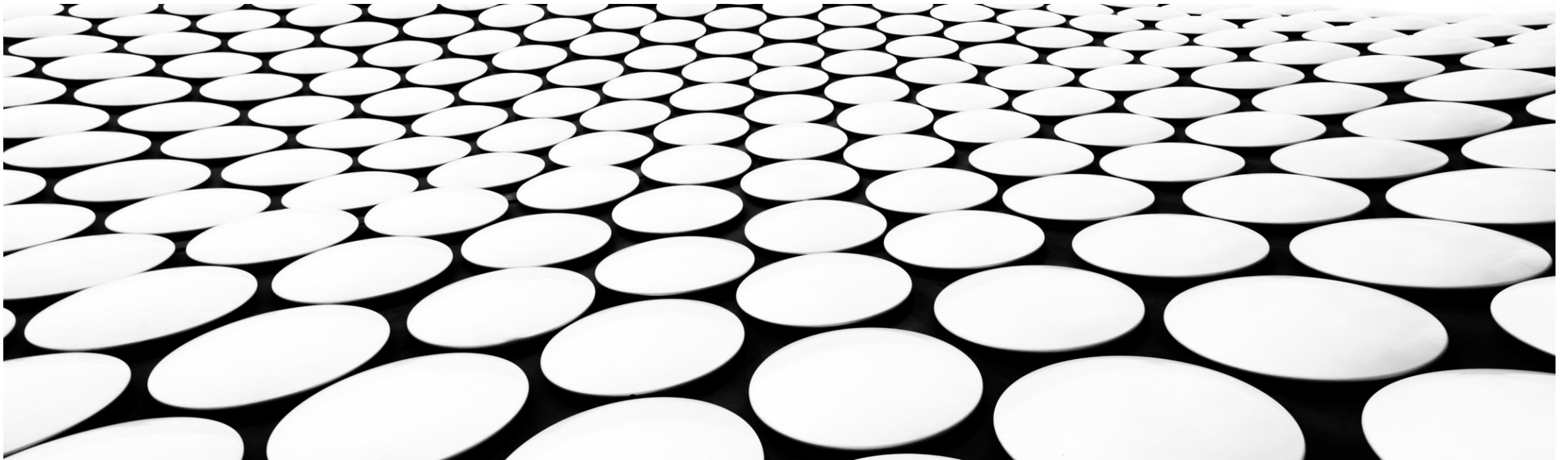

ARE CERTIFICATES MORE VALUABLE THAN COLLEGE DEGREES? *and* THE FUTURE OF WORK

Abstracts and TOWS Analysis

YC Strategic Planning Committee 11-3-2020



ARE CERTIFICATES MORE VALUABLE THAN COLLEGE DEGREES?

by Thomas Frey

Abstract

Topic: Landscape of post-secondary learning is changing to avoid the extra time and expense of a traditional college degree.

Challenges:

- ❑ Ambient learning is possible through other forms of media
- ❑ Breadth of a college degree is becoming redundant
- ❑ Time spent and debt accrued is no longer a beneficial investment for many

Solution:

□ Certificate Programs

- Cuts out the breadth of a traditional college degree and instead focuses entirely on depth of specific skill
- Plenty of certificate programs, both in the technology sector and non-technical fields, and are as lucrative as a college degree
- Valuable in an age in which career transitions are on the rise
- Provides flexibility to earn many different career-related certificates vs several full college degrees

Certificate Programs will become even more advantageous as automation and other technologies make it necessary to have specific skills (like programming languages) in order to compete.

THE FUTURE OF WORK *(July 2019)*

Abstract

Topic: Automation technologies displacing and reshaping the workforce across America. Reskilling workers to meet the need of changing labor markets

Challenges:

- ❑ Labor market could become more polarized
- ❑ Workers with high school degree or less are 4 times as likely as workers with bachelor's degree to be displaced by automation – reflecting more limited access to education
- ❑ Hispanic workers most at risk of displacement, followed by African Americans
- ❑ Jobs held by nearly 15 million workers ages 18-34 may be automated, so young workers need new career paths to gain initial foothold in work world
- ❑ Roughly 11.5 million workers over age 50 could also be displaced and face challenge of late-career moves
- ❑ Hollowing out of middle-wage work could continue



McKinsey Global Institute

The future of work in America: People and places, today and tomorrow

July 11, 2019 | Report

Click on picture
for summary
video (3:15 min)

