

### RIETI BBL Seminar Handout

#### America Responds to Change: Implications for globalization and the future of work

February 27, 2018

Speaker: Mr. Bruce Stokes

https://www.rieti.go.jp/jp/index.html

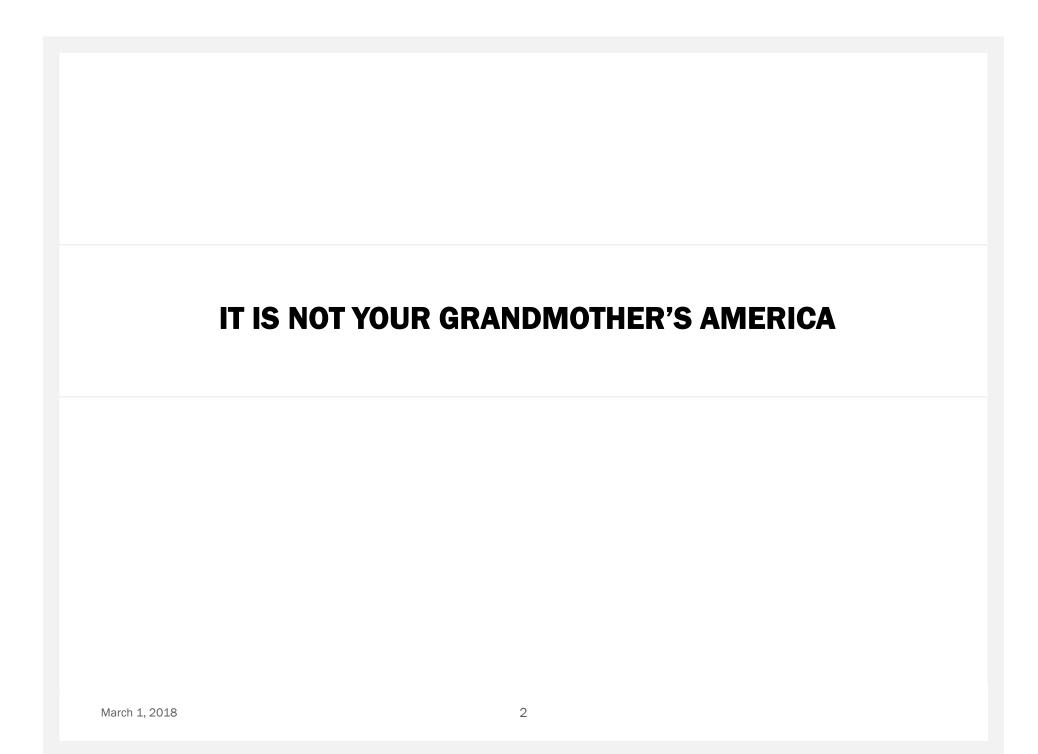


## America Responds to Change: Implications for Globalization and the Future of Work

**Bruce Stokes** 

Director, Global Economic Attitudes

RIETI, Tokyo, February 27, 2018



#### **Americans Have Experienced Dramatic Change in One Lifetime**

	1967	2017
	%	%
Non-white	12	38
Foreign-born	4.9	14
White, no college education	75	39
18-34, living with parents	22	32
Births to unmarried women	8.5	40.3
Women in the workforce	41	57
Share of wealth owned by top 1%	27	42

Source: Mehlman, Castagnetti, Rosen & Thomas analysis based on data from U.S. Census Bureau, Pew Research Center, U.S. Dept. of Labor and T. Piketty.

# **GLOBALIZATION IS SUPPORTED IN PRINCIPLE BUT NOT** IN PRACTICE

March 1, 2018

#### **Trade is Not a Public Policy Priority**

\_\_ is a top priority for the president and Congress

	2010	2014	2017	2018	'10-'18 Change	17-'18 Change
	%	%	%	%	%	%
Defending against terrorism	80	73	76	73	-7	-3
Improving education	65	69	69	72	+7	+3
Strengthening nation's economy	83	80	73	71	-12	-2
Reducing health care costs	57	59	66	68	+11	+2
Protecting environment	44	49	55	62	+18	+7
Improving job situation	81	74	68	62	-19	-6
Problems of poor and needy	53	49	56	58	+5	+2
Reducing budget deficit	60	63	52	48	-12	-4
Strengthening the military	49	43	45	46	-3	+1
Dealing with immigration	40	40	43	47	+7	+4
Dealing with climate change	28	29	38	46	+18	+8
Dealing with global trade	32	28	40	38	+6	-2

