

116TH CONGRESS
2D SESSION

S. 5043

To require the Federal Trade Commission and the Secretary of Commerce to conduct studies and submit reports on the impact of artificial intelligence and other technologies on United States businesses conducting interstate commerce, and for other purposes.

IN THE SENATE OF THE UNITED STATES

DECEMBER 17, 2020

Ms. SINEMA (for Mrs. FISCHER (for herself and Ms. SINEMA)) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To require the Federal Trade Commission and the Secretary of Commerce to conduct studies and submit reports on the impact of artificial intelligence and other technologies on United States businesses conducting interstate commerce, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “American Competitiveness Of a More Productive Emerg-
6 ing Tech Economy Act of 2020” or the “American COM-
7 PETE Act of 2020”.

1 (b) TABLE OF CONTENTS.—The table of contents for
 2 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Study to advance artificial intelligence.
- Sec. 3. Study to advance internet of things in manufacturing.
- Sec. 4. Study to advance quantum computing.
- Sec. 5. Study to advance blockchain technology.
- Sec. 6. Study to advance new and advanced materials.
- Sec. 7. Study to advance unmanned delivery services.
- Sec. 8. Study to advance internet of things.
- Sec. 9. Study to advance three-dimensional printing.
- Sec. 10. Study to combat online harms through innovation.

3 **SEC. 2. STUDY TO ADVANCE ARTIFICIAL INTELLIGENCE.**

4 (a) IN GENERAL.—

5 (1) STUDY REQUIRED.—Not later than 1 year
 6 after the date of the enactment of this Act, the Sec-
 7 retary of Commerce and the Federal Trade Commis-
 8 sion shall complete a study on the state of the artifi-
 9 cial intelligence industry and the impact of such in-
 10 dustry on the United States economy.

11 (2) REQUIREMENTS FOR STUDY.—In con-
 12 ducting the study, the Secretary and the Commis-
 13 sion shall—

14 (A) develop and conduct a survey of the
 15 artificial intelligence industry through outreach
 16 to participating entities as appropriate to—

17 (i) establish a list of industry sectors
 18 that implement and promote the use of ar-
 19 tificial intelligence;

(ii) establish a list of public-private partnerships focused on promoting the adoption and use of artificial intelligence, as well as industry-based bodies, including international bodies, which have developed, or are developing, mandatory or voluntary standards for artificial intelligence;

(iii) the status of such industry-based mandatory or voluntary standards; and

(iv) provide a description of the ways entities or industry sectors implement and promote the use of artificial intelligence;

(B) develop a comprehensive list of Federal agencies with jurisdiction over the entities and industry sectors identified under subparagraph (A);

(C) identify which Federal agency or agencies listed under subparagraph (B) each entity or industry sector interacts with;

(D) identify all interagency activities that are taking place among the Federal agencies listed under subparagraph (B), such as working groups or other coordinated efforts;

(E) develop a brief description of the jurisdiction and expertise of the Federal agencies

1 listed under subparagraph (B) with regard to
2 such entities and industry sectors;

3 (F) identify all regulations, guidelines,
4 mandatory standards, voluntary standards, and
5 other policies implemented by each of the Fed-
6 eral agencies identified under subparagraph
7 (B), as well as all guidelines, mandatory stand-
8 ards, voluntary standards, and other policies
9 implemented by industry-based bodies; and

10 (G) identify Federal Government resources
11 that exist for consumers and small businesses
12 to evaluate the use of artificial intelligence.

13 (b) MARKETPLACE AND SUPPLY CHAIN SURVEY.—
14 The Secretary and Commission shall conduct a survey of
15 the marketplace and supply chain of artificial intelligence
16 to—

17 (1) assess the severity of risks posed to such
18 marketplace and supply chain;

19 (2) review the ability of foreign governments or
20 third parties to exploit the supply chain in a manner
21 that raises risks to the economic and national secu-
22 rity of the United States; and

23 (3) identify emerging risks and long-term
24 trends in such marketplace and supply chain.

