

Careers 3.0

Future Skills

Future Work



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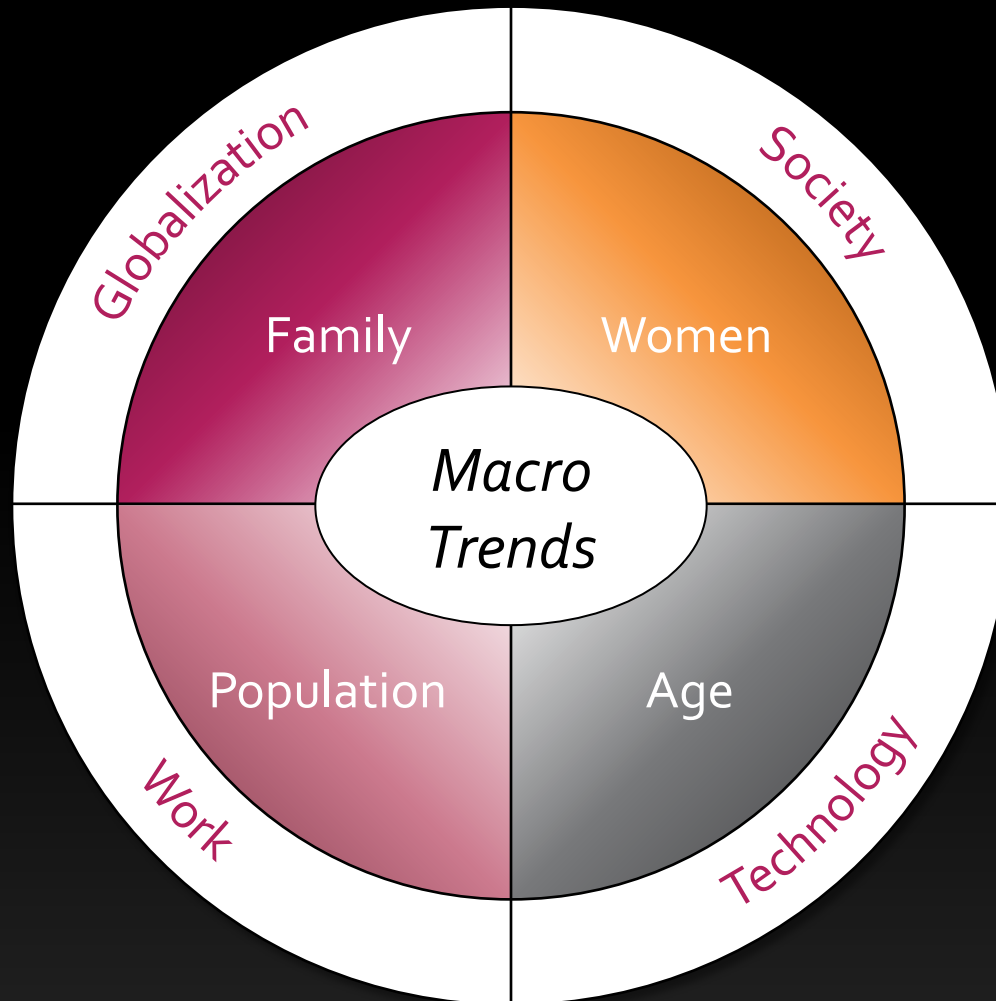
Apollo Research Institute

VP, Managing Director

Stanford University, Visiting Scholar



Society Trends

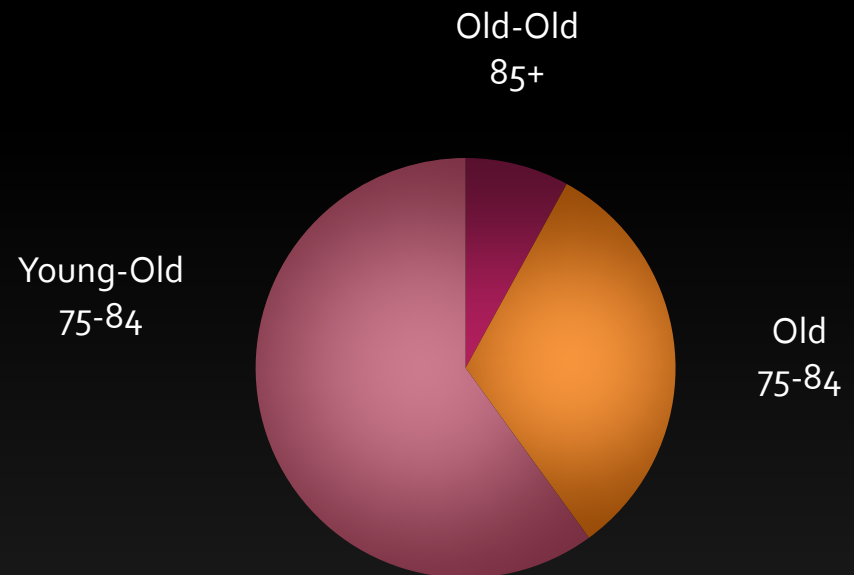


Extreme Longevity



13.2 Million workers over age 65 in 2022 Today there are 7.3 Million

- Age 100 will be the new normal
- People will work longer
- Education and skills required



The VUCA World



Definition

(VUCA) — Volatile, Uncertain, Complex, Ambiguous

WEF Global leader's top concerns

- Economic
- Environmental
- Geopolitical
- Societal
- Technology



Globally-connected World

Flat world Labor

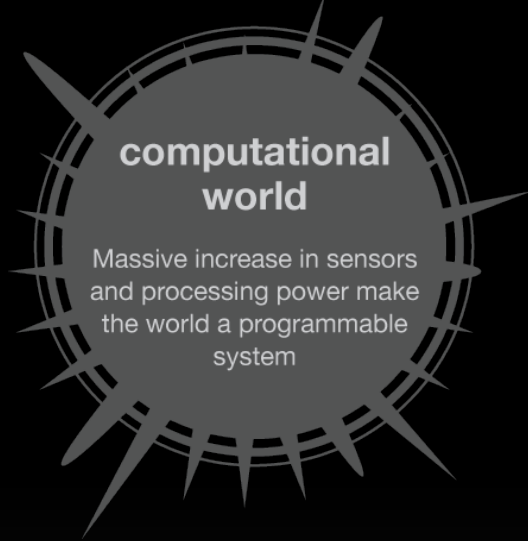
globally- connected world

Increased global
interconnectivity puts
diversity and adaptability
at the center of
organizational
operations

