**2017 PEW RESEARCH CENTER’S AMERICAN TRENDS PANEL**

**WAVE 27 May**

**FINAL TOPLINE**

**May 1 – May 15, 2017**

**TOTAL N=4,135**

**ASK ALL:**

CAREREL How likely is it that, at some point in your life, you will be responsible for caring for an aging parent or family member?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 40 | Very likely |
| 28 | Somewhat likely |
| 12 | Not too likely |
| 11 | Not at all likely |
| 9 | I am already doing this |
| 0 | No answer |
|  |  |

**ASK IF EMPLOYED (F\_E3\_FINAL=1,2) [N=2,629]:**

INDUSTRY What industry or field do you currently work in? If you have multiple jobs, please choose the one that you consider to be your main or primary occupation.

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 7 | Hospitality or service |
| 12 | Health care |
| 11 | Manufacturing, mining, or construction |
| 10 | Retail |
| 9 | Education |
| 7 | Banking, finance, accounting, real estate, or insurance |
| 4 | Transportation |
| 7 | Government, public administration or military |
| 7 | Information/Technology |
| 21 | Other |
| 4 | Not currently employed |
| 0 | No answer |
|  |  |

**ASK IF EMPLOYED (INDUSTRY=1-10) [N=2,510]:**

JOBDUTY Does your work involve any of the following duties or tasks? **[RANDOMIZE WITH E ALWAYS LAST]**

*[Check all that apply]*

|  |  |  |
| --- | --- | --- |
|  | Selected | Not selected  /No answer |
| a. Manual or physical labor | 41 | 59 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| b. Managing others | 39 | 61 |
| May 1-May 15, 2017 |  |  |
|  | Selected | Not selected  /No answer |
| **JOBDUTY CONTINUED…** |  |  |
| c. Working directly with clients or customers | 66 | 34 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| d. Data processing or analysis | 40 | 60 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| e. None of these **[EXCLUSIVE PUNCH]** | 7 | 93 |
| May 1-May 15, 2017 |  |  |
|  |  |  |

**ASK ALL:**

WORK1 If a current high school student asked you for advice on what sort of career they should pursue, what would you tell them?

**OPEN-ENDED RESPONSES NOT SHOWN**

**RANDOMIZE ORDER OF KNOW1 AND KNOW2**

**ASK ALL:**

KNOW1 Based on what you know, in the last 30 years has the total number of manufacturing jobs in the United States… **[RANDOMIZE OPTIONS; OPTION 3 ALWAYS LAST]**

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 10 | Increased |
| 81 | Decreased |
| 8 | Stayed about the same |
| 1 | No answer |
|  |  |

**ASK ALL:**

KNOW2 Based on what you know, in the last 30 years has the value of the goods and products manufactured in the United States… **[RANDOMIZE OPTIONS IN SAME ORDER AS KNOW1; OPTION 3 ALWAYS LAST]**

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 35 | Increased |
| 47 | Decreased |
| 17 | Stayed about the same |
| 1 | No answer |
|  |  |

**ASK ALL:**

PREDICT Do you think each of the following things will or will not happen in the next 20 years? **[RANDOMIZE ITEMS]**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Will definitely happen | Will probably happen | Will probably NOT happen | Will definitely NOT happen | No answer |
| a. Doctors will rely on computer programs to diagnose most diseases and determine treatments | 21 | 58 | 18 | 2 | 0 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
| b. Most stores and retail businesses will be fully automated and involve little or no human interaction between customers and employees | 13 | 52 | 32 | 2 | 0 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
| c. Most deliveries in cities will be made by robots or drones instead of humans | 12 | 53 | 31 | 4 | 0 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
| d. When people want to buy most common products, they will create them at home using a 3-D printer | 7 | 36 | 50 | 7 | 0 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |

**ASK ALL:**

CARS1 How much have you seen or heard about the effort to develop driverless vehicles – that is, cars and trucks that can operate on their own without a human driver?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 35 | A lot |
| 59 | A little |
| 6 | Nothing at all |
| 0 | No answer |
|  |  |