1 (c) REPORT TO CONGRESS.—Not later than 6
2 months after the completion of the study required under
3 subsection (a), the Secretary and the Commission shall
4 submit to the Committee on Energy and Commerce and
5 the Committee on Science, Space, and Technology of the
6 House of Representatives, and the Committee on Com-
7 merce, Science, and Transportation of the Senate, and
8 make publicly available on their respective websites, a re-
9 port that contains—

10 (1) the results of the study conducted pursuant
11 to subsection (a) and the survey conducted pursuant
12 to subsection (b); and

13 (2) recommendations to—

14 (A) grow the United States economy
15 through the secure advancement of artificial in-
16 telligence;

17 (B) develop a national strategy to advance
18 the United States business sectors' position in
19 the world on the adoption of artificial intel-
20 ligence;

21 (C) develop strategies to mitigate current
22 and emerging risks to the marketplace and sup-
23 ply chain of artificial intelligence; and

(D) develop legislation that may advance the expeditious adoption of artificial intelligence.

SEC. 3. STUDY TO ADVANCE INTERNET OF THINGS IN MANUFACTURING.

(a) IN GENERAL.—

(1) STUDY REQUIRED.—Not later than 1 year after the date of the enactment of this Act, the Secretary of Commerce, in coordination with the head of any other appropriate Federal agency, shall complete a study on the state of manufacturing in the United States.

(2) REQUIREMENTS FOR STUDY.—In conducting the study, the Secretary shall—

(A) develop and conduct a survey of the manufacturing industry through outreach to participating entities as appropriate to—

(i) establish a list of the industry sectors that implement and promote the use of internet-connected devices and internet-connected solutions in manufacturing;

(ii) establish a list of public-private partnerships focused on promoting the adoption and use of internet-connected devices and internet-connected solutions in

1 manufacturing, as well as industry-based
2 bodies, including international bodies, that
3 have developed, or are developing, manda-
4 tory or voluntary standards for such uses;

5 (iii) the status of such industry-based
6 mandatory or voluntary standards; and

7 (iv) provide a description of the ways
8 entities or industry sectors implement and
9 promote the use of internet-connected de-
10 vices and internet-connected solutions in
11 manufacturing;

12 (B) develop a comprehensive list of Federal
13 agencies with jurisdiction over the entities and
14 industry sectors identified under subparagraph
15 (A);

16 (C) identify which Federal agency or agen-
17 cies listed under subparagraph (B) each entity
18 or industry sector interacts with;

19 (D) identify all interagency activities that
20 are taking place among the Federal agencies
21 listed under subparagraph (B), such as working
22 groups or other coordinated efforts;

23 (E) develop a brief description of the juris-
24 diction and expertise of the Federal agencies

1 listed under subparagraph (B) with regard to
2 such entities and industry sectors;

3 (F) identify all regulations, guidelines,
4 mandatory standards, voluntary standards, and
5 other policies implemented by each of the Fed-
6 eral agencies identified under subparagraph
7 (B), as well as all guidelines, mandatory stand-
8 ards, voluntary standards, and other policies
9 implemented by industry-based bodies; and

10 (G) identify Federal Government resources
11 that exist for consumers and small businesses
12 to evaluate the use of internet-connected devices
13 and internet-connected solutions in manufac-
14 turing.

15 (b) MARKETPLACE AND SUPPLY CHAIN SURVEY.—

16 The Secretary shall conduct a survey of the marketplace
17 and supply chain of internet-connected devices and inter-
18 net-connected solutions used in manufacturing to—

19 (1) assess the severity of risks posed to such
20 marketplace and supply chain;

21 (2) review the ability of foreign governments or
22 third parties to exploit the supply chain in a manner
23 that raises risks to the economic and national secu-
24 rity of the United States; and

1 (3) identify emerging risks and long-term
2 trends in such marketplace and supply chain.

3 (c) REPORT TO CONGRESS.—Not later than 6
4 months after the completion of the study required pursu-
5 ant to subsection (a), the Secretary shall submit to the
6 Committee on Energy and Commerce and the Committee
7 on Science, Space, and Technology of the House of Rep-
8 resentatives, and the Committee on Commerce, Science,
9 and Transportation of the Senate, and make publicly
10 available on the website of the Department of Commerce,
11 a report that contains—

12 (1) the results of the study conducted pursuant
13 to subsection (a) and the surveys conducted pursu-
14 ant to subsection (b); and

15 (2) recommendations to—

16 (A) grow the United States economy
17 through the secure advancement of the use of
18 internet-connected devices and internet-con-
19 nected solutions in manufacturing;

20 (B) develop a national strategy to advance
21 the United States business sectors' position in
22 the world on the adoption of internet-connected
23 devices and internet-connected solutions used in
24 manufacturing;

