

The new world of work



“Embrace
change,
because it is
the only
constant in life.”
Heraclitus







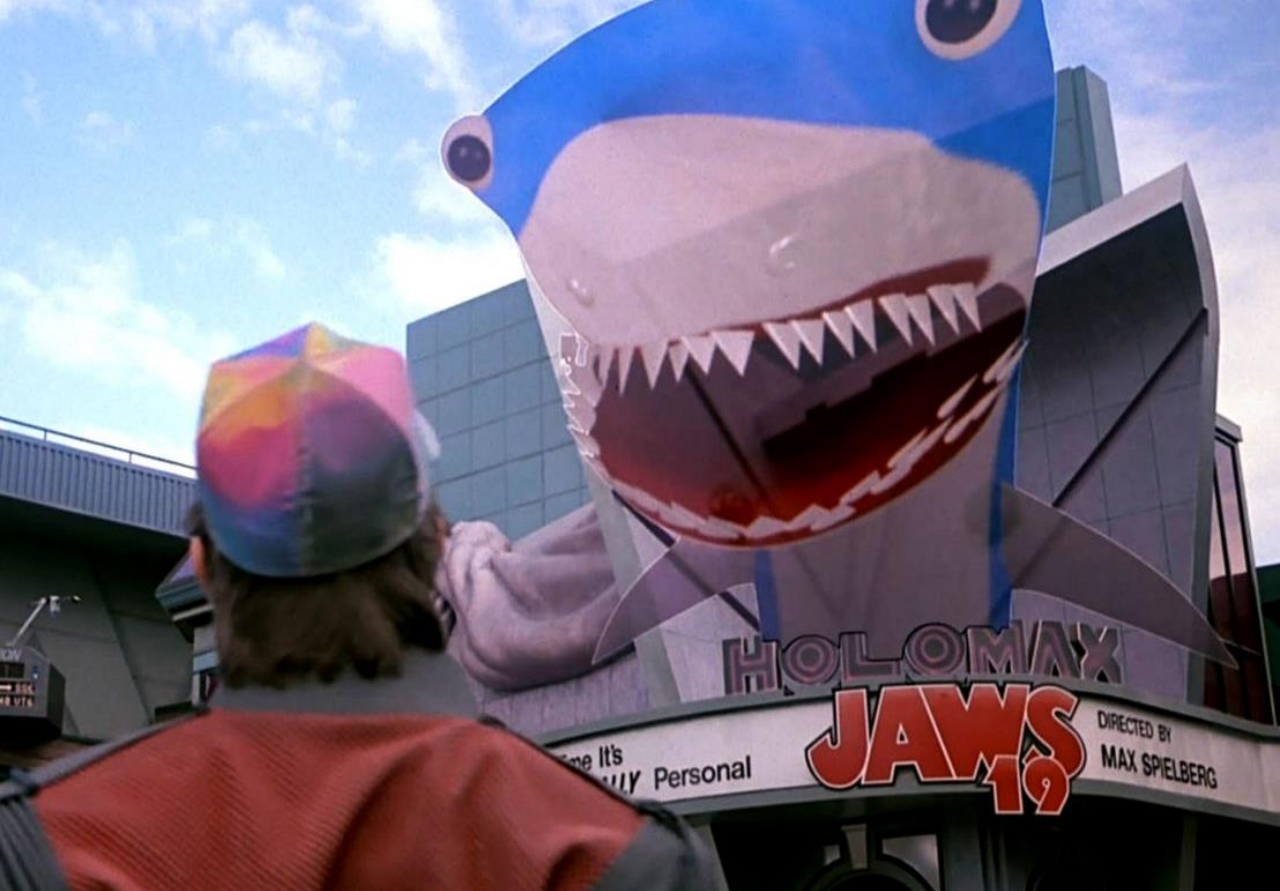
Back to the Future that came true
FIRST RELEASED IN NOV 1989



Back to the Future that came true



Back to the Future that came true



Back to the Future that came true



Back to the Future that came true



Back to the Future that came true



Back to the Future that came true





Brain Research Reviews 29 (1999) 169–195

BRAIN
RESEARCH
REVIEWS

Full-length review

EEG alpha and theta oscillations reflect cognitive and memory performance: a review and analysis