**ASK IF HAVE HEARD A LOT OR LITTLE ABOUT DRIVERLESS VEHICLES (CARS1=1-2) [N=3,977]:**

CARS2 Has what you’ve seen or heard about driverless vehicles been mostly positive, mostly negative, or a mix of both?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 22 | Mostly positive |
| 12 | Mostly negative |
| 66 | A mix of both |
| 0 | No answer |
|  |  |

**RANDOMIZE ORDER OF CARS3a AND CARS3b**

**ASK ALL:**

CARS3a How ENTHUSIASTIC are you, if at all, about the development of driverless vehicles?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 11 | Very enthusiastic |
| 28 | Somewhat enthusiastic |
| 38 | Not too enthusiastic |
| 22 | Not at all enthusiastic |
| 0 | No answer |
|  |  |

CARS3b How WORRIED are you, if at all, about the development of driverless vehicles?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 14 | Very worried |
| 39 | Somewhat worried |
| 35 | Not too worried |
| 11 | Not at all worried |
| 0 | No answer |
|  |  |

**ASK ALL:**

CARS4 How long, if ever, do you think it will take for MOST of the vehicles on the road to be driverless, rather than driven by humans?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 9 | Less than 10 years |
| 56 | 10 to less than 50 years |
| 23 | 50 to less than 100 years |
| 5 | 100 or more years |
| 8 | It will never happen |
| 0 | No answer |
|  |  |

**ASK ALL:**

CARS5 Would you, personally, want to ride in a driverless vehicle if you had the opportunity?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 44 | Yes |
| 56 | No |
| 0 | No answer |
|  |  |

**ASK IF ANSWERED CARS5 (CARS5=1-2) [N=4,129]:**

CARS6 What is the main reason you [IF CARS5=1 “would”; IF CARS5=2 “would not”] want to ride in a driverless vehicle?

**OPEN-ENDED RESPONSES NOT SHOWN**

**RANDOMIZE ORDER OF CARS7a AND CARS7b**

**ASK ALL:**

CARS7a How safe would you feel sharing the road with a driverless passenger vehicle?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 11 | Very safe |
| 37 | Somewhat safe |
| 35 | Not too safe |
| 17 | Not safe at all |
| 0 | No answer |
|  |  |

CARS7b How safe would you feel sharing the road with a driverless freight truck?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 8 | Very safe |
| 26 | Somewhat safe |
| 33 | Not too safe |
| 32 | Not safe at all |
| 0 | No answer |
|  |  |

**ASK ALL:**

CARS8 If driverless vehicles become widespread, do you think that the number of people killed or injured in traffic accidents will [increase, decrease/decrease, increase], or stay about the same? **[RANDOMIZE OPTIONS; OPTION 3 ALWAYS LAST]**

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 30 | Increase |
| 39 | Decrease |
| 31 | Stay about the same |
| 0 | No answer |

**ASK ALL:**

CARS9 Would you strongly favor, favor, oppose, or strongly oppose the following rules and regulations for driverless vehicles? **[RANDOMIZE]**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Strongly favor | Favor | Oppose | Strongly oppose | No answer |
| a. Requiring them to travel in dedicated lanes | 47 | 36 | 12 | 5 | 0 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
| b. Restricting them from traveling near certain areas, such as schools | 34 | 35 | 24 | 7 | 0 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
| c. Requiring them to have a person in the driver’s seat who could take control in an emergency situation | 53 | 34 | 10 | 3 | 0 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |

**ASK ALL:**

CARS10 If driverless vehicles become widespread, which of the following do you think are likely to happen as a result? **[RANDOMIZE ITEMS]**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Yes, likely | No, not likely | No answer |
| a. Elderly and disabled people will be able to live more independently | 75 | 25 | 0 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |
| b. Many people who drive for a living would lose their jobs | 81 | 19 | 0 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |
| c. Owning a car would become much less important to people | 43 | 56 | 1 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |
| d. Most people would never learn how to drive a car on their own | 70 | 30 | 0 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |
| e. There would be much less traffic in major cities | 28 | 72 | 0 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |

On a different subject…

**ASK ALL:**

WORK2 Would you say that society generally places TOO MUCH importance on working and having a job, NOT ENOUGH importance on working and having a job, or is it just about right?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 19 | Too much importance |
| 50 | Not enough importance |
| 31 | Just about right |
| 0 | No answer |
|  |  |