- Firms born global
- 60% goods made overseas
- Global supply chains-
Virtual teams
- Competition: Microwork



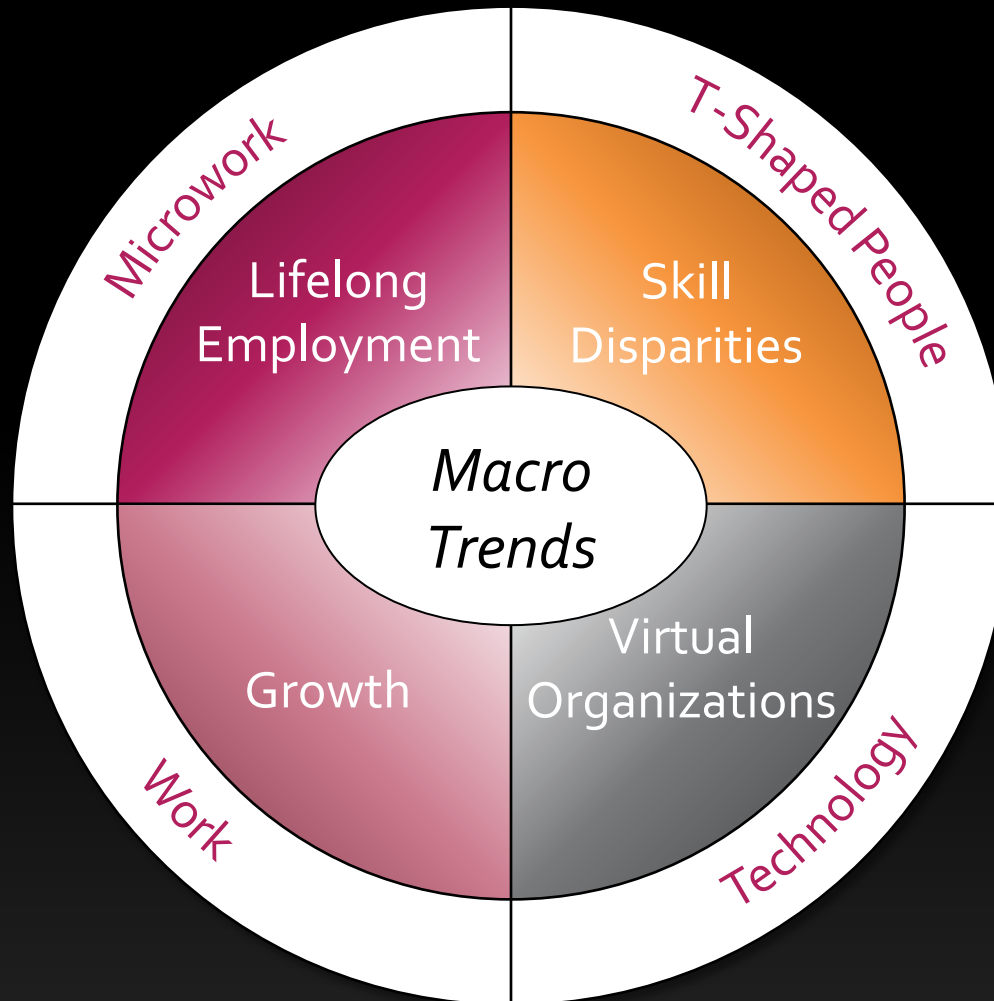
Technology World



- Data doubles annually
- Sensors
- Robotics
- Analytics
- Gaming



Work trends



Superstructuring



Definition

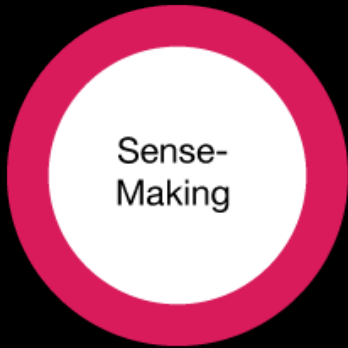
New forms of value creation. Collaboration, future workplace designs for productivity, Virtual organizations.



Ten Work Skills for the Future



Sense-Making



Definition:

As automation increases, we need the uniquely human capacity for critical thinking and determining the deeper meaning in data.

- Give meaning to data
- Higher level thinking skills
- Interpretation overlay
- Healthcare
- Manufacturing



Autonomous cars

Sensors + GPS+ Artificial Intelligence

SF taxi system permits

Nevada legal May 2012

Toyota Prius ships 2018

1. Improved safety
2. Handicapped driver option
3. Time saver



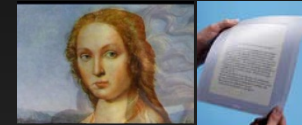
Computer programming

New Media Ecology Requires new Media Literacy

Skill: New literacy beyond text



- Expression through Multimedia
- Changes communication
- Changes Art, Media, Fashion industries
- Requires new skills



Deep Diversity



Demographic Shifts

- Women's Leaders
- Multicultural
- Aging workforce



Cross Cultural Competency



Definition

Ability to operate in different cultural settings.