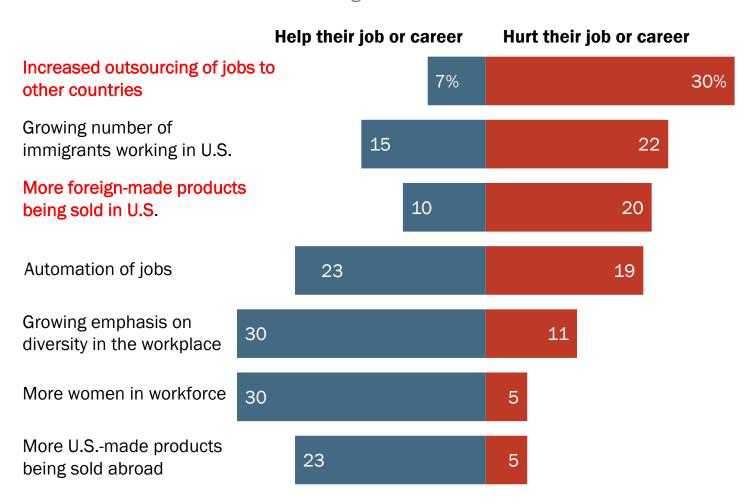
Note: In 2013 and earlier, the item "dealing with the issue of immigration" asked about "illegal immigration." In 2015 and earlier, the item "Dealing with global climate change" asked about "global warming." Significant differences in **bold**.

Source: Pew Research Center survey of U.S. adults conducted Jan.10-15, 2018.

Pew Research Center **\*** 

#### **Three-in-Ten Say Increased Outsourcing Has Hurt Their Job or Career**

Each of the following has done more to ...



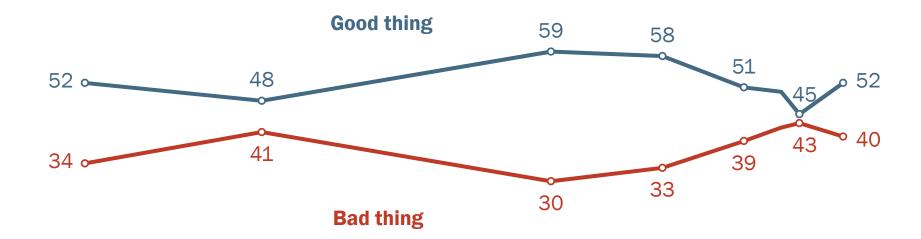
Note. Based on those who are employed, unemployed but looking for work or who have looked but couldn't find a job. Majorities (not shown here) say these trends haven't made much of a difference for their job or career.

Source: Pew Research Center survey of U.S. adults conducted Aug. 8-21 and Sept 14-28, 2017.

#### **In Principle Americans Favor Free Trade Deals**

Free trade agreements between the U.S. and other countries have been a \_\_ for the United States

80%





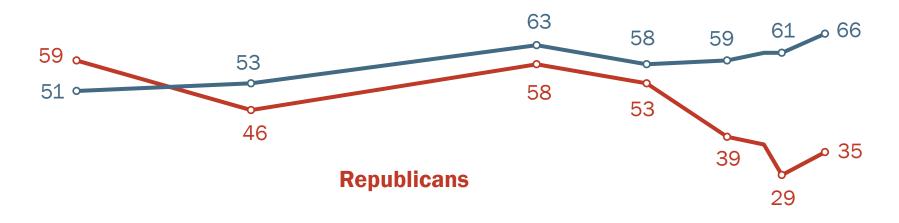
Source: Pew Research Center Survey, April 5-11, 2017.

## But Its Democrats Not Republicans Who Favor Such Trade Agreements

Free trade agreements between the U.S. and other countries have been a good thing for the United States

100%

#### **Democrats**





Source: Pew Research Center Survey, April 5-11, 2017.

