



# Competing in the Next Economy

The New Age of Innovation

Executive Summary

# Competing in the Next Economy

Just over 15 months ago, the Council on Competitiveness launched the National Commission on Innovation and Competitiveness Frontiers—in the firm belief that the nation's long-term growth in productivity and inclusive prosperity requires placing ever more attention on innovation to confer competitive advantage.

And while the United States has stood apart from the rest of the world during the past half century or more in its record of sustained innovation, across industries old and new, and through the ups and downs of economic cycles, the nation today faces realities and imperatives—some very new, some with the nation for a long time—transforming the context for continued innovation leadership:

- Other nations are replicating the structural advantages that historically have made the United States the center of global innovation;
- Many nations are developing their own, distinctive innovation ecosystems;
- The nature of innovation is changing—becoming dramatically more interconnected, turbulent and fast-paced;
- New research and business models are emerging, allowing someone to imagine, develop and scale a disruptive innovation independent of traditional institutions;
- Despite the growth of America's innovation-based economy, not every American has been brought onto the country's innovation team.

The National Commission was formed as a multi-year leadership movement to face these challenges at home and coming from abroad; to plan for the nation's long term success; to recommend action steps to put in place the talent, capital and infrastructure necessary to increase U.S. innovation capacity and capability for the future.

Comprised of 60+ National Commissioners—from industry, academia, labor and the national laboratories—the Commission has over the past year worked to develop its first report to the Nation—a “living” and evolving set of recommendations that will continue to grow in the coming years:

- On January 16, 2020, the Commission Community comprised of 200+ diverse innovation stakeholders from nearly all major sectors of the economy and regions of the country—including Commissioners, Advisors, Outreach and Engagement leaders, and members of four policy Working Groups—gathered at Arizona State University to map out the year's priorities and goals along a set of major themes:
  - Developing and Deploying at Scale Disruptive Technologies
  - Exploring the Future of Sustainable Production and Consumption
  - Optimizing the Environment for National Innovation Systems
  - Unleashing Capabilities for Work and Entrepreneurship

## National Commission on Innovation and Competitiveness Frontiers

### National Commissioners

60+ distinguished leaders from industry, academia, national laboratories and other critical stakeholder groups, including the Commission Co-Chairs:

**Dr. Mehmood Khan**  
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### Advisory Committee

Three dozen+ multi-sector innovation leaders supporting the National Commissioners and guiding the Working Group agendas.

### Outreach & Engagement Committee

Two dozen+ strategic communications, media and government affairs leaders supporting the creative education, advocacy and communications plans for the National Commission.

### Working Groups

150+ innovators and leaders—from all sectors of the economy and across the entire country—brainstorming and developing actionable policy recommendations for the National Commission.

1. **Developing and Deploying at Scale Disruptive Technologies**
2. **Exploring the Future of Sustainable Production and Consumption**
3. **Optimizing the Environment for the Nation's Innovation Systems**
4. **Unleashing Capabilities for Work and Entrepreneurship**

- Following this Commission Community Launch conference and the onset of the COVID-19 pandemic, the Council and the Commission's four Working Groups—each led by a distinguished group of co-chairs—pivoted dramatically, built quickly a new way of collaborating, and endeavored non-stop between March and November 2020, in nearly 100 virtual workshops, to create, debate, refine and suggest hundreds of potential recommendations both for the Commission's mid-year report and its first annual report.

Of the hundreds of suggested recommendations, this 2020 annual report lays out 50 priority recommendations emerging across the four Working Groups because they are: (1) urgent—failure to act could create serious consequences for the United States;

(2) strategic—they are fundamental to U.S. economic security, as well as national security; and (3) pivotal—they could play a prime and determining role in the scope and rate of U.S. innovation.

**The bottom-line is simple—to compete in the next economy requires playing a new innovation game, one whose goal is to boost U.S. innovation tenfold: 10x.**

This is the call-to-action from the Council on Competitiveness and its National Commission on Innovation and Competitiveness Frontiers—for local, state and national policymakers to come together with the private sector to focus in a bold and transformational way on all efforts to optimize the United States for a new, unfolding, challenging innovation reality.

# Key Recommendations from *Competing in the Next Economy*

## A New Innovation Age Calls for a New Innovation Game

### 10x: Leadership and National Strategies for Innovation

1. Establish the White House National Competitiveness and Innovation Council (NCIC)—and parallel State Competitiveness and Innovation Councils—to create a national vision for U.S. competitiveness and innovation in the 21st century global economy, and integrate policy development across federal departments and agencies in this domain.
2. Build a whole-of-nation strategy for developing and deploying critical dual-use technologies that will shape the industries of the future, national security and global grand challenges—including advanced microelectronics, advanced computing (supercomputing, quantum, artificial intelligence), biotechnology, advanced materials, climate, etc.
3. Establish the National Innovation Radar Initiative, a coupling of innovation and intelligence assessment.
4. Establish a new Technology Statecraft Initiative and International Innovation Corps.
5. Secure supply chains critical to U.S. innovation, national security and economy growth.
6. Establish regulations, government procurement policies, and reforms in antitrust and competition policy to support the industries of the future.