1 (C) develop strategies to mitigate current
 2 and emerging risks to the marketplace and sup-
 3 ply chain of internet-connected devices and
 4 internet-connected solutions used in manufac-
 5 turing;

6 (D) develop policies that States can adopt
 7 to encourage the growth of manufacturing, in-
 8 cluding the use of internet-connected devices
 9 and internet-connected solutions in manufac-
 10 turing; and

11 (E) develop legislation that may advance
 12 the expeditious adoption of the use of internet-
 13 connected devices and internet-connected solu-
 14 tions in manufacturing;

15 **SEC. 4. STUDY TO ADVANCE QUANTUM COMPUTING.**

16 (a) IN GENERAL.—

17 (1) STUDY REQUIRED.—Not later than 1 year
 18 after the date of the enactment of this Act, the Sec-
 19 retary of Commerce and the Federal Trade Commis-
 20 sion shall complete a study on the state of the quan-
 21 tum computing industry and the impact of such in-
 22 dustry on the United States economy.

23 (2) REQUIREMENTS FOR STUDY.—In con-
 24 ducting the study, the Secretary and the Commis-
 25 sion shall—

1 (A) develop and conduct a survey of the
2 quantum computing industry through outreach
3 to participating entities as appropriate to—

4 (i) establish a list of industry sectors
5 that implement and promote the use of
6 quantum computing;

7 (ii) establish a list of public-private
8 partnerships focused on promoting the
9 adoption and use of quantum computing,
10 as well as industry-based bodies, including
11 international bodies, which have developed,
12 or are developing, mandatory or voluntary
13 standards for quantum computing;

14 (iii) the status of such industry-based
15 mandatory or voluntary standards; and

16 (iv) provide a description of the ways
17 entities or industry sectors implement and
18 promote the use of quantum computing;

19 (B) develop a comprehensive list of Federal
20 agencies with jurisdiction over the entities and
21 industry sectors identified under paragraph (A);

22 (C) identify which Federal agency or agen-
23 cies listed under subparagraph (B) each entity
24 or industry sector interacts with;

1 (D) identify all interagency activities that
2 are taking place among the Federal agencies
3 listed under subparagraph (B), such as working
4 groups or other coordinated efforts;

5 (E) develop a brief description of the juris-
6 diction and expertise of the Federal agencies
7 listed under subparagraph (B) with regard to
8 such entities and industry sectors;

9 (F) identify all regulations, guidelines,
10 mandatory standards, voluntary standards, and
11 other policies implemented by each of the Fed-
12 eral agencies identified under subparagraph
13 (B), as well as all guidelines, mandatory stand-
14 ards, voluntary standards, and other policies
15 implemented by industry-based bodies; and

16 (G) identify Federal Government resources
17 that exist for consumers and small businesses
18 to evaluate the use of quantum computing.

19 (b) MARKETPLACE AND SUPPLY CHAIN SURVEY.—
20 The Secretary and Commission shall conduct a survey of
21 the marketplace and supply chain of quantum computing
22 to—

23 (1) assess the severity of risks posed to such
24 marketplace and supply chain;

1 (2) review the ability of foreign governments or
2 third parties to exploit the supply chain in a manner
3 that raises risks to the economic and national secu-
4 rity of the United States; and

5 (3) identify emerging risks and long-term
6 trends in such marketplace and supply chain.

7 (c) REPORT TO CONGRESS.—Not later than 6
8 months after the completion of the study required pursu-
9 ant to subsection (a), the Secretary and the Commission
10 shall submit to the Committee on Energy and Commerce
11 and the Committee on Science, Space, and Technology of
12 the House of Representatives, and the Committee on Com-
13 merce, Science, and Transportation of the Senate, and
14 make publicly available on their respective websites, a re-
15 port that contains—

16 (1) the results of the study conducted pursuant
17 to subsection (a) and the survey conducted pursuant
18 to subsection (b); and

19 (2) recommendations to—

20 (A) grow the United States economy
21 through the secure advancement of quantum
22 computing;

23 (B) develop a national strategy to advance
24 the United States business sectors' position in

1 the world on the adoption of quantum com-
2 puting;

3 (C) develop strategies to mitigate current
4 and emerging risks to the marketplace and sup-
5 ply chain of quantum computing; and

6 (D) develop legislation that may advance
7 the expeditious adoption of quantum com-
8 puting.