- Global adaptability
- Cross cultural fluency
- Adapt to differences
- Protocols
- Language



Virtual Collaboration



Definition

Ability to work productively, drive engagement and demonstrate presence as a member of a virtual team

- Lead virtual teams
- Influence over distance
- Create cohesiveness
- Collaborate with technology



Anybot

TelePresence + Robotics



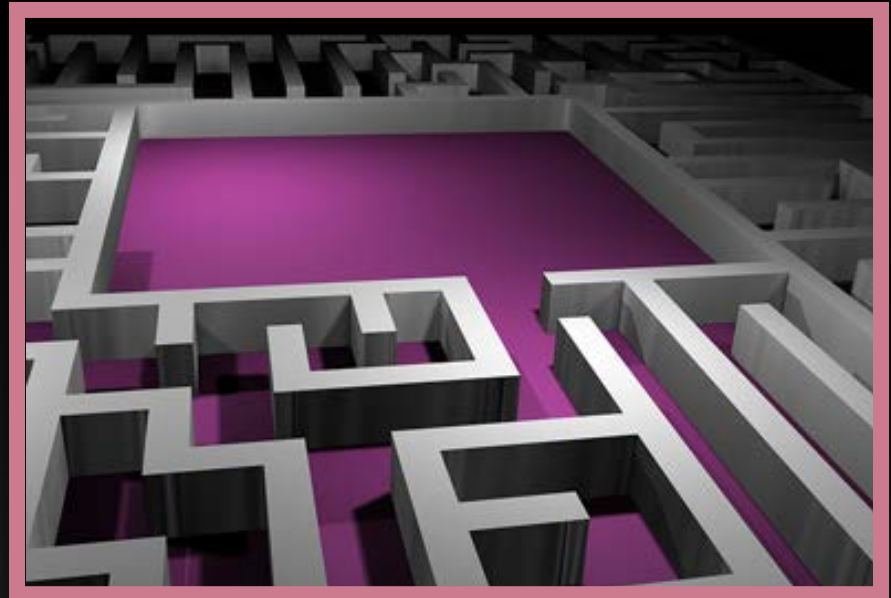
Novel and Adaptive Thinking



Definition

Proficiency at thinking and coming up with solutions and responses beyond that which is rote or rule-based