Megacities

- 23% of U.S. population
- 74.3 million people
- Median household income and GDP per capita are among the highest in the nation
- High income inequality

Silver Cities

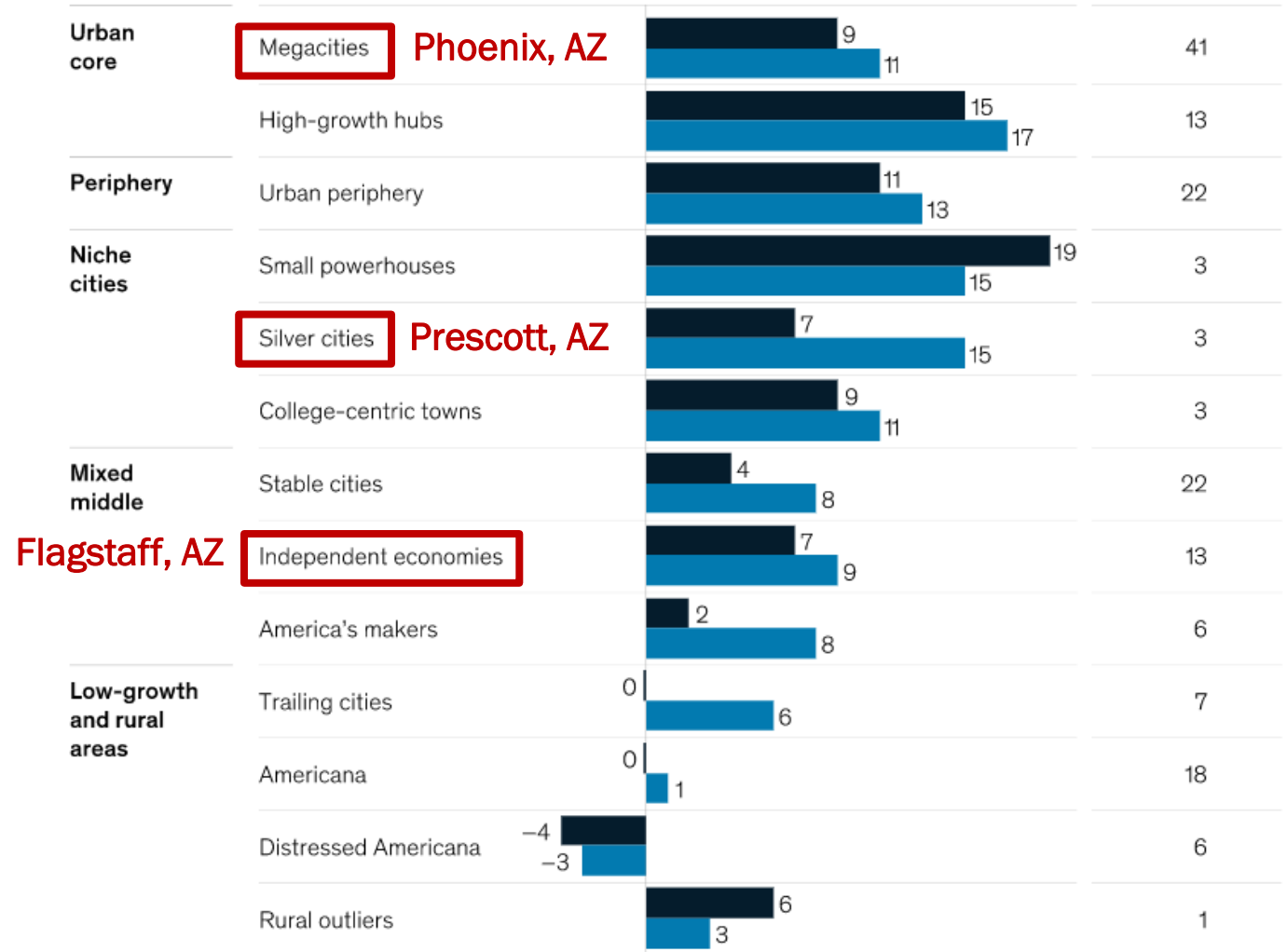
- 2% of U.S. population
- 6.8 million people
- Retirement destinations
- Oldest populations on average
- Highest net migration rate
- Healthcare services major driver for economic growth

Independent Economies

- 8% of U.S. population
- 26 million people
- Lower GDP per capita
- Lower income inequality
- Neither thriving nor in distress
- Must accelerate modest economic growth in coming period of technological change or risk falling into actual distress

The urban core, urban periphery, and niche cities are positioned to have the strongest future employment growth.