9 **SEC. 5. STUDY TO ADVANCE BLOCKCHAIN TECHNOLOGY.**

10 (a) IN GENERAL.—

11 (1) STUDY REQUIRED.—Not later than 1 year
12 after the date of the enactment of this Act, the Sec-
13 retary of Commerce and the Federal Trade Commis-
14 sion shall complete a study on the state of the
15 blockchain technology industry and the impact of
16 such industry on the United States economy.

17 (2) REQUIREMENTS FOR STUDY.—In con-
18 ducting the study, the Secretary and the Commis-
19 sion shall—

20 (A) develop and conduct a survey of the
21 blockchain technology industry through out-
22 reach to participating entities as appropriate
23 to—

1 (i) establish a list of industry sectors
2 that implement and promote the use of
3 blockchain technology;

4 (ii) establish a list of public-private
5 partnerships focused on promoting the
6 adoption and use of blockchain technology,
7 as well as industry-based bodies, including
8 international bodies, which have developed,
9 or are developing, mandatory or voluntary
10 standards for blockchain technology;

11 (iii) the status of such industry-based
12 mandatory or voluntary standards; and

13 (iv) provide a description of the ways
14 entities or industry sectors implement and
15 promote the use of blockchain technology;

16 (B) develop a comprehensive list of Federal
17 agencies with jurisdiction over the entities and
18 industry sectors identified under paragraph (A);

19 (C) identify which Federal agency or agen-
20 cies listed under subparagraph (B) each entity
21 or industry sector interacts with;

22 (D) identify all interagency activities that
23 are taking place among the Federal agencies
24 listed under subparagraph (B), such as working
25 groups or other coordinated efforts;

(E) develop a brief description of the jurisdiction and expertise of the Federal agencies listed under subparagraph (B) with regard to such entities and industry sectors;

(F) identify all regulations, guidelines, mandatory standards, voluntary standards, and other policies implemented by each of the Federal agencies identified under subparagraph (B), as well as all guidelines, mandatory standards, voluntary standards, and other policies implemented by industry-based bodies; and

(G) identify Federal Government resources that exist for consumers and small businesses to evaluate the use of blockchain technology.

(b) MARKETPLACE AND SUPPLY CHAIN SURVEY.—

The Secretary and Commission shall conduct a survey of the marketplace and supply chain of blockchain technology to—

(1) assess the severity of risks posed to such marketplace and supply chain;

(2) review the ability of foreign governments or third parties to exploit the supply chain in a manner that raises risks to the economic and national security of the United States; and

1 (3) identify emerging risks and long-term
2 trends in such marketplace and supply chain.

3 (c) REPORT TO CONGRESS.—Not later than 6
4 months after the completion of the study required pursu-
5 ant to subsection (a), the Secretary and the Commission
6 shall submit to the Committee on Energy and Commerce
7 and the Committee on Science, Space, and Technology of
8 the House of Representatives, and the Committee on Com-
9 merce, Science, and Transportation of the Senate, and
10 make publicly available on their respective websites, a re-
11 port that contains—

12 (1) the results of the study conducted pursuant
13 to subsection (a) and the survey conducted pursuant
14 to subsection (b); and

15 (2) recommendations to—

16 (A) grow the United States economy
17 through the secure advancement of blockchain
18 technology;

19 (B) develop a national strategy to advance
20 the United States business sectors' position in
21 the world on the adoption of blockchain tech-
22 nology;

23 (C) develop strategies to mitigate current
24 and emerging risks to the marketplace and sup-
25 ply chain of blockchain technology; and

1 (D) develop legislation that may advance
2 the expeditious adoption of blockchain tech-
3 nology.

4 **SEC. 6. STUDY TO ADVANCE NEW AND ADVANCED MATE-**
5 **RIALS.**

6 (a) IN GENERAL.—

7 (1) STUDY REQUIRED.—Not later than 1 year
8 after the date of the enactment of this Act, the Sec-
9 retary of Commerce and the Federal Trade Commis-
10 sion, in coordination with the head of any other ap-
11 propriate Federal agency, shall complete a study on
12 the state of new and advanced materials industry,
13 including synthetically derived or enhanced natural
14 properties, and the impact of such industry on the
15 United States economy.