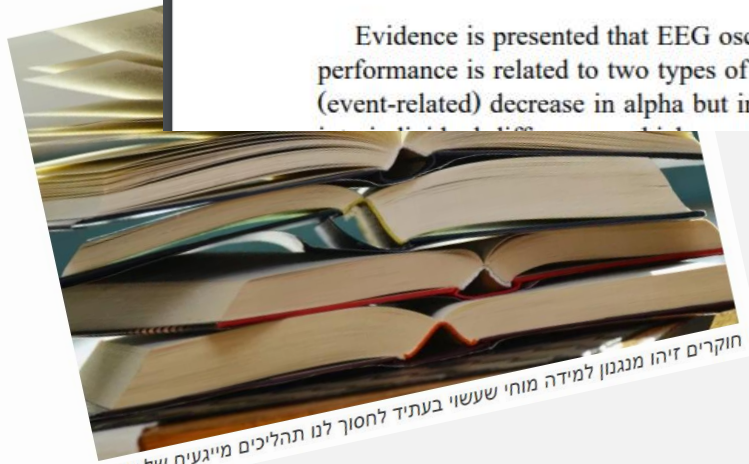
Wolfgang Klimesch *

Department of Physiological Psychology, Institute of Psychology, University of Salzburg, Hellbrunnerstr. 34, A-5020 Salzburg, Austria

Accepted 24 November 1998

Abstract

Evidence is presented that EEG oscillations in the alpha and theta band reflect cognitive and memory performance in particular. Good performance is related to two types of EEG phenomena (i) a tonic increase in alpha but a decrease in theta power, and (ii) a large phasic (event-related) decrease in alpha but increase in theta, depending on the type of memory demands. Because alpha frequency shows large



Future Trends



A man in a grey suit jacket, white shirt, and dark trousers is walking on a paved path. He is carrying a brown leather messenger bag over his shoulder and holding a light-colored folder or book in his right hand. The background is a blurred outdoor setting with trees and grass.

Jobs that didn't exist 10
years ago

Rideshare
driver



Instagram
influencer



YouTuber



Millennial
expert



User
Experience
(UX) designer



Social media manager



Escape room
owner



Twitch
streamer



Virtual reality
game
developer



Electric scooter
"juicer"



A man with short brown hair, wearing a blue suit jacket and a light-colored shirt, is walking away from the camera through a crowded city street at night. The background is filled with blurred lights from buildings, streetlights, and other pedestrians, creating a bokeh effect. A blue bus is visible on the right side of the street. The man has a light green bag strap over his right shoulder.

Jobs that didn't exist a year ago

Jobs that didn't exist 2 years ago



What Jobs
will be
invented at
the future ?

*Up to 85%
of future jobs
haven't been
invented yet!*



All About America

Most of 2030's Jobs Haven't Been Invented Yet

By Dora Mekouar
February 08, 2019 08:48 AM



Los Angeles-based DAQRI uses augmented reality devices to display work instructions over a worker's environment, which the company says enables workers to complete tasks safely and efficiently. (Courtesy daqri.com)

Up to 85 percent of the jobs that today's college students will have in 11 years haven't been invented yet.

That's according to a panel of experts assembled by the Institute for the Future, although an exact percentage is impossible to predict.

The IFTF, a nonprofit that seeks to identify emerging trends and their impacts on global society, forecasts that many of the tasks and duties of the jobs that today's young people will hold in 2030 don't exist right now.

"Those who plan to work for the next 50 years, they have to have a mindset of like, 'I'm going to be working and learning and working and learning, and working and learning,' in order to make a career," says Rachel Maguire, a research director with IFTF.

By 2030, we'll likely be living in a world where artificial assistants help us with almost every task, not unlike the way email tries to finish spelling a word for users today.

The changing nature of a career

Figure 1. The changing nature of a career

Length of career



60 to 70 years

Average tenure in a job



4.5 years

Half-life of a learned skill



5 years

Sources: Lynda Gratton and Andrew Scott, *The 100-Year Life: Living and Working in an Age of Longevity* (Bloomsbury, 2016); Douglas Thomas and John Seely Brown, *A New Culture of Learning: Cultivating the Imagination for a World of Constant Change* (CreateSpace, January 4, 2011).

Deloitte University Press | dupress.deloitte.com



This is what millennials look for in a job

Image: The 2016 Deloitte Millennial Survey

Figure 11: In most markets, work/life balance comes before career progression when evaluating job opportunities

Relative degree of importance (excluding salary)



Q. For each of the following groups of four, please indicate what would be the strongest reason for choosing to work for an organization and what would be the weakest.