Net job growth, % ■ 2007–17 ■ 2017–30



COVID-19 IMPACT CHANGES DATA OF REPORT *(April 2020)*

Estimated that up to 57 million US jobs are now “vulnerable”, including more and more white-collar positions. In addition to the effects of automation technologies, the crisis itself may create lasting changes in consumer behavior and health protocols. To put vulnerable workers on more promising and sustainable paths, the US response should incorporate a longer-term view about the resulting occupational shifts and the development of skills.

Vulnerable Jobs:

- Workers without bachelor’s degrees are nearly twice as likely to hold these jobs
- Minorities are more likely to hold vulnerable jobs, especially in large cities
- Younger workers are 35 percent more likely to hold these jobs
- Mounting white-collar slow trickle as secondary impact from pandemic *(CNN Business, October 30, 2020)*

The pandemic is accelerating structural shifts in the economy that were already underway, such as using digital channels to reach consumers, automating operations, and allowing people to work remotely from home. Moreover, some shifts in consumer behavior and demand for new types of work may outlast the current public health crisis. Preparing for the “future of work” has gone from a distant hypothetical to a very immediate priority. Tens of millions of workers need support not only to get through today’s challenges but also to put themselves on a better footing for the future. In the months ahead, we will continue with our ongoing research to track these trends.

Overall job postings have declined, but there have been small increases in COVID-19-related occupations. April 2020

Top 15 occupations by absolute increases in job postings

	Number	%
Interpreters and translators	19,902	268
Respiratory therapists	10,587	52
Family and general practitioners	9,189	18
Physicians and surgeons	6,281	9
Registered nurses	5,510	1
Manual laborers and warehouse stockers	4,420	9
Internists	4,301	12
Psychiatrists	3,469	13
Obstetricians and gynecologists	1,878	13
Writers and authors	1,707	51
Loan interviewers and clerks	1,673	19
Surgeons	1,502	7
Chemistry and biology R&D managers	1,343	6
Anesthesiologists	1,207	19
Heating and air-conditioning installers ²	962	63

Top 15 occupations by absolute decreases in job postings¹

	Number	%
Retail supervisors	-51,593	-15
Childcare workers	-45,165	-36
Retail salespersons	-42,551	-12
App-software developers	-33,583	-11
Food-prep supervisors	-32,196	-22
Light-truck delivery drivers	-30,820	-21
Customer-service representatives	-29,817	-12
Office and administrative supervisors	-28,425	-18
Food-prep workers	-25,583	-20
Personal-care aides	-24,926	-25
Restaurant cooks	-24,160	-30
Accountants and auditors	-20,895	-15
Heavy- and tractor-trailer truck drivers	-20,517	-3
Maintenance and repair workers	-20,367	-16
Restaurant servers	-16,556	-30

<https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-jobs-monitoring-the-us-impact-on-people-and-places>

THE FUTURE OF WORK

Solutions:

- ❑ **Mapping new career pathways to enable economic mobility**
 - Although technology may displace some workers, it can also be part of the solution for re-engaging them by identifying career pathways and logical job moves based on the skills an individual already has
 - Employers can also do this for displaced job roles by providing employee upskill training
- ❑ **Local business leaders, policy makers, and educators need to work together to chart new course**
 - To make this happen there must coordinated action from local business leaders, policy makers, educators, and other stakeholders
 - ✓ Connect workers with opportunities
 - The [Markle Foundation's Skillful](#) nationwide initiative aimed at driving innovations that expand opportunities for employment and broaden ways for all Americans to learn and train for the work of the future
 - ✓ Retrain workers and provide lifelong learning
 - ✓ Create tailored economic development strategies to boost job creation
 - ✓ Support workers in transition



MARKLE

ADVANCING AMERICA'S FUTURE

MISSION: Markle works to realize the potential of information technology to address previously intractable public problems for the economic security, health, and national security of all Americans.

The Markle Foundation launched the Rework America Task Force (RATF) in 2017. RATF, a coalition of influential leaders from some of the world's leading organizations and institutions, will seek to use the same digital technology that is disrupting the economy today to create practical solutions that will transform America's labor market from one largely based on traditional credentials, such as degrees and work history, to one rooted in the skills and lifelong learning valued in the digital economy.