- Creative thinking
- Compete with Machines



Watson

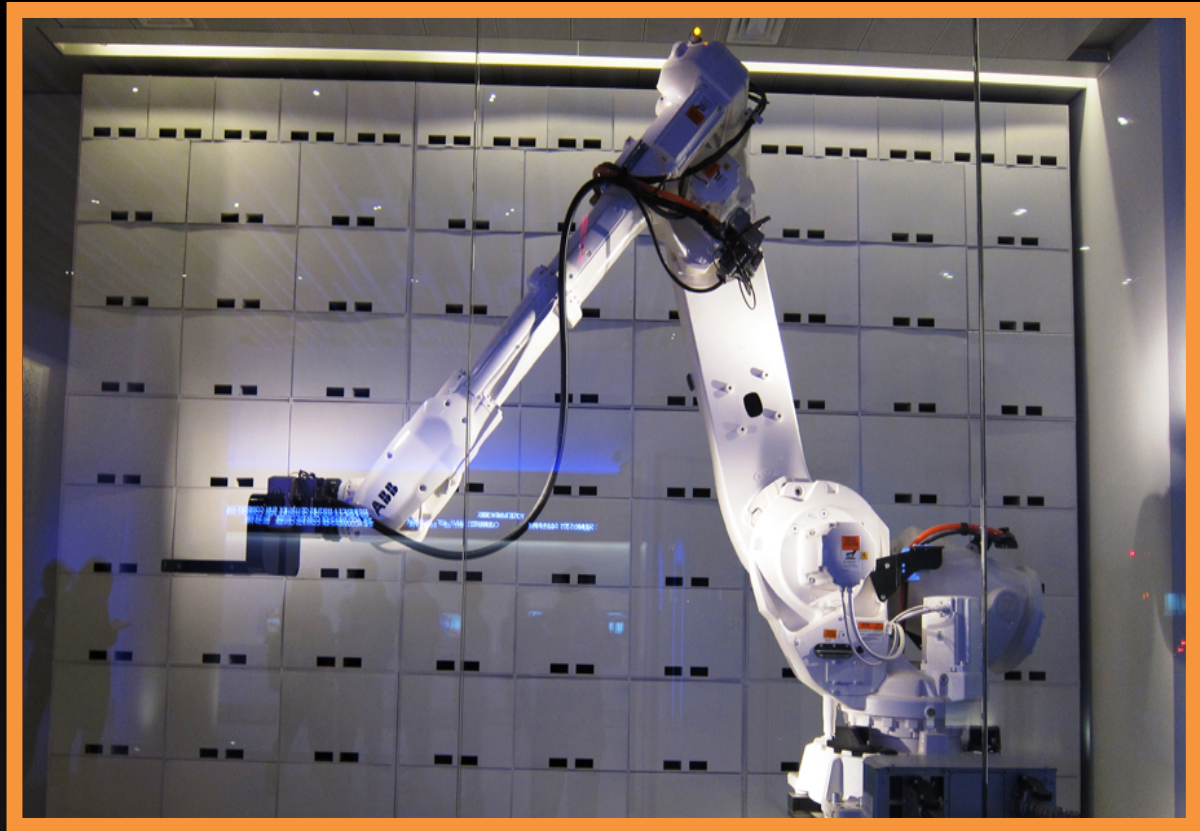


Smart Machines and Automation

smart machines

from stand-alones to
new human-machine
symbiosis

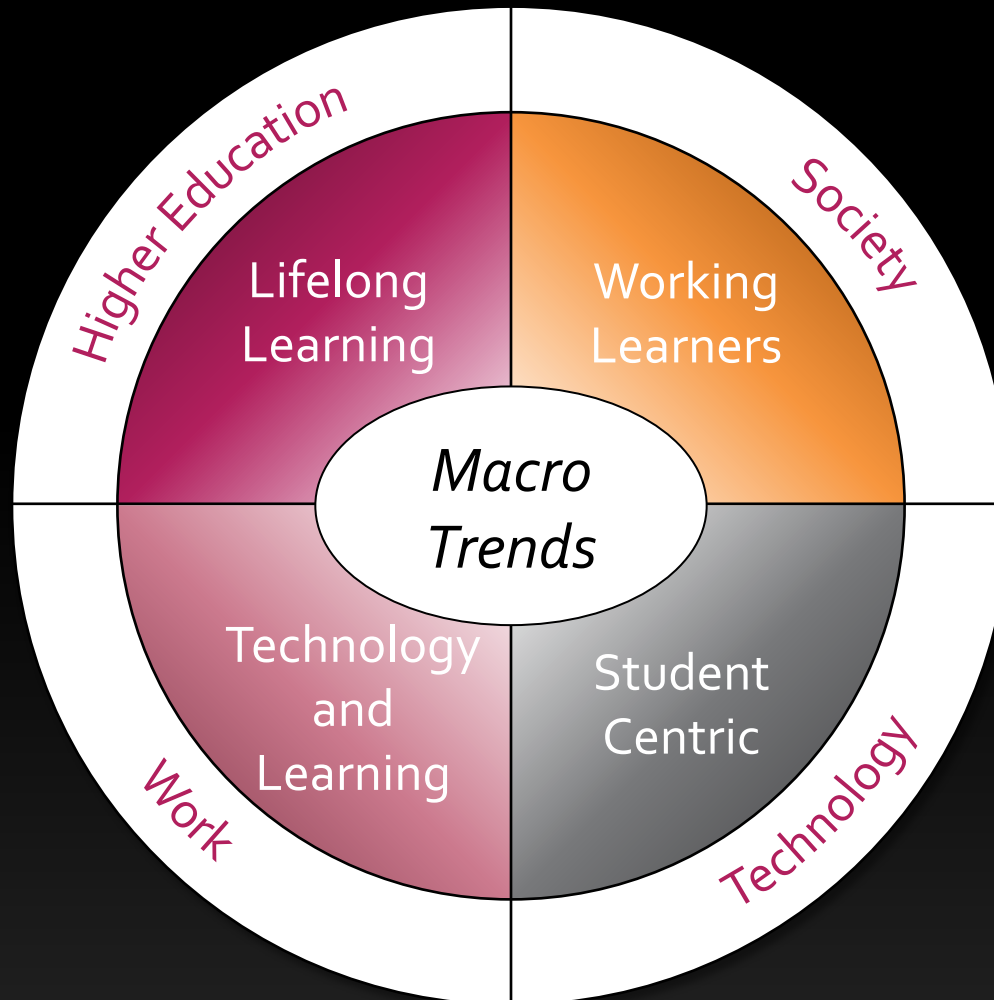
Intelligent Systems and Robotics



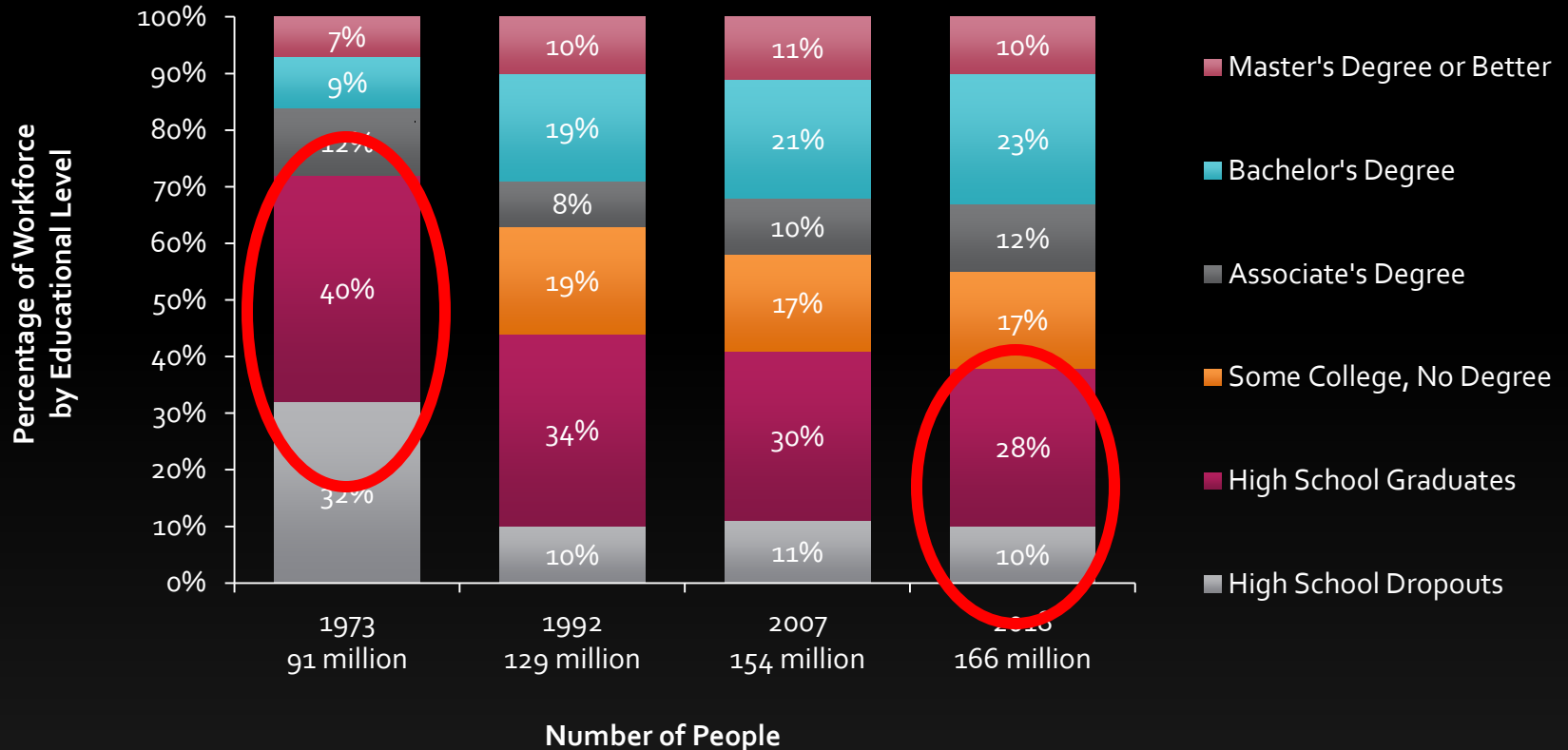
Robot Barber



Education and Skills

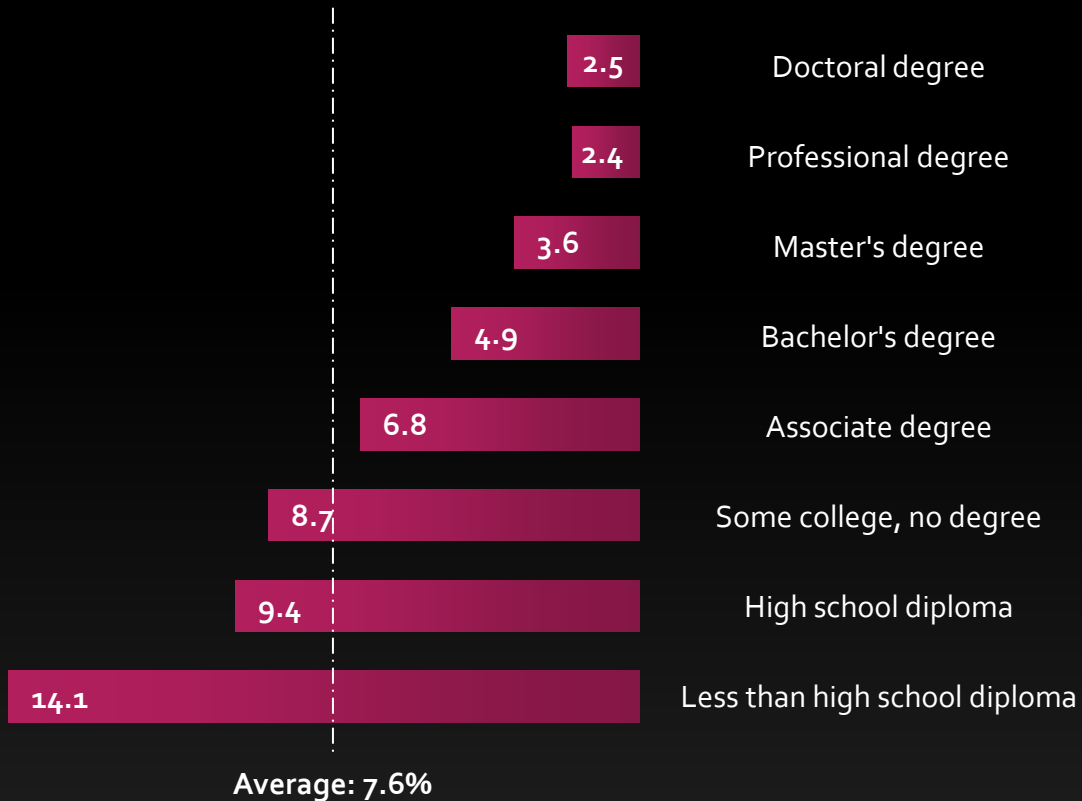