**ASK IF EMPLOYED (INDUSTRY=1-10) [N=2,510]:**

WORK3 Have the following technologies had a [positive impact, a negative impact / negative impact, positive impact], or no impact either way on you and your job or career? **[RANDOMIZE ORDER; RANDOMIZE RESPONSE CATEGORIES, ITEM 3 ALWAYS LAST]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Positive impact | Negative impact | No impact either way | No answer |
| a. Industrial robots | 27 | 14 | 58 | 1 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |
| b. Word processing or spreadsheet software | 70 | 5 | 25 | 1 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |
| c. Email or social media | 60 | 16 | 24 | 1 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |
| d. Software that manages your daily work schedule or routine | 54 | 9 | 36 | 1 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |
| e. Smartphones | 67 | 13 | 20 | 0 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |
| f. Technologies that help customers serve themselves on their own | 48 | 12 | 40 | 0 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |

**ASK IF EMPLOYED (INDUSTRY=1-10) [N=2,510]:**

Thinking about the different technologies you have used or that have impacted you over the course of your career…

**RANDOMIZE ORDER OF WORK4a, WORK4b AND WORK4c**

WORK4a Thinking about how DEMANDING your work is, has technology generally made your work…

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 39 | More demanding |
| 29 | Less demanding |
| 32 | No impact either way |
| 0 | No answer |
|  |  |

WORK4b Thinking about how INTERESTING your work is, has technology generally made your work…

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 53 | More interesting |
| 12 | Less interesting |
| 34 | No impact either way |
| 0 | No answer |
|  |  |

WORK4c Thinking about opportunities for advancement in your career, do you feel that technology has…

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 46 | Increased your opportunities |
| 13 | Decreased your opportunities |
| 40 | No impact either way |
| 0 | No answer |
|  |  |

Please consider the following scenario…

New developments in robotics and computing are changing the nature of many jobs. Today, these technologies are mostly being used in certain settings to perform routine tasks that are repeated throughout the day. But in the future, robots and computers with advanced capabilities may be able to do most of the jobs that are currently done by humans today.

**ASK ALL:**

ROBJOB1 How much have you heard, read, or thought about this idea before today?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 24 | A lot |
| 61 | A little |
| 14 | Nothing at all |
| 0 | No answer |
|  |  |

**ASK ALL:**

ROBJOB2 Based on what you know, does this concept seem…

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 20 | Extremely realistic |
| 57 | Somewhat realistic |
| 17 | Not very realistic |
| 5 | Not at all realistic |
| 1 | No answer |
|  |  |

**ASK ALL, RANDOMIZE ORDER OF ROBJOB3a AND ROBJOB3b:**

ROBJOB3 Thinking about the possibility that computers and robots could do most of the work currently done by humans…

a. How ENTHUSIASTIC are you, if at all, about this possibility for society as a whole?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 6 | Very enthusiastic |
| 27 | Somewhat enthusiastic |
| 47 | Not too enthusiastic |
| 20 | Not at all enthusiastic |
| 0 | No answer |
|  |  |

b. How WORRIED are you, if at all, about this possibility for society as a whole?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 25 | Very worried |
| 48 | Somewhat worried |
| 23 | Not too worried |
| 4 | Not at all worried |
| 0 | No answer |
|  |  |

**ASK ALL:**

ROBJOB4 If robots and computers were able to perform most of the jobs currently being done by humans, do you think the following are likely or not likely to happen as a result? **[RANDOMIZE]**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Yes, likely | No, not likely | No answer |
| a. Inequality between rich and poor would be much worse than it is today | 76 | 23 | 1 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |
| b. People would have a hard time finding things to do with their lives | 64 | 36 | 0 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |
| c. People would be able to focus less on work and more on the things that really matter to them in life | 42 | 57 | 1 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |
| d. The economy as a whole would be much more efficient | 43 | 56 | 1 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |
| e. The economy would create many new, better-paying jobs for humans | 25 | 75 | 1 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |
| f. Humans would find their jobs more meaningful and fulfilling since machines would mostly be doing things that humans find unappealing | 40 | 59 | 1 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |

**ASK ALL:**

ROBJOB5 In the event that robots and computers are able to do most of the jobs that are done by humans today, would you favor or oppose the following? **[RANDOMIZE]**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Strongly favor | Favor | Oppose | Strongly oppose | No answer |
| a. If the federal government provided all Americans with a guaranteed income that would allow them to meet their basic needs | 31 | 30 | 21 | 18 | 1 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
| b. If robots and computers were mostly limited to doing jobs that are dangerous or unhealthy for humans to do | 47 | 38 | 11 | 3 | 0 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | Strongly favor | Favor | Oppose | Strongly oppose | No answer |
| **ROBJOB5 CONTINUED…** |  |  |  |  |  |
| c. If people had the option of paying extra to interact with a human, rather than a robot or computer, when buying a product or service | 22 | 41 | 24 | 13 | 1 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
| d. If the federal government created a national service program that paid people to perform tasks even if a robot or computer could do those tasks faster or cheaper | 21 | 37 | 29 | 12 | 1 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |

**RANDOMIZE ORDER OF ROBJOB6 AND ROBJOB7**

**ASK ALL:**

ROBJOB6 Which of the following statements best describes how you feel, even if neither is exactly right? **[RANDOMIZE OPTIONS]**

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 50 | The government would have an obligation to take care of people whose jobs are displaced by robots and computers, even if that meant raising taxes substantially |
| 49 | Individuals would have an obligation to take care of their own financial well-being, even if robots and computers have already taken many of the jobs they might be qualified for |
| 1 | No answer |
|  |  |

**ASK ALL:**

ROBJOB7 Which of the following statements best describes how you feel, even if neither is exactly right? **[RANDOMIZE OPTIONS]**

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 41 | If businesses can receive better work at lower cost by replacing humans with robots and computers, they are justified in doing so |
| 58 | There should be limits on how many jobs businesses can replace with robots and computers, even if they can do those jobs better and more cheaply than humans can |
| 1 | No answer |
|  |  |

**ASK ALL:**

ROBJOB8 Do you think it is very likely, somewhat likely, not very likely, or not at all likely that the following jobs will be mostly replaced by robots or computers in your lifetime? **[RANDOMIZE]**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Very  likely | Somewhat likely | Not very likely | Not at all likely | No answer |
| a. Software engineer | 15 | 38 | 35 | 12 | 1 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
| b. Legal clerk | 13 | 36 | 38 | 12 | 1 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
| c. Nurse | 4 | 16 | 46 | 34 | 1 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
| d. Construction worker | 10 | 32 | 39 | 19 | 0 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
| e. Fast food worker | 38 | 39 | 17 | 6 | 0 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
| f. Teacher | 10 | 26 | 38 | 26 | 1 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
| g. Insurance claims processor | 22 | 44 | 27 | 7 | 0 |
| May 1-May 15, 2017 |  |  |  |  |  |
|  |  |  |  |  |  |

**ASK IF EMPLOYED (INDUSTRY=1-10) [N=2,510]:**

ROBJOB9 How likely, if at all, do you think it is that YOUR OWN job or profession will be mostly done by robots or computers in your lifetime?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 7 | Very likely |
| 23 | Somewhat likely |
| 40 | Not very likely |
| 30 | Not at all likely |
| 0 | No answer |
|  |  |

**ASK ALL:**

WORK5a Have you yourself ever lost a job because your employer replaced your position with a machine, robot or computer program?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 2 | Yes |
| 94 | No |
| 4 | I’m not sure |
| 0 | No answer |
|  |  |

**ASK IF HAVE LOST A JOB DUE TO AUTOMATION (WORK5a=1) [N=83]:**

WORK5b When you lost a job for this reason, was your next job…

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 36 | A job you liked better |
| 17 | A job you liked worse |
| 34 | A similar job |
| 13 | Did not find a new job |
| 0 | No answer |
|  |  |

**ASK ALL:**

WORK6 Have you ever had your pay or hours reduced because your employer replaced some aspect of your job with a machine, robot or computer program?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 5 | Yes |
| 91 | No |
| 4 | I’m not sure |
| 1 | No answer |
|  |  |