OUR PARTNERS



The old model of front-loading education early in life needs to give way to lifelong learning.

Employers will be the natural providers of training and continuous learning opportunities for many workers. But millions who need to switch employers or change occupations will need training options outside the workplace. All levels of government, nonprofits, education providers, and industry associations can play a role here. Midcareer workers need to continue paying their bills while they train for the next chapter in their careers; they require short, flexible courses that follow the boot camp model, teaching new skills in weeks or months rather than years.

The challenge ahead is to scale up the most successful programs. Using data to track employment outcomes will be essential so that funding can be channeled into what works and individuals can make more informed choices about their own training and careers. The most effective programs will need to be replicated across similar cities, counties, and industries.

Breaking Paradigms

For a number of years, job postings have shown persistent “degree inflation.” One report found that almost two-thirds of job postings for executive assistants, for example, now call for a bachelor’s degree when only 19 percent of those employed in those roles at the time of the study held those degrees.¹⁵ Breaking this trend by focusing on the specific skills needed in a given job, rather than on degree requirements, can vastly increase the number of qualified job applicants and create opportunities for more people.

Employers will be the natural providers of training and continuous learning opportunities for many workers. For instance, Walmart’s Academy is designed to allow high-performing associates to move into management. Toyota’s Advanced Manufacturing Technicians program integrates a two-year technical degree curriculum with part-time employment. SAP quantified an expected skills gap, then mapped comprehensive “learning journeys” to help thousands of employee's transition into new roles through in-house classroom training courses and bootcamps, job shadowing , and on-the-job practice. ¹⁶

¹⁵ Moving the goalposts: How demand for a bachelor’s is reshaping the workforce., Burning Glass Technologies, September 2014.

¹⁶ “Building the workforce of tomorrow, today.” McKinsey Quarterly, November 2018

TOWS Matrix

Strategies should align with the larger goals of the organization as well as its mission and vision statements.

<p style="text-align: center;">Internal Factors</p> <p style="text-align: center;">External Factors</p>	<p>Take advantage of Organizational <u>STRENGTHS</u>:</p> <ol style="list-style-type: none"> 1) Certificate programs already in place 2) Outstanding REDC and SBDC 3) Passionate Faculty and Staff who will embrace change and growth 	<p>Overcome Organizational <u>WEAKNESSES</u>:</p> <ol style="list-style-type: none"> 1) Bound by semester blocks – difficult to compete with employers that can start training whenever necessary 2) Determining which certificates to offer 3) New Program proposal process too long 4) ALL program areas should train for workforce 5) Not all certificates lead to national exams
<p>Maximize Environmental <u>OPPORTUNITIES</u>:</p> <ol style="list-style-type: none"> 1) Expand role of REDC to create partnerships with employers to provide certificates and <i>just-in-time</i> training 2) Silver city in need of healthcare specific skills requiring training with national exam 3) Ride momentum from high-tech manufacturer bringing headquarters to Prescott – known as pro-business, strategic location in the region 	<p><i>S-O Strategies: Generate strategies for best use of organizational strengths to capitalize/maximize or build upon existing or emerging opportunities.</i></p> <ul style="list-style-type: none"> • Leverage existing assets of the college to evolve a hybrid model • Embrace advances in content delivery and create new ones • Work towards pulling a younger demographic to our area • It's about the relationships 	<p><i>W-O Strategies: Generate strategies to take advantage of existing opportunities to implement plans for overcoming weaknesses.</i></p> <ul style="list-style-type: none"> • Embrace managed change • Enlighten staff and faculty • Lead instead of follow • No one left behind
<p>Minimize Environmental <u>THREATS</u>:</p> <ol style="list-style-type: none"> 1) If YC doesn't embrace a robust certification program, employers will further divorce themselves from what YC offers 2) Universities and for-profit companies offering certificates leading to national exams 3) Plethora of online options across the world 	<p><i>S-T Strategies: Generate strategies to use organizational strengths to avoid or mitigate existing or emerging threats.</i></p> <ul style="list-style-type: none"> • Exploit the existing organizational talent to assist in the evolution • Use outside organizational input & data trends • A “status quo” attitude is not acceptable 	<p><i>W-T Strategies: Generate strategies to minimize or overcome organizational weaknesses to be less susceptible to, or cope with, external threats.</i></p> <ul style="list-style-type: none"> • Minimize bureaucracy and “traditional” ways of outcome • Recognize competition can be healthy • “There is no box”...