Job Growth is for College Graduates

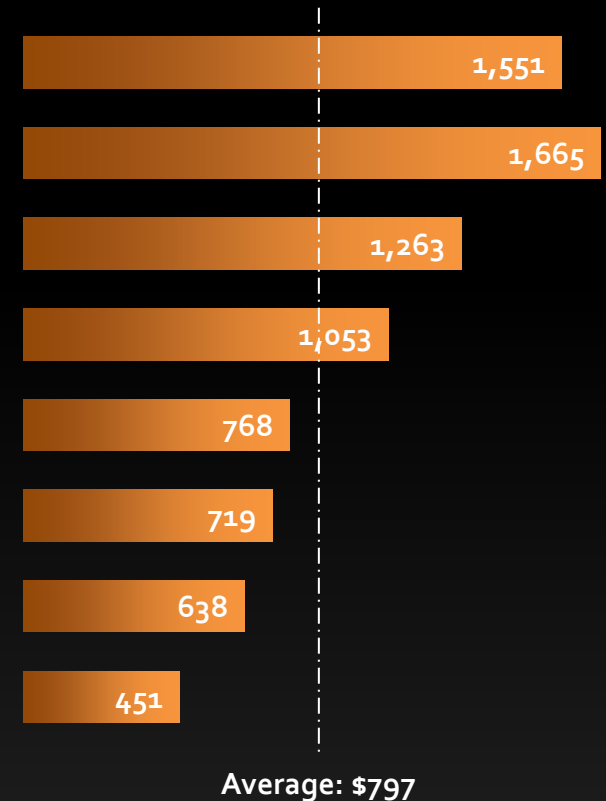


Education brings better job prospects – U.S., 2011

Unemployment rate in 2011 (in %)



Median weekly earnings in 2011 (in \$)



Education and Economic Impact

On average, adding 1 year of schooling for all workers in a U.S. metropolitan area is estimated to increase the local GDP by 10.5% and each worker's real wage by 8.36 %