**ASK ALL:**

WORK7 Do you personally KNOW anyone who has lost a job, or had their pay or hours reduced, because their employer replaced their work with a machine, robot or computer program?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 18 | Yes |
| 81 | No |
| 1 | No answer |
|  |  |

**[ASSIGN PARTICIPANTS TO RECEIVE ONE OF THE FOLLOWING TWO VIGNETTES BASED ON FORM SPLIT]**

**ASK IF FORM 1 [N=2,045]:**

Next, please consider the following scenario…

Today, many older adults move into assisted living facilities when they can no longer live independently. In the future, people could be provided with a robot caregiver that would allow them to continue living in their own home as they age. This robot would be available 24 hours a day to help with household chores, test vital signs and dispense medication, or call for assistance in an emergency. It would also have conversational skills and could serve as a companion for people who live alone.

CAREGIV1 How much have you heard, read, or thought about this idea before today?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 6 | A lot |
| 29 | A little |
| 65 | Nothing at all |
| 0 | No answer |
|  |  |

CAREGIV2 Based on what you know, does this concept seem…

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 10 | Extremely realistic |
| 49 | Somewhat realistic |
| 29 | Not very realistic |
| 11 | Not at all realistic |
| 0 | No answer |
|  |  |

**ASK IF FORM 1 [N=2,045]:**

CAREGIV3 Thinking about the possibility that older adults could have this type of robot caregiver… **[RANDOMIZE ORDER]**

a. How ENTHUSIASTIC are you, if at all, about this possibility for society as a whole?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 9 | Very enthusiastic |
| 35 | Somewhat enthusiastic |
| 38 | Not too enthusiastic |
| 18 | Not at all enthusiastic |
| 0 | No answer |
|  |  |

b. How WORRIED are you, if at all, about this possibility for society as a whole?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 14 | Very worried |
| 33 | Somewhat worried |
| 43 | Not too worried |
| 10 | Not at all worried |
| 0 | No answer |
|  |  |

**ASK IF FORM 1 [N=2,045]:**

CAREGIV4 Would you, personally, be interested in this type of robot caregiver for yourself or a member of your family?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 41 | Yes |
| 59 | No |
| 0 | No answer |
|  |  |

**ASK IF CAREGIV4=1-2 [N=2,039]:**

CAREGIV5 What is the main reason you [IF CAREGIV4=1 “would”; IF CAREGIV4=2 “would not”] be interested in this type of robot caregiver?

**OPEN-ENDED RESPONSES NOT SHOWN**

**ASK IF FORM 1 [N=2,045]:**

CAREGIV6 If robot caregivers such as these were developed, do you think the following are likely or not likely to happen as a result? **[RANDOMIZE ITEMS]**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Yes, likely | No, not likely | No answer |
| a. Young people would feel less worried about caring for their aging relatives | 70 | 30 | 1 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |
| b. Society would save money on caring for older adults | 51 | 47 | 1 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |
| c. Many older adults would treat their robot caregiver like a human friend | 56 | 43 | 1 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |
| d. Older adults would feel more isolated than they do today | 64 | 35 | 1 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |
| e. Older adults would feel more independent and self-sufficient | 59 | 40 | 1 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |
| f. These robots would only be used by people who could not afford a human caregiver for their loved one | 42 | 56 | 2 |
| May 1-May 15, 2017 |  |  |  |
|  |  |  |  |

**ASK IF FORM 1 [N=2,045]:**

CAREGIV7 Would you feel better, worse, or would it not make a difference if the robot caregiver in this scenario had a camera so that a human operator could monitor the situation at all times?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 48 | Better |
| 20 | Worse |
| 32 | No difference |
| 0 | No answer |
|  |  |

**ASK IF FORM 2 [N=2,090]:**

Next, please consider the following scenario…

Today, when companies are hiring they typically have someone read applicants’ resumes and conduct personal interviews to choose the right person for the job. In the future, computer programs may be able to provide a systematic review of each applicant without the need for human involvement. These programs would give each applicant a score based on the content of their resume, application, or standardized tests for skills such as problem solving or personality type. Applicants would then be ranked and hired based on those scores.

