Future of Work
No Such Thing As Job Security

Top 10 largest layoffs in the past 20 years

<table>
<thead>
<tr>
<th>Date</th>
<th>Company</th>
<th>Layoffs</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1993</td>
<td>IBM</td>
<td>60,000</td>
</tr>
<tr>
<td>Nov. 2008</td>
<td>Citigroup</td>
<td>50,000</td>
</tr>
<tr>
<td>Jan. 1993</td>
<td>Sears Roebuck &amp; Co.</td>
<td>50,000</td>
</tr>
<tr>
<td>Feb. 2009</td>
<td>General Motors</td>
<td>47,000</td>
</tr>
<tr>
<td>Jan. 1996</td>
<td>AT&amp;T</td>
<td>40,000</td>
</tr>
<tr>
<td>Jan. 2002</td>
<td>Ford Motor Co.</td>
<td>35,000</td>
</tr>
<tr>
<td>Jan. 2003</td>
<td>Kmart Corp.</td>
<td>35,000</td>
</tr>
<tr>
<td>Jan. 2009</td>
<td>Circuit City Stores</td>
<td>34,000</td>
</tr>
<tr>
<td>Sept. 2001</td>
<td>Boeing Co.</td>
<td>31,000</td>
</tr>
<tr>
<td>Sept. 2011</td>
<td>Bank of America</td>
<td>30,000</td>
</tr>
</tbody>
</table>
6,100 Expected To Close In 2019
Prepare Students For Their Future; Not Our Past

“

We are currently preparing students for jobs that don’t yet exist... using technologies that haven’t yet been invented... in order to solve problems we don’t even know are problems yet.

- Richard Riley, Secretary of Education under President Clinton
Future Jobs

Future jobs framework

Very likely

(Bubble size = job creation potential)

1. Gamification designer
2. Digital architect
3. Avatar Manager
4. Virtual reality experience designer
5. 3D printer design specialist
6. Data hostage specialist
7. Computer personality designer
8. Personality programmer
9. Neighborhood watch officer
10. Remote drone pilot
11. Drone dispatcher
12. Energy storage
13. Body part engineer
14. Nano medic
15. Neuro-implant technician
16. Organ farmer
17. Tele-sergeon
18. Healthcare navigator
19. Memory augmentation / nostalgic
20. Child designer
21. Remote health care specialist
22. Amnesia surgeons
23. End of life therapist
24. Elderly well-being consultant
25. Garbage Designer
26. Rewilder
27. Localizer
28. Ecosystem auditor
29. Vertical farmer
30. Waste data handler
31. Climate controller
32. Extinction revivists
33. Biomimicry designer

0-10 years
10-20 years
>20 years

developers
medical
sustainability-related

drones-related
medical engineering
psychology

institute for future insights
People Change Jobs

2 million change jobs each month
People Change Jobs

- 2 million change jobs each month
- 12 different jobs during career

Median employee tenure was 4.3 years
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The future of work. Are you ready?
The Knocker Up. 5:30 A.M.
How the Lancashire Mill Worker is roused from his Slumbers.
The Future of Jobs

Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution

some 65% of children entering primary schools today will likely work in roles that don’t currently exist.

January 2016

http://www3.weforum.org/docs/Media/WEF_FutureofJobs.pdf
We are currently preparing students for jobs that don’t yet exist... using technologies that haven’t yet been invented... in order to solve problems we don’t even know are problems yet.

- Richard Riley, Secretary of Education under President Clinton
“It’s diabolically tricky to try to pick a career that you’ll still be doing when you’re 40.”

47% of U.S. employment at risk for being automated by 2034.
Frey and Osborne

Fast food workers are becoming obsolete

PANERA CEO: Robots will replace our labor 'like the sun comes up in the morning'
Your Lawyer May Soon Be an Algorithm

The vast majority of activities that lawyers are engaged in are straightforward drafting of contracts, putting together things like apartment leases, real estate deals, pre-trial discovery...It’s these very tasks that make the profession susceptible to automation.” Jerry Kaplan, author of Humans Need Not Apply: A Guide to Wealth and Work in the Age of Artificial Intelligence.

Why Hire a Lawyer? Computers Are Cheaper

By JOE PALAZZOLO
Updated June 18, 2012 2:06 p.m. ET

When the roofs of three jet hangars in Virginia collapsed under heavy snow and crushed 14 private jets in 2010, the owner of the hangars prepared for the inevitable lawsuits.
Uber: The world’s largest taxi company, owns no vehicles.

Facebook: The world’s most popular media owner, creates no content.

Alibaba: The world’s largest accommodation provider, owns no real estate.

Airbnb: The most valuable retailer, has no inventory.

Something interesting is happening.

TOM GOODWIN
Future jobs framework

(Bubble size = job creation potential)

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- developers
- medical
- sustainability-related
- drones-related
- medical engineering
- psychology

institute for future insights
Fit for the future
Capitalising on global trends

We believe organisations must overcome three particular challenges in their race to become fit for the future. They’ll need to harness technology to create value in totally new ways; capitalise on demographic shifts to develop tomorrow’s workforce; and, just as important, understand how to serve increasingly demanding consumers across the new economic landscape.

1,344 CEOs in 68 countries

39% of CEOs are very confident about their company’s growth prospects
See page 5

86% of CEOs recognise the need to change R&D and innovation capacity

The world of work is in a state of flux. And from Mumbai to Manchester, public debate rages about the future of work, and whether there will be enough jobs to gainfully employ everyone.
Training Students to Outpace Automation

According to the Society for College and University Planning’s new “Trends for Higher Education” report, which cites World Economic Forum (WEF) predictions, the world’s workforce is set to lose some 7.1 million jobs between 2015 and 2020, in large part because of automation. But the WEF also anticipates a rise in demand for some specialties, like mechatronics, that didn’t even exist a decade or two ago; it suggests that some 65 percent of children in primary school today will ultimately hold jobs that don’t exist yet.
The challenge of education is to prepare students for their future, not our past.... If we teach today as we taught yesterday, we rob our children of tomorrow.

“The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn”

Alvin Toffler
given the extremely rapid progress taking place in digital technologies, people in all lines of work should strive to be flexible about acquiring new skills and even about changing their occupations.
“Job security is a complete myth, as is long-term employment. Companies lay off employees in droves...by the thousands! They just make sweeping cuts when they need to. The average employee tenure is under five years and for millennials it’s under three years.”

According to a 2012 *JAMA Internal Medicine* Mayo Clinic study, 46% of all U.S. physicians are emotionally exhausted, feel cynical about work or have lost their sense of personal accomplishment ... or all three.

A 2012 study of 5000 physicians showed that 89% of practicing physicians would not recommend medicine as a profession to their children or other family members.