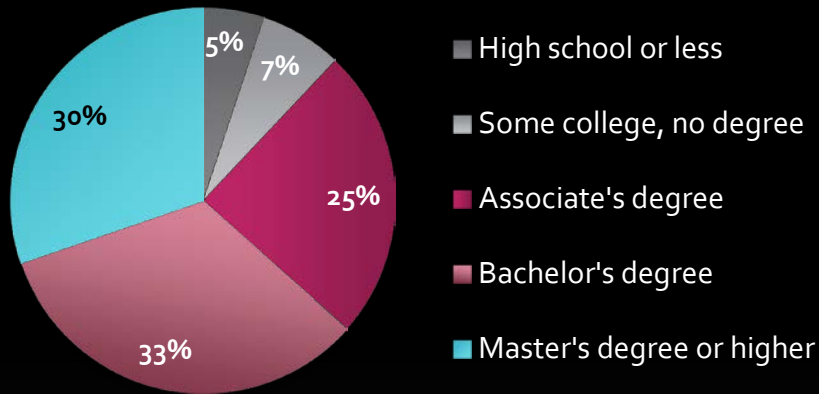
Currently workers in	Complete on average this many years of schooling
Atlanta	13.95
Boston	14.54
Chicago	14.00
Cleveland	13.85
Dallas	13.47
Los Angeles	13.30
New York	14.05
Philadelphia	14.08
San Francisco	14.20
Washington DC	14.58

But if these same workers increased one year of schooling

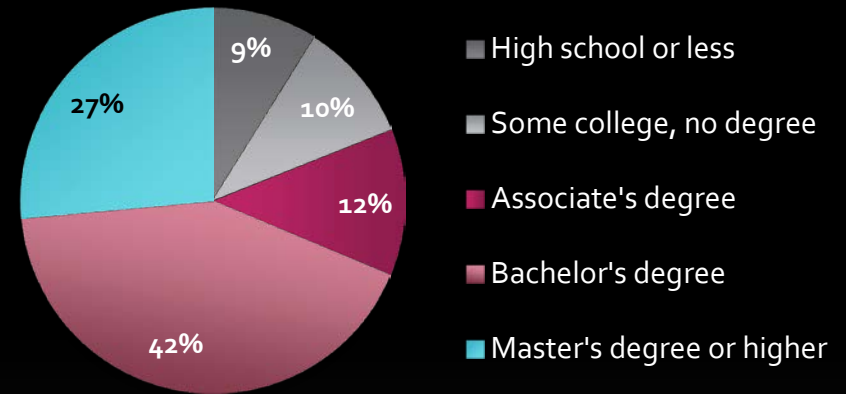
The metro-area GDP would increase by	And real wage per worker would increase by
6.8%	5.4%
0.4%	0.3%
6.2%	4.9%
7.9%	6.3%
12.4%	9.7%
14.4%	11.3%
5.7%	4.6%
5.4%	4.3%
4.1%	3.2%
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Jobs by Education Level and Industry