HIRING1 How much have you heard, read, or thought about this idea before today?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 9 | A lot |
| 34 | A little |
| 57 | Nothing at all |
| 0 | No answer |
|  |  |

HIRING2 Based on what you know, does this concept seem…

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 12 | Extremely realistic |
| 47 | Somewhat realistic |
| 28 | Not very realistic |
| 13 | Not at all realistic |
| 0 | No answer |
|  |  |

**ASK IF FORM 2 [N=2,090]:**

HIRING3 Thinking about the possibility that job candidates might be evaluated using this sort of computer program… **[RANDOMIZE ORDER]**

a. How ENTHUSIASTIC are you, if at all, about this possibility for society as a whole?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 3 | Very enthusiastic |
| 19 | Somewhat enthusiastic |
| 49 | Not too enthusiastic |
| 28 | Not at all enthusiastic |
| 1 | No answer |
|  |  |

b. How WORRIED are you, if at all, about this possibility for society as a whole?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 21 | Very worried |
| 46 | Somewhat worried |
| 25 | Not too worried |
| 7 | Not at all worried |
| 1 | No answer |
|  |  |

**ASK IF FORM 2 [N=2,090]:**

HIRING4 Would you, personally, want to apply for a job that used this type of computer program to make hiring decisions?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 22 | Yes |
| 76 | No |
| 1 | No answer |
|  |  |

**ASK IF HIRING4=1-2 [N=2,076]:**

HIRING5 What is the main reason you [IF HIRING4=1 “would”; IF HIRING4=2 “would not”] want to apply for a job that uses this type of computer program to make hiring decisions?

**OPEN-ENDED RESPONSES NOT SHOWN**

**ASK IF FORM 2 [N=2,090]:**

HIRING6 Do you think these computer programs would do a better job, a worse job, or do about the same as humans when it comes to… **[RANDOMIZE ITEMS]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Better job than humans | Worse job than humans | About the same | No answer |
| a. Hiring candidates who are well-qualified | 25 | 42 | 32 | 1 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |
| b. Hiring candidates who fit well with the company’s culture | 12 | 60 | 28 | 1 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |
| c. Choosing candidates from a diverse range of backgrounds | 27 | 42 | 31 | 1 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |
| d. Providing opportunities for candidates with non-traditional experiences | 13 | 58 | 28 | 1 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |

**ASK IF FORM 2 [N=2,090]:**

HIRING7 Would you feel better, worse, or would your opinion of this scenario not change in each of the following scenarios… **[RANDOMIZE ITEMS]**

a. If these computer programs included public data about each candidate – such as the material they post on social media – in making their evaluations

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 19 | Better |
| 50 | Worse |
| 29 | No difference |
| 1 | No answer |
|  |  |

b. If companies used these computer programs to conduct initial screenings of potential candidates, but then interviewed those candidates in the traditional way

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 57 | Better |
| 17 | Worse |
| 25 | No difference |
| 1 | No answer |
|  |  |

**ASK FORM 1 [N=2,045]:**

On a final topic…

VOICE1 Do you ever use a voice-controlled digital assistant, such as Apple Siri, Amazon Alexa, Google Assistant, or Microsoft Cortana?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 46 | Yes |
| 54 | No |
| 0 | No answer |
|  |  |

**ASK IF USE DIGITAL ASSISTANT (VOICE1=1) [N=1,057]:**

VOICE2 On what type of device do you use a digital assistant? **[RANDOMIZE 1-3 WITH ITEM 4 LAST]**

*[Check all that apply]*

|  |  |  |
| --- | --- | --- |
|  | Selected | Not selected  /No answer |
| 1. Smartphone | 90 | 10 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| 2. A stand-alone device, like an Amazon Echo or Google Home | 17 | 83 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| 3. Computer or tablet | 31 | 69 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| 4. Some other type of device | 7 | 93 |
| May 1-May 15, 2017 |  |  |
|  |  |  |

**ASK IF USE DIGITAL ASSISTANT (VOICE1=1) [N=1,057]:**

VOICE3 Do you ever use a digital assistant to control other devices in your home, such as a stereo, TV, thermostat, or lighting?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 26 | Yes |
| 73 | No |
| 1 | No answer |
|  |  |