### 10x: Increasing the Number of Innovations Developed in and Deployed by the United States

1. Keep the U.S. corporate tax rates competitive with EU and OECD nations, and include corporate pass-through entities in the Section 1202 exclusion, increasing asset limits to \$100 million.
2. Restore federal research and development (R&D) investment to 1960 levels of two percent of GDP.
3. Establish a new, non-profit American Innovation Investment Fund with initial public-private capitalization of \$100 billion.
4. Expand venture capacity nationwide, extend Treasury small business programs to encompass bank loans and private investors, allow equity investments into federal small business programs, and develop preferential rates for veterans and other underserved populations.
5. Establish new federal and state SBIR phase III grants to bridge the valley of death.

### 10x: Increasing the Speed at Which the United States Innovates

1. Establish the U.S. Digital Infrastructure Access and Inclusion Initiative.
2. Drive deployment—by federal, state and local governments—of new technologies that make infrastructure smarter, safer, more sustainable, more efficient, and more responsive and resilient.
3. Extend the mission of national labs to encompass economic competitiveness and permit co-funding with private sector partners.
4. Expand access to and public-private financing for shared research institutions and industry-led pilot demonstration projects.
5. Establish new sustainability curricula, innovation consortia, the “Patents for Planet” program, and new tax incentives or sustainability investments.

### 10x: Increasing the Number and Diversity of Americans Engaged in Innovation

1. Ensure all federal, state and local programs and investments in innovation capacity and education address the access, diversity and inclusion of minorities and women—with a goal to increasing their participation tenfold.
2. Redesign federal economic development programs to support innovation building capacity, eliminating outdated grant criteria and duplicative funding by adopting innovation metrics and performance standards for new block grant programs.
3. Conduct through State Competitiveness and Innovation Councils regional innovation mapping and assessments for building future innovation capacity.
4. Realign federal, state and local workforce development programs and training to enable a highly skilled, digitally competent, innovation workforce beginning at the junior and high school levels.
5. Launch new community-based public-private partnerships to support students and entrepreneurs, by expanding invention and entrepreneurship curricula in pre-K through higher education—with a goal to retain and grow regional innovation capacity.
6. Establish multidisciplinary engineering innovation centers and ecosystems in communities of dire economic and social need.

# Conclusion

*Competing in the Next Economy* is a roadmap for policymakers to follow. It marks a path to innovation leadership, growth, speed and inclusivity. The roadmap acknowledges key truths:

- Other nations are replicating the structural advantages that historically have made the United States the center of global innovation;
- Many nations are developing their own, distinctive innovation ecosystems;
- The nature of innovation is changing—becoming dramatically more interconnected, turbulent and fast-paced;
- New research and business models are emerging, allowing someone to imagine, develop and scale a disruptive innovation independent of traditional institutions;
- Despite the growth of America’s innovation-based economy, not every American has been brought onto the country’s innovation team.

But most important, the work of the National Commission and the report it has generated recognizes that innovation is what will grow the U.S. economy. Innovation is not a silver bullet requiring a singular action. More money, the creation of a new program or a change in leadership will not suffice. *Competing in the Next Economy* is not just the report’s title, but an acknowledgment that a new approach is needed.

To achieve greater than 3 percent annual growth in gross domestic product will require an “all-hands-on-deck” commitment by the nation’s leadership. America has tried tax cuts, and the country has spent far more than the government has taken in. Neither have achieved the results necessary to increase inclusive prosperity consistent with the Council’s mission to increase the standard of living for all Americans. Something different is required. Just as innovation is the key to growth, so must we innovate the nation’s policy agenda. Only by doing that can we achieve the goals set out by the Council and its Commission.

Is the aspirational goal of 10x innovation possible? That is, perhaps, the wrong question. **10x innovation is a way of thinking differently than what the country has tried for a generation.** The agricultural revolution, the industrial revolution, and the digital revolution upended entire sectors of the economy creating entirely new industries and services, and required entirely new skills. The new age of innovation called for in this report will be achieved when jobs are being created, wages are rising, products are being manufactured sustainably and diversity describes those engaged in the innovation ecosystem, not those left out.

Even with the release of this report, the work is not done.

The Commission will continue. Important ideas were left on the table. Critical recommendations were only hinted at and, of course, science and technology will continue to evolve and disrupt. The United States must be more nimble as a nation. Recommendations like the National Council on Innovation and Competitiveness are intended to better prepare the country and its leadership to adapt and move quickly to keep the U.S. competitive. But there will be more to do and new challenges to overcome.

Important as it is to acknowledge that others are making similar investments and have their own plans for leadership, it is equally important to acknowledge that, with certain exceptions, those efforts are out of America's control. The United States must get its own house in order and put the policies, the infrastructure, and the tools in place for its citizens and institutions to compete and thrive. Only then will the country prosper. Not because we bested someone else, but because we believed in and invested in ourselves.

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While the players may have changed since its founding in 1986, the mission remains as vital as ever—to enhance U.S. productivity and raise the standard of living for all Americans.

The members of the Council—CEOs, university presidents, labor leaders and national lab directors—represent a powerful, nonpartisan voice that sets aside politics and seeks results. By providing real-world perspective to Washington policymakers, the Council's private sector network makes an impact on decision-making across a broad spectrum of issues from the cutting-edge of science and technology, to the democratization of innovation, to the shift from energy weakness to strength that supports the growing renaissance in U.S. manufacturing.

The Council's leadership group firmly believes that with the right policies, the strengths and potential of the U.S. economy far outweigh the current challenges the nation faces on the path to higher growth and greater opportunity for all Americans.

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