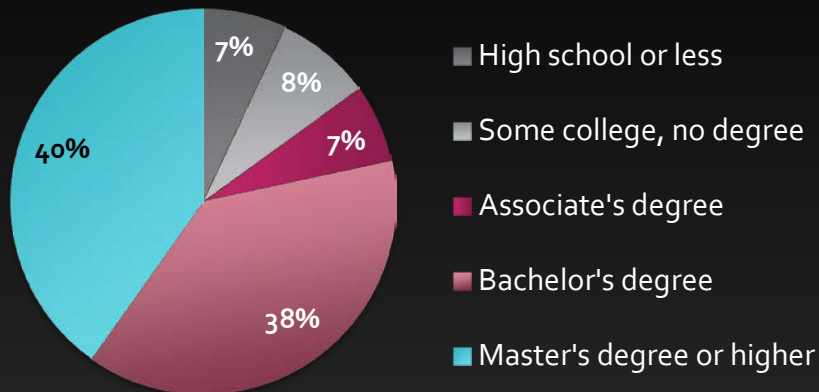
Healthcare Professional and Technical



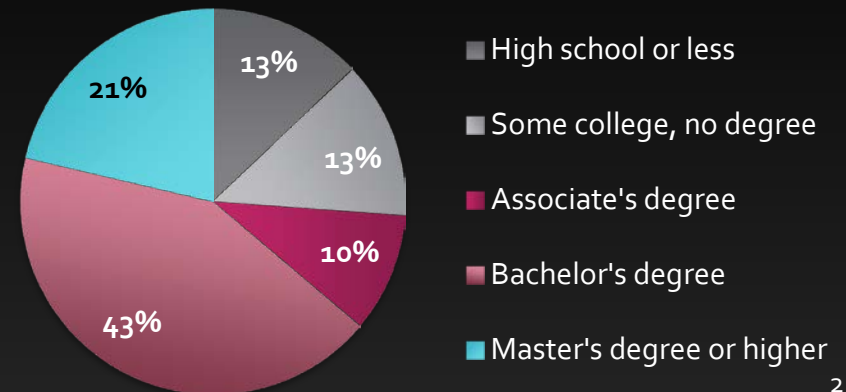
STEM



Education

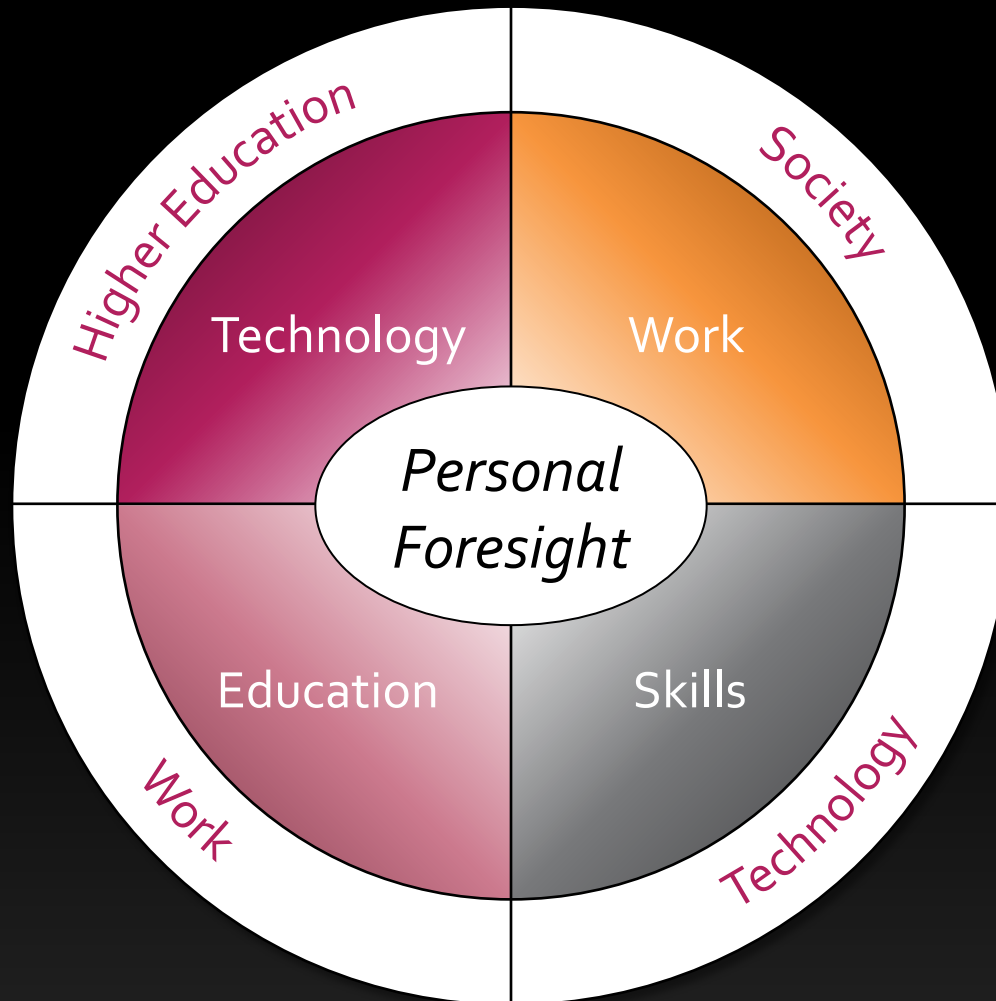


Managerial and Professional Office



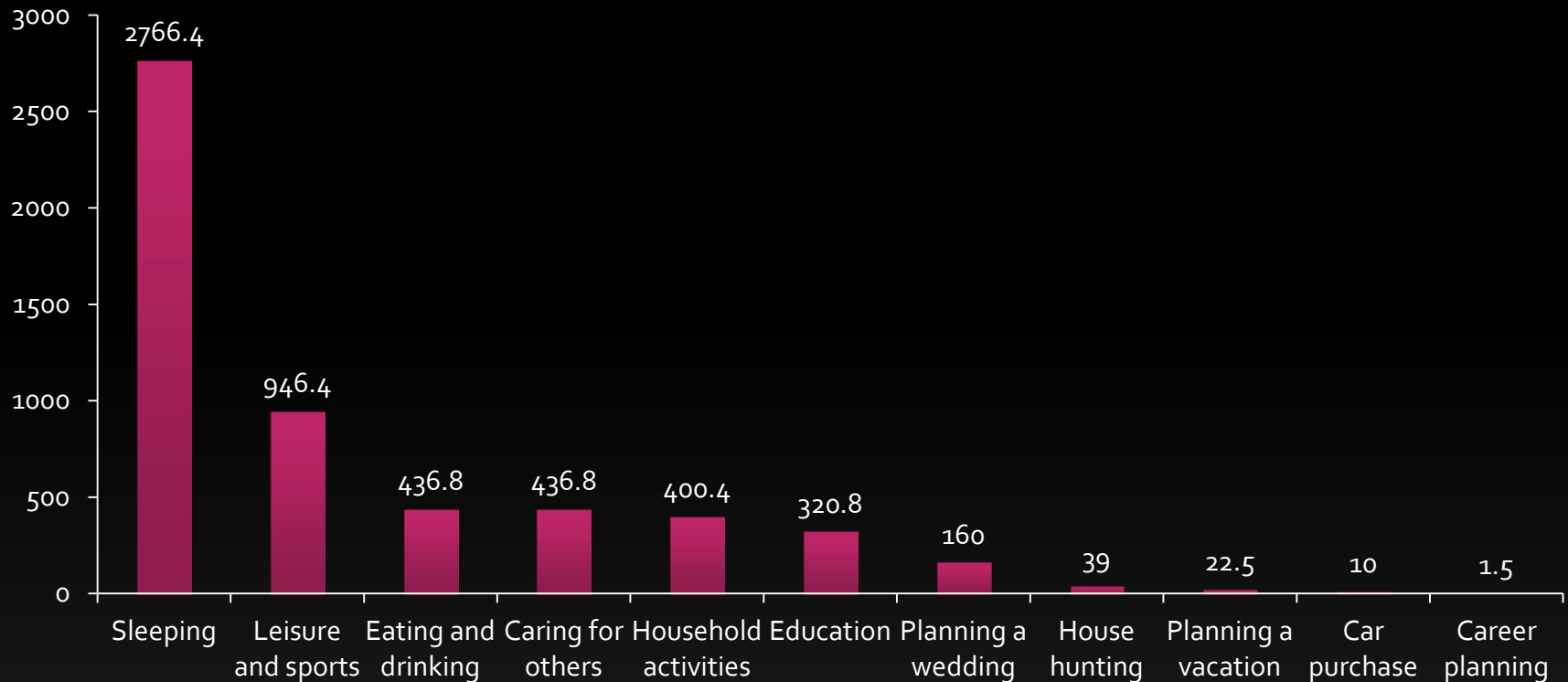
By 2020,
75% of jobs
will require
some type
of
technical training

