Insight

Tech Policy and the 2020 Election, Part 4: Emerging Technologies and the Regulatory State

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Executive Summary

- The approach the next president takes to the administrative state and regulatory policy in general will impact a wide range of emerging technologies.
- Autonomous vehicles provide a case study regarding the different impacts regulatory philosophy can have on emerging technologies.
- The winner of the 2020 presidential election should be cautious not to place undue regulatory barriers on emerging technologies that could stifle beneficial innovations.

Introduction

While many debates in technology policy revolve around longstanding issues, innovation raises a different set of challenges. Emerging technologies—think autonomous vehicles, artificial intelligence, and 3-D printing—include both completely novel products as well as new applications or improvements on existing technologies. These emerging technologies are rapidly evolving in public, with applications that often raise new regulatory questions. Here lies the challenge for policymakers.

In some cases, President Donald Trump and Democratic presidential candidate Joe Biden have indicated how they would approach specific technologies, but policies for specific technologies are quickly rendered obsolete by innovation. As the rate at which consumers adopt new technologies continues to increase, policymakers must also adapt their governance of these technologies. The approach taken by the winner of the 2020 presidential election regarding the governance and regulatory environment for emerging technologies, and not just the approach to specific technologies, will impact not only particular innovations but the broader innovation environment, as well.

The Regulatory State and Innovation

For a variety of reasons, many technologies are increasingly governed by agency action rather than legislation. In particular, emerging technologies such as 3-D printing, artificial intelligence, and transportation are often subject to governing by a "soft law" of guidance, best practices, and workshops rather than more formal regulation. Often for emerging technology, this approach is more flexible and adaptive to the rapidly changing technologies, but it still requires important checks on the administrative state to ensure it does not devolve into overly burdensome and unaccountable regulation.

With the regulatory state having an increasing influence on a wide range of technology, the regulatory policy of the winner of the 2020 presidential election will impact any number of innovations. As the American Action Forum's regulatory experts Dan Bosch and Dan Goldbeck discussed in their analysis of the candidates' regulatory policy, "President Trump has focused primarily on repealing or seriously amending Obama-era regulations and will look to continue this approach in a second term. If elected president, former Vice President Biden would likely seek to reinstate or strengthen those Obama Administration rules rolled back by the Trump Administration." Not only can increased regulation place burdens on the technology subject to it, but it can also signal to innovators that they should expect to need permission from the government before undertaking their activities. Such an approach could discourage not only potentially risky behaviors, but also potentially beneficial ones, as innovators and entrepreneurs find themselves having to navigate government red tape rather than focusing on improving their products and responding to consumer demands.

A Case Study: Transportation Innovation

Transportation has experienced disruption by many emerging technologies, from e-scooters to driverless cars to drones. This field of technology provides a useful case study in the different policies of the two candidates, as the approach taken to transportation policy for these emerging technologies at a federal level will impact the future of innovation.

Under the Obama Administration, the initial Department of Transportation guidance on autonomous vehicles was precautionary and focused on restraining potential worst-case scenarios rather than enabling the beneficial uses of this technology. The result could be that innovators choose to pursue development of this technology elsewhere. This "innovation arbitrage," in which innovators choose to pursue their technology in more favorable regulatory environments, has happened for example with testing delivery drones. As Mercatus Center's Adam Thierer and Caleb Watney noted at the time, "If [highly automated vehicle] entrepreneurs feel that America's approach to innovation policy stacks the deck against them, they will seek out alternative venues where experimentation can continue in a relatively unabated fashion." A Biden Administration would likely return to the precautionary regulatory approach of the Obama Administration, which would result in much more red tape and the need for permission to pursue innovation.

In the Trump Administration, in contrast, the Department of Transportation has taken a more hands-off approach and utilized informal agency actions to encourage autonomous vehicles. While this approach recognizes that changes to current regulation may be needed and certain standards should be handled at a federal rather than state or local level, it does not attempt to contain or dictate all elements of this rapidly emerging technology. Furthermore, this approach seeks to enable the benefits of innovation rather than focusing on establishing stringent protocols that might limit or deter unforeseeable improvements. Nevertheless, a soft-law approach may require greater clarity as an innovation evolves, and it requires checks to ensure that such informal actions are not subject to industry capture or simply become an expression of the unchecked power of the regulatory state.

Using Regulatory Policy to Support Innovation

The overall regulatory environment can send important signals to innovators about their ability to experiment and be entrepreneurial. For example, some innovations may need a federal framework, which could encourage improvements and entrepreneurship by eliminating potential conflicts in state law or overcoming innovation-deterring state and local regulations. Continuing the light-touch approach taken to many technologies and examining the necessity of the regulatory burdens on others will help continue the United States' innovation leadership in a number of areas and applications.