#### **Older White Men Are the Most Negative on Free Trade Deals**

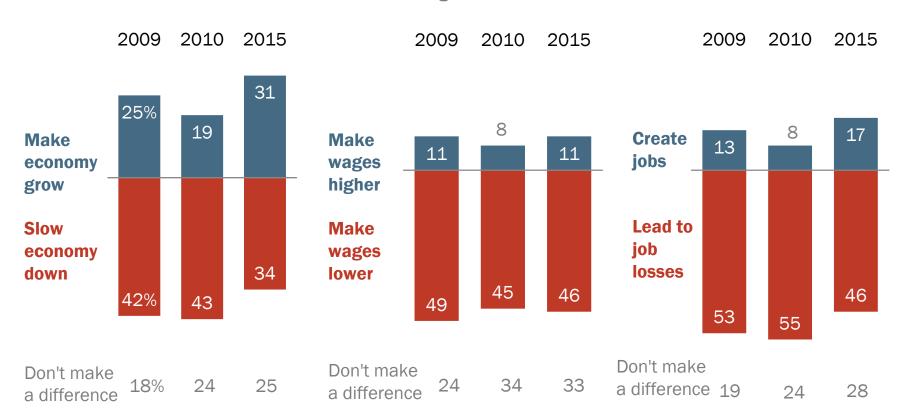
Free trade agreements between the U.S. and other countries have been a \_\_ for the United States

	<b>Good thing</b>	<b>B</b> ad thing
	%	%
TOTAL Population	52	40
White men	46	47
18-34	63	32
35-49	49	41
50-64	35	55
65+	34	58

Note: Whites include only those who are not Hispanic. Source: Pew Research Center Survey, April 5-11, 2017.

## Why?: Because Few Americans Think Free Trade Deals Boost the Economy, Wages or Jobs

Free trade agreements ...



Note: "Other" and "Don't know" responses not shown. Source: Pew Research Center survey, May 12-18, 2015.

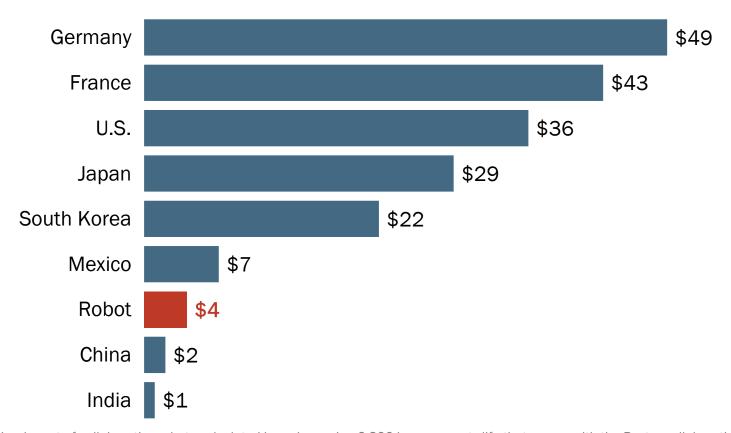


## THE ADVENT OF ROBOTICS AND ARTIFICIAL **INTELLIGENCE POSES NEW CHALLENGES**

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#### Next Generation Robots Are Already Highly Cost Competitive in Both Advanced and Emerging Economies, Bain & Co.

Average hourly cost of manufacturing workers by country vs. collaborative robot, 2013

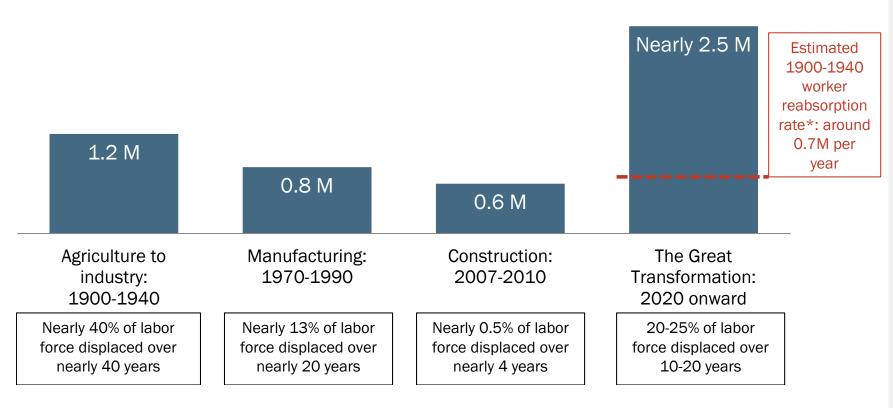


Note: Hourly cost of collaborative robots calculated based on using 6,300-hour warranty life that comes with the Baxter collaborative robot. China and India data from 2012 and 2011, respectively.

