

The future of work

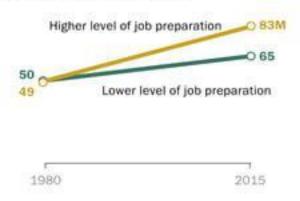
10 facts about jobs in the future

Lee Rainie - @Irainie Director Internet and Technology Research at PRC IMF- World Bank Youth Dialogue on the future of work Oct. 10, 2017

The nature of jobs is changing as the knowledge economy rises

Employment is rising faster in occupations requiring more preparation ...

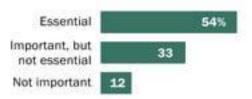
Number employed, in millions





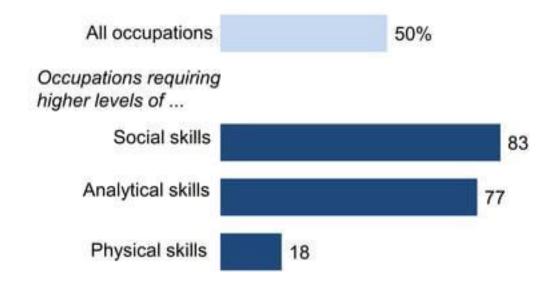
... and most workers see continuous training as essential or important to career success

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



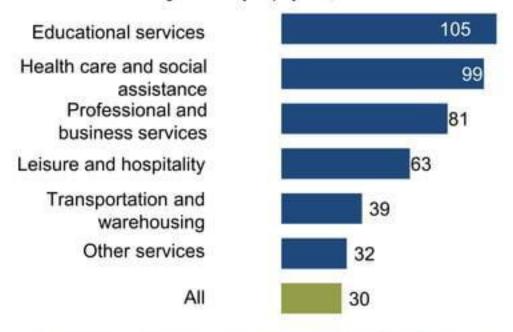
The nature of jobs is changing as the knowledge economy rises

% change in employment, 1980-2015

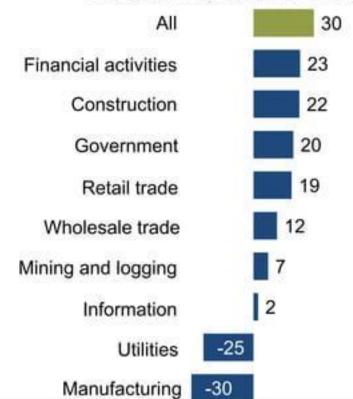


Since 1990, employment growth most rapid in education and health services

% change in industry employment, 1990-2015



% change in industry employment, 1990-2015



 Automation, robots, artificial intelligence are taking over workers' traditional tasks

47%

50%

Oxford researchers calculate
this is the percentage of
American employment that
is at risk because of the
expected impacts of
computerization in the
foreseeable future

McKinsey analysts estimate this is the share of activities workers are paid to do now that could be automated using currently available technologies – accounting for \$15 trillion in wages

http://www.aidordmartin.ax.ac.uk/downloads/academic/The_Future_of_Employment.pdf

https://www.rickinsey.com/global-themes/trigital-disruption/harnessing-automation-for-a-future-that-work

 Automation, robots, artificial intelligence are taking over workers' traditional tasks

45 years

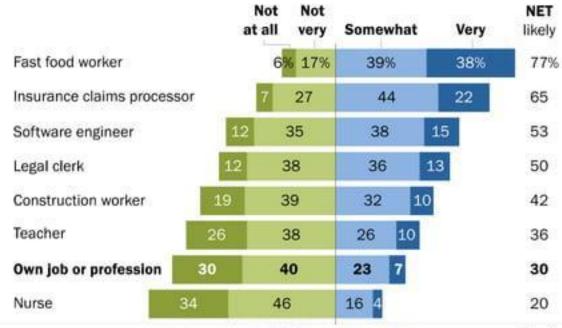
The timeframe estimated by artificial intelligence experts when "high level machine intelligence" – unaided machines that can accomplish any given task better and more cheaply than humans – will be developed

- 2024: outperform language translators
 - 2027: drive a truck
 - 2031 : work in retail
 - 2049: write best selling book
 - 2053: work as a surgeon

