The EU AI Act of 2024

Lessons Learned for the Rest of the World

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The European Union Artificial Intelligence Act of 2024 (the Act) leaves gaping holes in the treatment of AI policies and legislative frameworks. First conceptualized in 2021 and finally enacted in 2024, the Act has attracted commentary from all sectors with a stake in the current and future development and deployment of AI. Thinking in a binary fashion, the Act is either too little too late or too much too soon.

Goldilocks Model

Through negotiations and compromise over a three-year period, the EU AI Act follows the *Goldilocks Model*. Metaphorically, the Act is neither too hot (Baby Bear's porridge) nor too cold (Papa Bear's) but just right (Mama Bear's). The Act is a bold attempt to legislate AI that potentially will cause member states currently behind others to fall further behind in their AI innovation advances.

In a European Union context, the EU runs the risk of losing ground to countries not yet regulated. These countries include the United States, China, and Russia. From a Silicon Valley perspective, new technology firms open for business at a rate not seen since the first Internet boom of the late 1990s. Tech firms engaged in AI projects receive much attention from the press, risk capital providers, and established corporations seeking growth through innovation.

In the U.S., an AI safety bill in California was presented to and passed by the State Assembly (SB 1047) in 2024. The bill was directed at the larger AI models and the companies developing and deploying those models.

California Governor Gavin Newsome vetoed the bill and stated, "Smaller, specialized models may emerge as equally or even more dangerous than the models targeted by SB 1047 — at the potential expense of curtailing the very innovation that fuels advancement in favor of the public good."

Responding to Newsome's veto, Scott Wiener, a co-author of SB 1047, said, ""This veto leaves us with the troubling reality that companies aiming to create an extremely powerful technology face no binding restrictions from U.S. policymakers, particularly given Congress's continuing paralysis around regulating the tech industry in any meaningful way."

Considered a bell-weather for the U.S. (and possibly the world), California failed to enact AI regulatory legislation. The concern is the California example will be the norm for other states and potentially at the federal level. An age-old tug-of-war has plagued the U.S. since its birth – the balance of power between federal and stage governance.

Unpacking Artificial Intelligence

Dozens, if not hundreds, of news articles and opinion pieces emerged before, during, and after the EU Artificial Intelligence Act was rolled out to member states. The world does not need yet another summary of the Act's timing, intent, and reach.

However, readers need to know the Act's scope excludes two essential stages in the AI development and deployment lifecycle.

Unpacking AI's lifecycle, five stages emerge: (1) basic theory, (2) architecture design, (3) data, (4) algorithmic coding, and (5) usage. The scope of the Act includes stages three, four, and five. The three stages are the most publicly visible to constituents and governing bodies.

However, the European Commission has missed the first two hyper-critical stages, (1) the formulation of basic theory and (2) the design of overarching architectures for AI solutions and apps.

For example, the basic theory of generative artificial intelligence is the mathematics of statistics, calculus, and probability and the architecture of the neural network (NN). Granted neural networks were first conceptualized over a century prior (c. 1850) to the formation of the EU. Any application of AI regulation should reach back to the original conceptualization of the NN.

Another example comes in the form of expert systems, an early embodiment of AI. The systems are based on the theory of binary decision-making. One of the first applications of the binary theorem was in dual diagnosis in a healthcare delivery context.

A physician tests (heart rate, blood pressure, body temperature, blood work, diagnostic imaging to name just a few) a series of binary branches to narrow down the root causes of a patient's ailment. Of course, a mechanic can follow the same architecture when diagnosing operating issues with automobiles.

Several questions remain. What stages of the AI lifecycle should be regulated, and which should not? Should research scientists' behaviours be legislated and controlled? How to regulate without stifling innovation in computer science?

Learning from the aftermath of the General Data Protection Regulation (GDPR), several critical factors exist for successful adoption and enforcement of EU-wide legislation in the technology arena. Standout critical success factors are (1) clear and comprehensive legislation, (2) strict enforcement mechanisms, (3) emphasis on individual rights, (4) accountability and governance, (5) technological adaptation, (6) awareness and cultural shift, (7) global influence, (8) continuous monitoring and adaptation, and (9) strong public trust.

The GDPR lessons learned should be considered by member states during the rollout of the EU AI Act and compliance. GDPR is more than a regulatory obligation—it's a framework for building trust and protecting individuals in the digital age.

In the shadow of GDPR, governing bodies of member states have a clear framework and an unavoidable obligation to protect their citizens in the onslaught of expanded scope and future novel approaches to artificial intelligence.

To governing bodies around the world: focus on the scope of regulation at the country, state, and local levels. Observe with open minds the EU experience of implementing the AI Act. Expand the scope of AI legislation to include basic theory and architecture design with caution. Be wary of compliance creep and continuously monitor progress and regress of AI safety locally and globally.