**ASK IF USE DIGITAL ASSISTANT (VOICE1=1) [N=1,057]:**

VOICE4 When you use digital assistants, how often do they accurately respond to your commands?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 39 | Most of the time |
| 42 | Some of the time |
| 16 | Not very often |
| 4 | No answer |
|  |  |

**ASK IF USE DIGITAL ASSISTANT (VOICE1=1) [N=1,057]:**

VOICE5 Which of the following, if any, are reasons why you use a voice-controlled digital assistant? **[RANDOMIZE]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Major reason | Minor reason | Not a reason | No answer |
| a. It lets me use my phone or device while doing other things with my hands | 55 | 28 | 16 | 1 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |
| b. Spoken language feels more natural than typing | 22 | 37 | 40 | 0 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |
| c. It’s easier for children to use | 14 | 20 | 65 | 1 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |
| d. It’s fun | 23 | 39 | 38 | 0 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |

**ASK IF DO NOT USE DIGITAL ASSISTANT (VOICE1=2) [N=983]:**

VOICE6 Which of the following, if any, are reasons why you do not use digital assistants? **[RANDOMIZE 1-4 WITH ITEMS 5 AND 6 LAST AND IN ORDER]**

*[Check all that apply]*

|  |  |  |
| --- | --- | --- |
|  | Selected | Not selected  /No answer |
| 1. Privacy concerns | 27 | 73 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| 2. Don’t own any devices that offer this feature | 28 | 72 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| 3. Too complicated to use | 18 | 82 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| 4. Just not interested | 61 | 39 |
| May 1-May 15, 2017 |  |  |
|  | Selected | Not selected  /No answer |
| **VOICE6 CONTINUED…** |  |  |
| 5. Some other reason | 9 | 91 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| 6. None of these **[EXCLUSIVE PUNCH]** | 8 | 92 |
| May 1-May 15, 2017 |  |  |
|  |  |  |

**ASK FORM 2 [N=2,090]:**

On a final topic…

DRONE1 Do you personally own a flying drone?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 8 | Yes |
| 91 | No |
| 1 | No answer |
|  |  |

DRONE2 Have you ever seen someone operating a drone?

|  |  |
| --- | --- |
| May 1-  May 15  2017 |  |
| 59 | Yes |
| 41 | No |
| 0 | No answer |
|  |  |

**ASK FORM 2 [N=2,090]:**

DRONE3 If you happened to see a drone flying close to where you live, which of these emotions, if any, would you feel? **[RANDOMIZE WITH ITEM 8 LAST]**

*[Check all that apply]*

|  |  |  |
| --- | --- | --- |
|  | Selected | Not selected  /No answer |
| 1. Scared | 11 | 89 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| 2. Nervous | 26 | 74 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| 3. Indifferent | 18 | 82 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| 4. Interested | 45 | 55 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| 5. Excited | 15 | 85 |
| May 1-May 15, 2017 |  |  |
|  | Selected | Not selected  /No answer |
| **DRONE3 CONTINUED…** |  |  |
| 6. Curious | 58 | 42 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| 7. Angry | 12 | 88 |
| May 1-May 15, 2017 |  |  |
|  |  |  |
| 8. None of these **[EXCLUSIVE PUNCH]** | 6 | 94 |
| May 1-May 15, 2017 |  |  |
|  |  |  |

**ASK FORM 2 [N=2,090]:**

DRONE4 Do you think that private citizens should or should not be allowed to pilot drones in the following areas? **[RANDOMIZE]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Should be allowed | Should not be allowed | It depends | No answer |
| a. Near people’s homes | 11 | 54 | 34 | 1 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |
| b. Near crime scenes or traffic accidents | 20 | 53 | 26 | 1 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |
| c. On beaches | 35 | 32 | 32 | 1 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |
| d. In public parks | 44 | 25 | 31 | 1 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |
| e. At events, like concerts or rallies | 24 | 45 | 31 | 1 |
| May 1-May 15, 2017 |  |  |  |  |
|  |  |  |  |  |