Source: Bain & Company report based on Barclays Equity Research, Conference Board, Robotworx, Rethink Robotics, and Bain Macro Trends Group Analysis, 2017.

## U.S. Service Sector Automation Could Displace Labor Much More Rapidly Than Previous Transformations, Bain & Co.

Average <u>annual</u> workers displaced, scaled to size of the 2016 labor force (in millions)

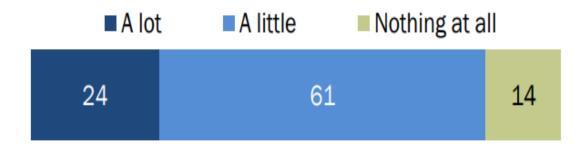


<sup>\*</sup>Reabsorption rate calculated based on estimated average annual reabsorption of displaced agricultural workers from 1900 to 1940.

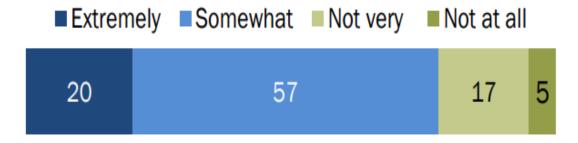
Source: Bain & Company report based on U.S. Census Bureau, U.S. Bureau of Labor Statistics and Bain Macro Trend Group analysis, 2017.

## Public Has Some Awareness, Believes Job Displacement Likely

% of U.S. adults who say they have heard, read or thought \_\_\_\_ about the idea that robots and computers may be able to do many jobs currently done by humans

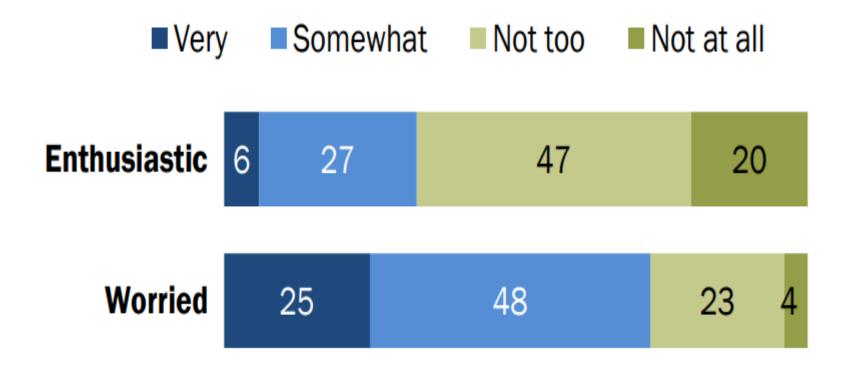


% who say this concept seems \_\_\_\_ realistic



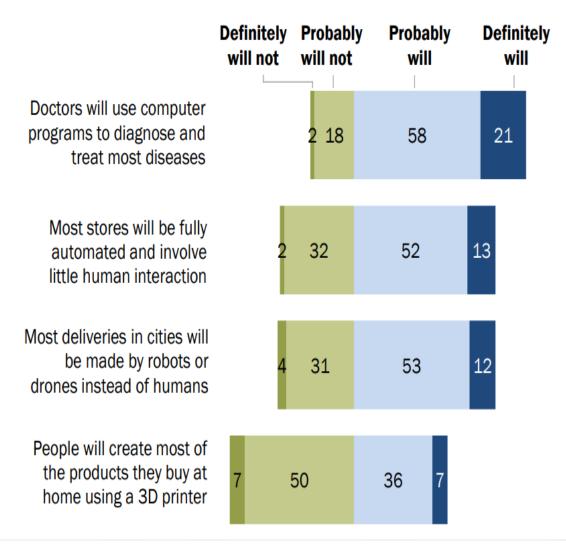
## The Public is More Worried Than Enthusiastic About Al/Robots

% of U.S. adults who say the possibility that robots and computers could do many of the jobs currently done by humans makes them feel ...