The Future of you and your career



Time Spent on Career Planning

Hours Spent in a Year



Sources:

www.reuters.com/article/2008/04/03/idUS126258+03-Apr-2008+PRN20080403

www.bls.gov/tus/charts/

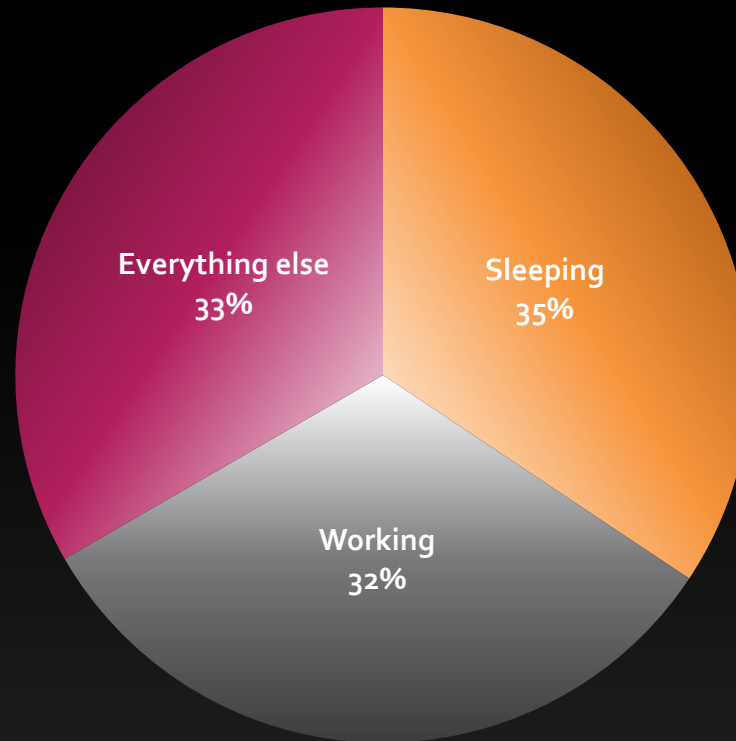
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Why should people pay attention to career planning?

Nearly $\frac{1}{3}$ of Your Life Will Be Spent Working



What has changed?

Career Yesterday	Career Today
Life = 70-80 years old	Life= 100 +
Work= 25- 30 years	Work = 50-60 years
Lifelong career	New job every 4 years
Economic cycles less frequent	Economic cycles more frequent every 7-10 years
Classical World	Technology World
Global = exporting	Global= talent competition
Education = 1 X	Education = Ongoing

Transdisciplinarity



Definition

Literacy in and ability to understand concepts across multiple disciplines

- Depth
- Breadth
- High level of skills
- Specialized
- Generalist



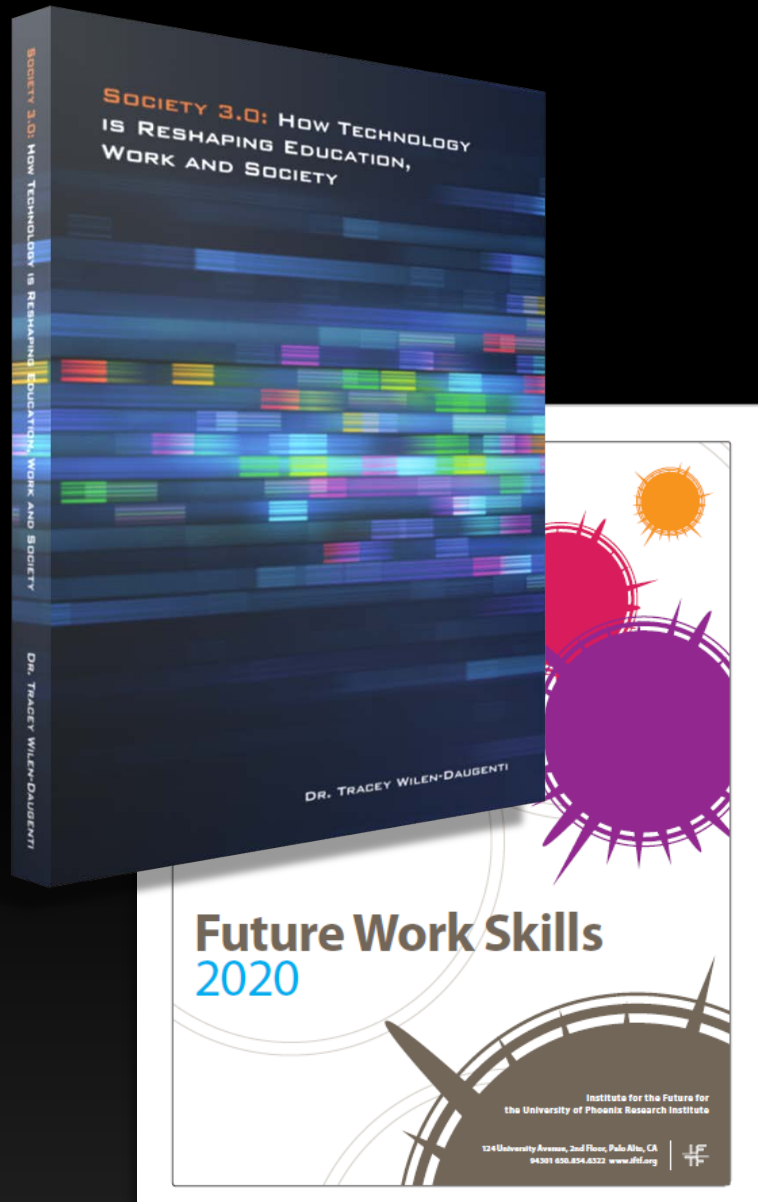
You Inc.

Business plan

Every stage of life

- Finance plan
- Health plan
- Work plan
- Education plan
- Family plan
- Retirement plan





Future Skills 2020

Future Work 2020

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Social Technology + Society + Music



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