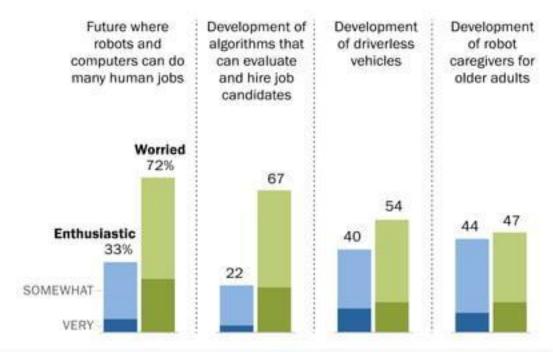
https://arxiv.org/pdf:1705.08807.pdf

4) People think many professions at risk – but not their own jobs

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

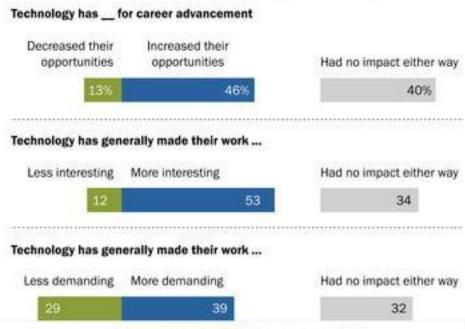


5) People express more worry than optimism about future automation

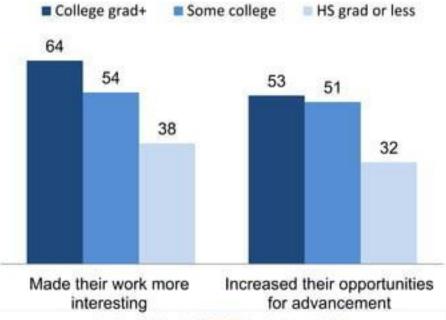


6) Workers express more positive than negative views on overall impact of technology on their careers

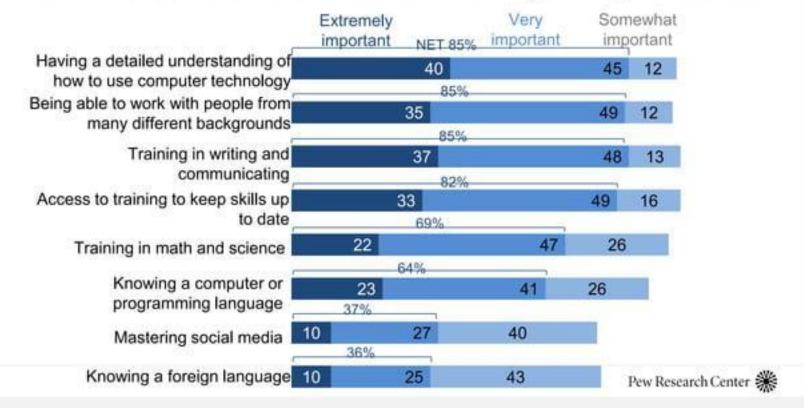
% of U.S. workers who say the following



Workers with higher levels of education more likely to say tech has increased opportunities, made jobs more interesting

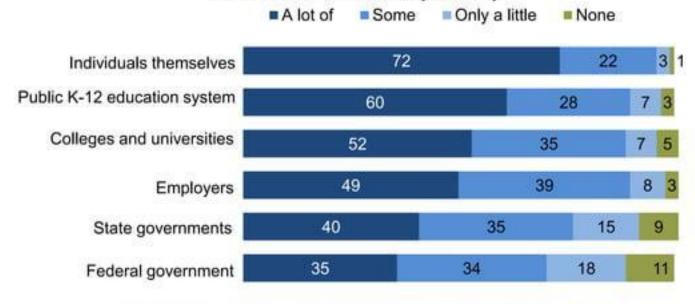


People think knowledge of computers, social dexterity, communications skills and access to training are key to success



Americans think individuals and public schools should have the most responsibility to make sure workers have the right skills

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



Experts see major changes in education and jobs training programs

In the next 10 years, do you think we will see the emergence of new educational and training programs that can successfully train large numbers of workers in the skills they will need to perform the jobs of the future?

> 70% "yes" 30% "no

- Theme 1) The training ecosystem will evolve, with a mix of innovation in all education formats
- Theme 2) Learners must cultivate 21st-century skills, capabilities and attributes: Tough-to-teach intangibles such as emotional intelligence, curiosity, creativity, adaptability, resilience and critical thinking will be most highly valued
- Theme 3) New credentialing systems will arise as selfdirected learning expands

Thank you!

Email: Irainie@pewresearch.org

Twitter: @Irainie

@pewinternet

@pewresearch