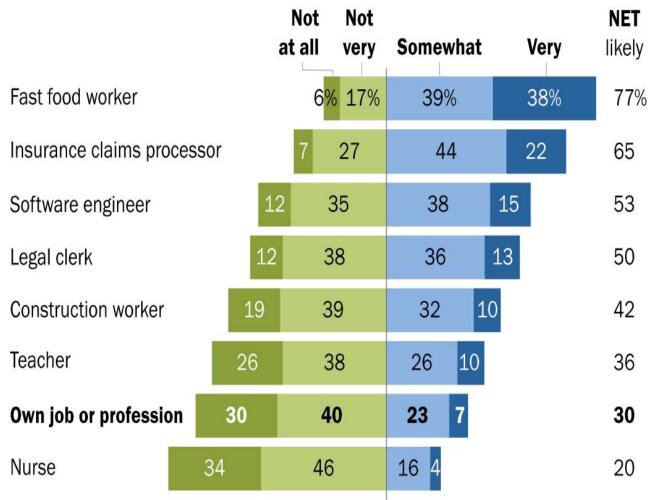
#### Automation Is Expected to Impact Many Areas of Life Over the Nest 20 Years

% of U.S. adults who think the following will / will not happen in the next 20 years



#### **Some Occupations Are Viewed as More at Risk Than Others**

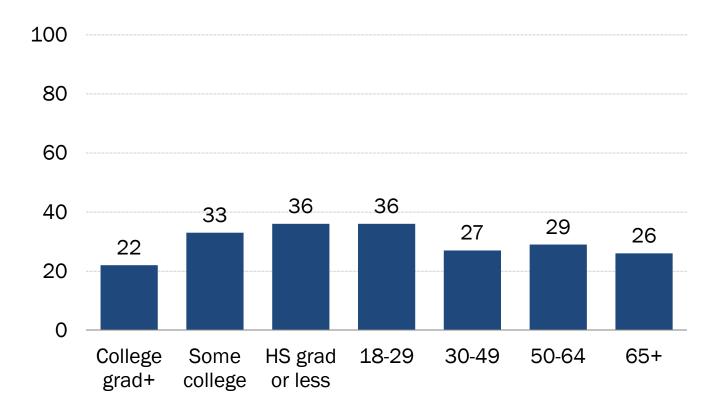
% of U.S. adults who think it likely that the following jobs will be replaced by robots or computers in their lifetimes



Source: Pew Research Center survey conducted May 1-15, 2017.

#### The Less Educated and Young People Are the Most Worried That Their Own Job Will Be Automated in the Future

% of workers in each group who think it very/somewhat likely that their job will be replaced by machines in their lifetime



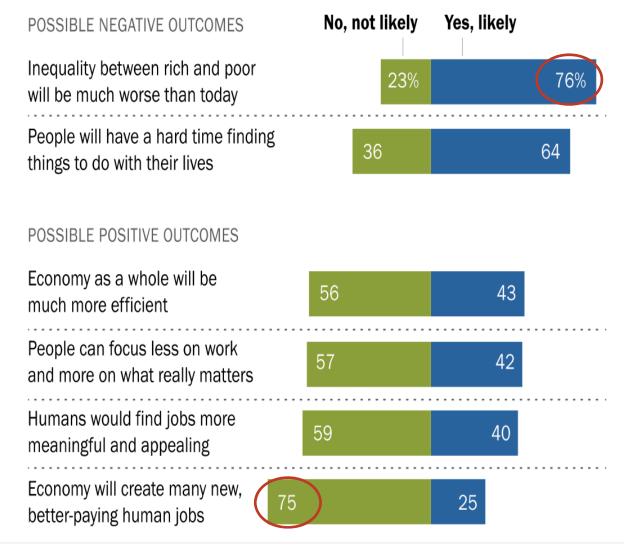
## Blue Collar Workers More Likely to Say Al Will Eliminate More Jobs than it Creates, Gallup

Thinking about the number of jobs in the U.S., do you believe an increase in the use of artificial intelligence will ...

		Age		Educati	Education		Job Type	
	TOTAL	18-35	36-50	Less than bachelor's degree	Bachelor's degree or higher	White collar	Blue collar	
	%	%	%	%	%	%	%	
Create more jobs than AI eliminates	14	10	15	13	16	17	9	
Eliminate more jobs than Al creates	73	78	75	74	72	71	82	
No impact on number of jobs in the U.S.	13	12	11	13	12	12	10	

Source: Gallup survey conducted Sep. 15- Oct. 10, 2017.