16 (2) REQUIREMENTS FOR STUDY.—In con-
17 ducting the study, the Secretary and the Commis-
18 sion shall—

19 (A) develop and conduct a survey of the
20 new and advanced materials industry through
21 outreach to participating entities as appropriate
22 to—

23 (i) establish a list of industry sectors
24 that implement and promote the use of
25 new and advanced materials;

1 (ii) establish a list of public-private
2 partnerships focused on promoting the
3 adoption and use of new and advanced ma-
4 terials, as well as industry-based bodies,
5 including international bodies, which have
6 developed, or are developing, mandatory or
7 voluntary standards for new and advanced
8 materials;

9 (iii) the status of such industry-based
10 mandatory or voluntary standards; and

11 (iv) provide a description of the ways
12 entities or industry sectors implement and
13 promote the use of new and advanced ma-
14 terials;

15 (B) develop a comprehensive list of Federal
16 agencies with jurisdiction over the entities and
17 industry sectors identified under subparagraph
18 (A);

19 (C) identify which Federal agency or agen-
20 cies listed under subparagraph (B) each entity
21 or industry sector interacts with;

22 (D) identify all interagency activities that
23 are taking place among the Federal agencies
24 listed under subparagraph (B), such as working
25 groups or other coordinated efforts;

1 (E) develop a brief description of the juris-
2 diction and expertise of the Federal agencies
3 listed under subparagraph (B) with regard to
4 such entities and industry sectors;

5 (F) identify all regulations, guidelines,
6 mandatory standards, voluntary standards, and
7 other policies implemented by each of the Fed-
8 eral agencies identified under subparagraph
9 (B), as well as all guidelines, mandatory stand-
10 ards, voluntary standards, and other policies
11 implemented by industry-based bodies; and

12 (G) identify Federal Government resources
13 that exist for consumers and small businesses
14 to evaluate the use of new and advanced mate-
15 rials.

16 (b) MARKETPLACE AND SUPPLY CHAIN SURVEY.—

17 The Secretary and Commission shall conduct a survey of
18 the marketplace and supply chain of new and advanced
19 materials to—

20 (1) assess the severity of risks posed to such
21 marketplace and supply chain;

22 (2) review the ability of foreign governments or
23 third parties to exploit the supply chain in a manner
24 that raises risks to the economic and national secu-
25 rity of the United States; and

1 (3) identify emerging risks and long-term
2 trends in such marketplace and supply chain.

3 (c) REPORT TO CONGRESS.—Not later than 6
4 months after the completion of the study required pursu-
5 ant to subsection (a), the Secretary and the Commission
6 shall submit to the Committee on Energy and Commerce
7 and the Committee on Science, Space, and Technology of
8 the House of Representatives, and the Committee on Com-
9 merce, Science, and Transportation of the Senate, and
10 make publicly available on their respective websites, a re-
11 port that contains—

12 (1) the results of the study conducted pursuant
13 to subsection (a) and the survey conducted pursuant
14 to subsection (b); and

15 (2) recommendations to—

16 (A) grow the United States economy
17 through the secure advancement of new and ad-
18 vanced materials;

19 (B) develop a national strategy to advance
20 the United States business sectors' position in
21 the world on the adoption of new and advanced
22 materials;

23 (C) develop strategies to mitigate current
24 and emerging risks to the marketplace and sup-
25 ply chain of new and advanced materials; and

1 (D) develop legislation that may advance
2 the expeditious adoption of new and advanced
3 materials.

4 **SEC. 7. STUDY TO ADVANCE UNMANNED DELIVERY SERV-**
5 **ICES.**

6 (a) IN GENERAL.—

7 (1) STUDY REQUIRED.—Not later than 1 year
8 after the date of the enactment of this Act, the Sec-
9 retary of Commerce, in coordination with the head
10 of any other appropriate Federal agency, shall com-
11 plete a study on the impact of unmanned delivery
12 services on United States businesses conducting
13 interstate commerce.

