-enabled world is complex and technical experts and policy analysts have raised concerns about how AIs that make consequential decisions will ensure justice, fairness, and accountability. Currently, there are far fewer (and less effective) means of governance of AI than for traditional enterprise IT. As AI advances, expect to see federal contract structures and policies directed toward establishing confidence that AI-enabled systems are safe and controllable. Governance measures may slow the eventual adoption of AI by the rise of AI safety conventions to prevent unacceptable risk, secure individual liberties, and ensure the welfare of the citizenry. The realization that AI speeds up decisions affecting our common defense, domestic tranquility, and prosperity will also revolutionize existing business processes.

A More Perfect Union

As we pair AI with the Internet of Things and cyber-physical systems, the pace of change will accelerate. For government contracting, the resulting business opportunities are those that address the union of humans and AI systems working to solve specific use cases around automating commodity processes, provision of citizen services, health sciences research, weapon platform design, and intelligence gathering. This includes defining solutions that leverage the complementary nature of humans and AI systems, and preparing the government workforce to use the cognitive power of AI without ceding decision authority. Leaders, regulators, and industry need to collaborate to provide new guardrails for our future security without stifling the machines. The real promise of AI is to throw off the shackles created by excess data, network complexities, and human inefficiencies.

The Four Industrial Revolutions

The real promise of AI is to throw off the shackles created by excess data, network complexities, and human inefficiencies.

Source: Wolf Den Associates

1751 Pinnacle Drive 
McLean, VA 22102 
wolfdenassociates.com

JJ Foster  
(703) 380-2321  
JJ.Foster@wolfdenassociates.com

LeeAnn Gedeon  
(571) 422-7927  
LeeAnn@wolfdenassociates.com

Thomas Olson  
(571) 213-3945  
Thomas@wolfdenassociates.com