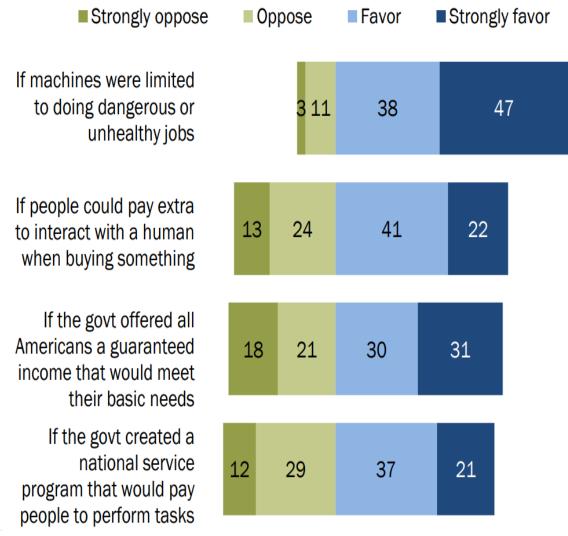
#### **Top Expected Outcomes: Greater Inequality, No New Jobs**





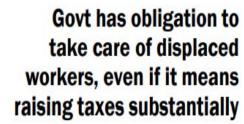


### Strong Support for Policies That Limit the Impact of Automation

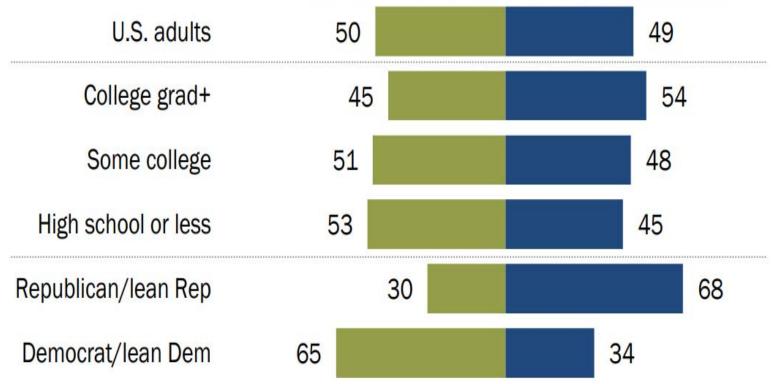




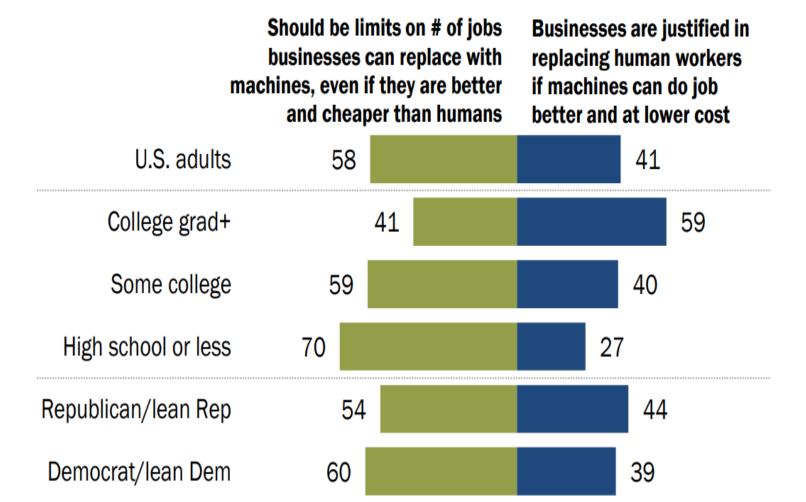
#### Public Split on Who Should be Responsible for Displaced Workers



Individuals have obligation to care for own well-being, even if machines have already taken many jobs



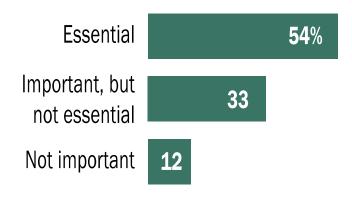
#### **But Americans Supportive of Limits on Job Displacement**