14 (2) REQUIREMENTS FOR STUDY.—In con-
15 ducting the study, the Secretary shall do the fol-
16 lowing:

17 (A) Conduct a survey through outreach to
18 participating entities to—

19 (i) establish a list of the industry sec-
20 tors that develop and use unmanned deliv-
21 ery services, including the use of autono-
22 mous vehicles, drones, and robots;

23 (ii) review how unmanned delivery
24 services are currently being used and any

1 potential future applications of such serv-
2 ices;

3 (iii) identify any challenges to the de-
4 velopment and adoption of unmanned de-
5 livery services;

6 (iv) review how such services may be
7 used to—

8 (I) deliver groceries, meals, medi-
9 cations, and other necessities to senior
10 citizens, people with disabilities, and
11 people without access to traditional
12 public transportation;

13 (II) address challenges public
14 health emergencies present, including
15 delivering groceries, meals, medica-
16 tions, medical supplies, and other ne-
17 cessities during such emergencies; and

18 (III) any other potential use of
19 such services;

20 (v) identify any safety risks associated
21 with the adoption of unmanned delivery
22 services on roads, in the air, or other envi-
23 ronments, including any dangers posed to
24 pedestrians, bicyclists, motorcyclists, mo-
25 torists, or property;

1 (vi) identify the effect of unmanned
2 delivery services on traffic safety and con-
3 gestion;

4 (vii) evaluate the extent to which soft-
5 ware, technology, and infrastructure be-
6 hind unmanned delivery services are devel-
7 oped and manufactured in the United
8 States;

9 (viii) identify the number and types of
10 jobs that may be lost or substantially
11 changed due to the development and adop-
12 tion of unmanned delivery services;

13 (ix) identify the number and types of
14 jobs that may be created due to the devel-
15 opment and adoption of unmanned delivery
16 services; and

17 (x) evaluate the effect of the adoption
18 unmanned delivery services on job quality
19 for low, middle, and high-skilled workers.

20 (B) Develop and conduct a survey of Fed-
21 eral activity related to unmanned delivery serv-
22 ices to—

23 (i) establish a list of Federal agencies
24 asserting jurisdiction over industry sectors
25 identified under subparagraph (A)(i);

1 (ii) develop a brief description of the
2 jurisdiction and expertise of the Federal
3 agencies regarding unmanned delivery
4 services; and

5 (iii) identify all interagency activities
6 regarding unmanned delivery services.

7 (C) Conduct a survey of the marketplace
8 and supply chain of unmanned delivery services
9 to—

10 (i) assess the severity of risks posed
11 to such marketplace and supply chain;

12 (ii) review the ability of foreign gov-
13 ernments or third parties to exploit such
14 supply chain in a manner that raises risks
15 to the economic and national security of
16 the United States; and

17 (iii) identify emerging risks and long-
18 term trends in such marketplace and sup-
19 ply chain.

20 (b) REPORT TO CONGRESS.—Not later than 6
21 months after the completion of the study required pursu-
22 ant to subsection (a), the Secretary, in coordination with
23 the head of any other appropriate Federal agency, shall
24 submit to the Committee on Energy and Commerce and
25 the Committee on Science, Space, and Technology of the

1 House of Representatives, and the Committee on Com-
2 merce, Science, and Transportation of the Senate, and
3 make publicly available on the website of the Department
4 of Commerce, a report that contains—

5 (1) the results of the study conducted under
6 subsection (a); and

7 (2) recommendations to—

8 (A) develop and implement a comprehen-
9 sive plan to promote the development and adop-
10 tion of unmanned delivery services in the
11 United States;

12 (B) develop policies that States can adopt
13 to encourage the development and adoption of
14 unmanned delivery services;

15 (C) develop a national strategy to advance
16 the United States position in the world on the
17 development and adoption of unmanned delivery
18 services, and manufacture of technology behind
19 unmanned delivery services;

20 (D) develop strategies to mitigate current
21 and emerging risks to the marketplace and sup-
22 ply chain of unmanned delivery services; and

23 (E) develop legislation to accomplish such
24 recommendations.

1 **SEC. 8. STUDY TO ADVANCE INTERNET OF THINGS.**

2 (a) STUDY.—The Secretary of Commerce shall con-
3 duct a study on the state of the internet-connected devices
4 industry (commonly known as the “Internet of Things”)
5 in the United States. In conducting the study, the Sec-
6 retary shall—

7 (1) develop and conduct a survey of the inter-
8 net-connected devices industry through outreach to
9 participating entities as appropriate, including—

10 (A) a list of the industry sectors that de-
11 velop internet-connected devices;

12 (B) a list of public-private partnerships fo-
13 cused on promoting the adoption and use of
14 internet-connected devices, as well as industry-
15 based bodies, including international bodies,
16 which have developed, or are developing, man-
17 datory or voluntary standards for internet-con-
18 nected devices;

19 (C) the status of the industry-based man-
20 datory or voluntary standards identified in sub-
21 paragraph (B); and

22 (D) a description of the ways entities or
23 industry sectors develop, use, or promote the
24 use of internet-connected devices;

1 (2) develop a comprehensive list of Federal
2 agencies with jurisdiction over the entities and in-
3 dustry sectors identified under paragraph (1);

4 (3) identify which Federal agency or agencies
5 listed under paragraph (2) each entity or industry
6 sector interacts with;

7 (4) identify all interagency activities that are
8 taking place among the Federal agencies listed
9 under paragraph (2), such as working groups or
10 other coordinated efforts;

11 (5) develop a brief description of the jurisdic-
12 tion and expertise of the Federal agencies listed
13 under paragraph (2) with regard to such entities
14 and industry sectors;

15 (6) identify all regulations, guidelines, manda-
16 tory standards, voluntary standards, and other poli-
17 cies implemented by each of the Federal agencies
18 identified under paragraph (2), as well as all guide-
19 lines, mandatory standards, voluntary standards,
20 and other policies implemented by industry-based
21 bodies; and

22 (7) identify Federal Government resources that
23 exist for consumers and small businesses to evaluate
24 internet-connected devices.

1 (b) REPORT TO CONGRESS.—Not later than 1 year
2 after the date of enactment of this Act, the Secretary shall
3 submit to the Committee on Energy and Commerce and
4 the Committee on Science, Space, and Technology of the
5 House of Representatives, and the Committee on Com-
6 merce, Science, and Transportation of the Senate, and
7 make publicly available on the website of the Department
8 of Commerce, a report that contains—

9 (1) the results of the study conducted under
10 subsection (a); and

11 (2) recommendations of the Secretary for
12 growth of the United States economy through the
13 secure advancement of internet-connected devices.

14 (c) DEFINITIONS.—In this section:

15 (1) FEDERAL AGENCY.—The term “Federal
16 agency” means an agency, as defined in section 551
17 of title 5, United States Code.

18 (2) INTERNET-CONNECTED DEVICE.—The term
19 “internet-connected device” means a physical object
20 that—

21 (A) is capable of connecting to the inter-
22 net, either directly or indirectly through a net-
23 work, to communicate information at the direc-
24 tion of an individual; and

1 (B) has computer processing capabilities
 2 for collecting, sending, receiving, or analyzing
 3 data.

4 **SEC. 9. STUDY TO ADVANCE THREE-DIMENSIONAL PRINT-**
 5 **ING.**

6 (a) IN GENERAL.—

7 (1) STUDY REQUIRED.—Not later than 1 year
 8 after the date of the enactment of this Act, the Sec-
 9 retary of Commerce, in coordination with the head
 10 of any other appropriate Federal agency, shall com-
 11 plete a study on the state of the three-dimensional
 12 printing industry and the impact of such industry on
 13 the United States economy.

14 (2) REQUIREMENTS FOR STUDY.—In con-
 15 ducting the study, the Secretary shall—

16 (A) develop and conduct a survey of the
 17 three-dimensional printing industry through
 18 outreach to participating entities as appropriate
 19 to—

20 (i) establish a list of industry sectors
 21 that implement and promote the use of
 22 three-dimensional printing;

23 (ii) establish a list of public-private
 24 partnerships focused on promoting the
 25 adoption and use of three-dimensional

1 printing, as well as industry-based bodies,
2 including international bodies, which have
3 developed, or are developing, mandatory or
4 voluntary standards for three-dimensional
5 printing;

6 (iii) the status of such industry-based
7 mandatory or voluntary standards; and

8 (iv) provide a description of the ways
9 entities or industry sectors implement and
10 promote the use of three-dimensional
11 printing;

12 (B) develop a comprehensive list of Federal
13 agencies with jurisdiction over the entities and
14 industry sectors identified under paragraph (A);

15 (C) identify which Federal agency or agen-
16 cies listed under subparagraph (B) each entity
17 or industry sector interacts with;

18 (D) identify all interagency activities that
19 are taking place among the Federal agencies
20 listed under subparagraph (B), such as working
21 groups or other coordinated efforts;

22 (E) develop a brief description of the juris-
23 diction and expertise of the Federal agencies
24 listed under subparagraph (B) with regard to
25 such entities and industry sectors;

1 (F) identify all regulations, guidelines,
 2 mandatory standards, voluntary standards, and
 3 other policies implemented by each of the Fed-
 4 eral agencies identified under subparagraph
 5 (B), as well as all guidelines, mandatory stand-
 6 ards, voluntary standards, and other policies
 7 implemented by industry-based bodies; and

8 (G) identify Federal Government resources
 9 that exist for consumers and small businesses
 10 to evaluate the use of three-dimensional print-
 11 ing.