#### The Public Now Sees Training as Essential

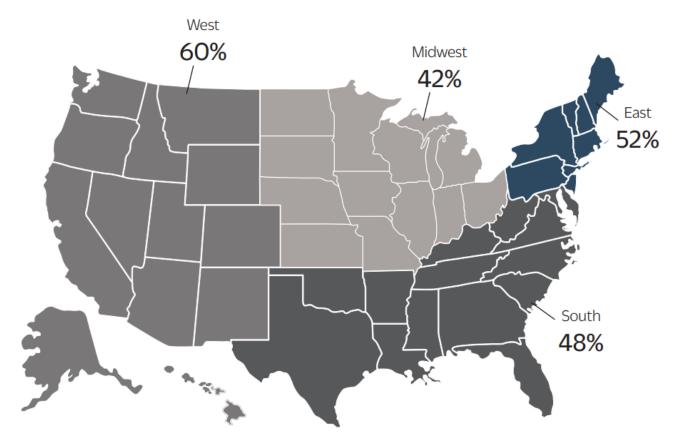
#### ... and most workers see continuous training as essential or important to career success

% saying training/skills development throughout their work life will be ...



## But Fewer in Midwest Say They Would Need More Education If New Technology Replaced Their Job, Gallup Poll

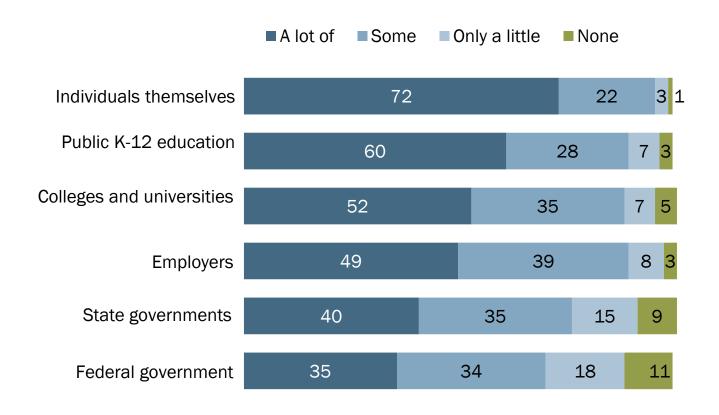
% of employed Americans who agree that if they lost their job because of new technology, they would need additional education/training to find another job with a similar salary



Source: Gallup survey conducted Sep. 15- Oct. 10, 2017.

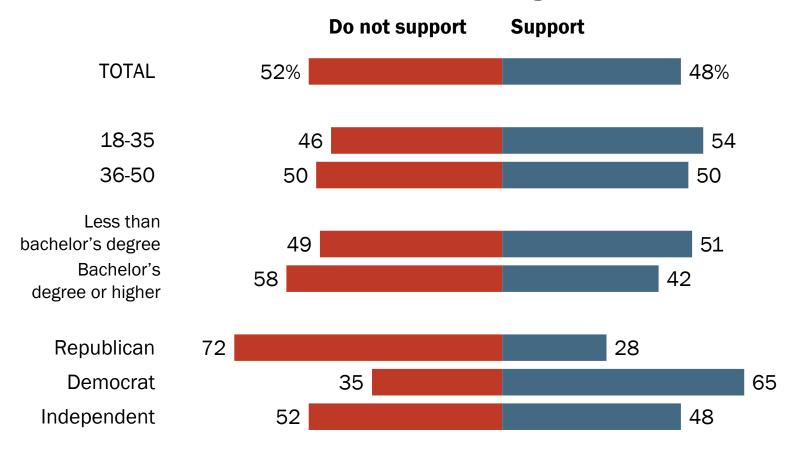
## Americans Say Individuals Themselves Have the Most Responsibility to Make Sure Workers Have the Right Skills

% saying these groups should have \_\_ responsibility in making sure the American workforce has the right skills and education to be successful in today's economy



#### And, Americans Split on Universal Basic Income, Gallup

Do you \_\_ a universal basic income program as a way to help Americans who lose their jobs because of advances in artificial intelligence?



Source: Gallup survey conducted Sep. 15- Oct. 10, 2017.



## All Pew Research Center reports and data are available online at <a href="https://www.pewresearch.org">www.pewresearch.org</a>

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