12 (b) MARKETPLACE AND SUPPLY CHAIN SURVEY.—
 13 The Secretary shall conduct a survey of the marketplace
 14 and supply chain of three-dimensional printing to—

15 (1) assess the severity of risks posed to such
 16 marketplace and supply chain;

17 (2) review the ability of foreign governments or
 18 third parties to exploit the supply chain in a manner
 19 that raises risks to the economic and national secu-
 20 rity of the United States; and

21 (3) identify emerging risks and long-term
 22 trends in such marketplace and supply chain.

23 (c) REPORT TO CONGRESS.—Not later than 6
 24 months after the completion of the study required pursu-
 25 ant to subsection (a), the Secretary shall submit to the

1 Committee on Energy and Commerce and the Committee
2 on Science, Space, and Technology of the House of Rep-
3 resentatives, and the Committee on Commerce, Science,
4 and Transportation of the Senate, and make publicly
5 available on the website of the Department of Commerce,
6 a report that contains—

7 (1) the results of the study conducted pursuant
8 to subsection (a) and the survey conducted pursuant
9 to subsection (b); and

10 (2) recommendations to—

11 (A) grow the United States economy
12 through the secure advancement of three-di-
13 mensional printing;

14 (B) develop a national strategy to advance
15 the United States business sectors' position in
16 the world on the adoption of three-dimensional
17 printing;

18 (C) develop strategies to mitigate current
19 and emerging risks to the marketplace and sup-
20 ply chain of three-dimensional printing; and

21 (D) develop legislation that may advance
22 the expeditious adoption of three-dimensional
23 printing.

1 **SEC. 10. STUDY TO COMBAT ONLINE HARMS THROUGH IN-**
2 **NOVATION.**

3 (a) IN GENERAL.—

4 (1) STUDY REQUIRED.—Not later than 1 year
5 after the date of the enactment of this Act, the Fed-
6 eral Trade Commission shall conduct and complete
7 a study on how artificial intelligence may be used to
8 address the online harms described in paragraph
9 (2).

10 (2) REQUIREMENTS FOR STUDY.—In con-
11 ducting the study, the Commission shall consider
12 whether and how artificial intelligence may be used
13 to identify, remove, or take any other appropriate
14 action necessary to address the following online
15 harms:

16 (A) Deceptive and fraudulent content in-
17 tended to scam or otherwise harm individuals,
18 including such practices directed at senior citi-
19 zens.

20 (B) Manipulated content intended to mis-
21 lead individuals, including deepfake videos and
22 fake individual reviews.

23 (C) Website or mobile application inter-
24 faces designed to intentionally mislead or ex-
25 ploit individuals.

1 (D) Illegal content online, including the il-
2 legal sale of opioids, child sexual exploitation
3 and abuse, revenge pornography, harassment,
4 cyberstalking, hate crimes, the glorification of
5 violence or gore, and incitement of violence.

6 (E) Terrorist and violent extremists' abuse
7 of digital platforms, including the use of such
8 platforms to promote themselves, share propa-
9 ganda, and glorify real-world acts of violence.

10 (F) Disinformation campaigns coordinated
11 by inauthentic accounts or individuals to influ-
12 ence United States elections.

13 (G) The sale of counterfeit products.

14 (b) REPORT TO CONGRESS.—Not later than 6
15 months after the completion of the study required pursu-
16 ant to subsection (a), the Commission shall submit to the
17 Committee on Energy and Commerce and the Committee
18 on Science, Space, and Technology of the House of Rep-
19 resentatives, and the Committee on Commerce, Science,
20 and Transportation of the Senate, and make publicly
21 available on its website, a report that contains—

22 (1) the results of the study conducted under
23 subsection (a);

1 (2) recommendations on how artificial intel-
2 ligence may be used to address the online harms de-
3 scribed in subsection (a)(2);

4 (3) recommendations on what reasonable poli-
5 cies, practices, and procedures may be implemented
6 to utilize artificial intelligence to address such online
7 harms; and

8 (4) recommendations for any legislation that
9 may advance the adoption and use of artificial intel-
10 ligence to address such online harms.

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