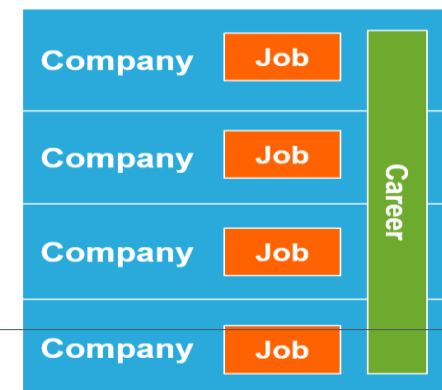
How jobs & careers have changed



Traditional Employment 1960s-1990s



Transparent Job Market 2000s – 2018



The Pixelated Workforce Today into the Future

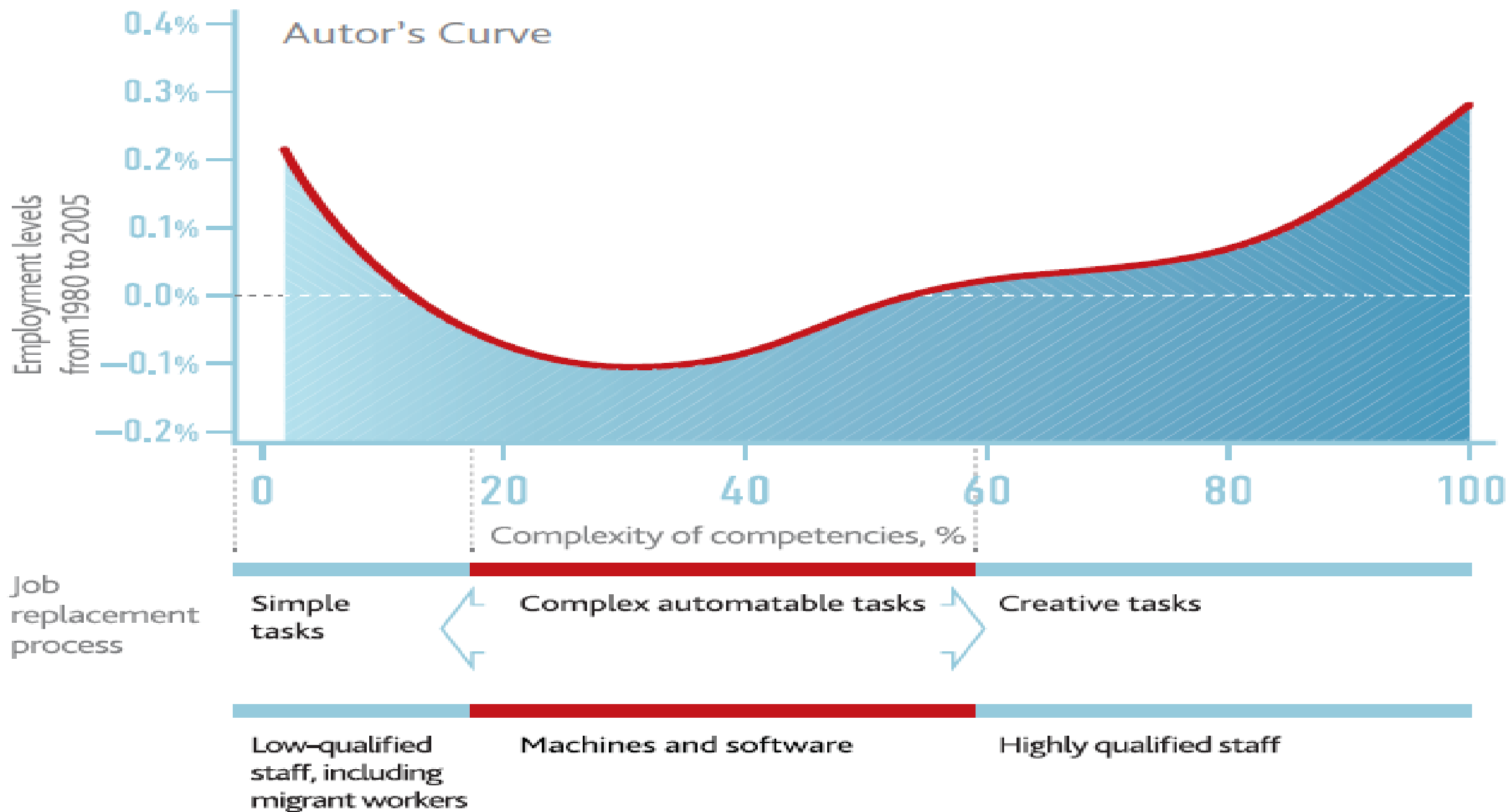


When you train or work in one job,
you develop skills that can be

applied in **13** other jobs



(The Foundation of Young Australians, 2017)



Employment outlook across job families

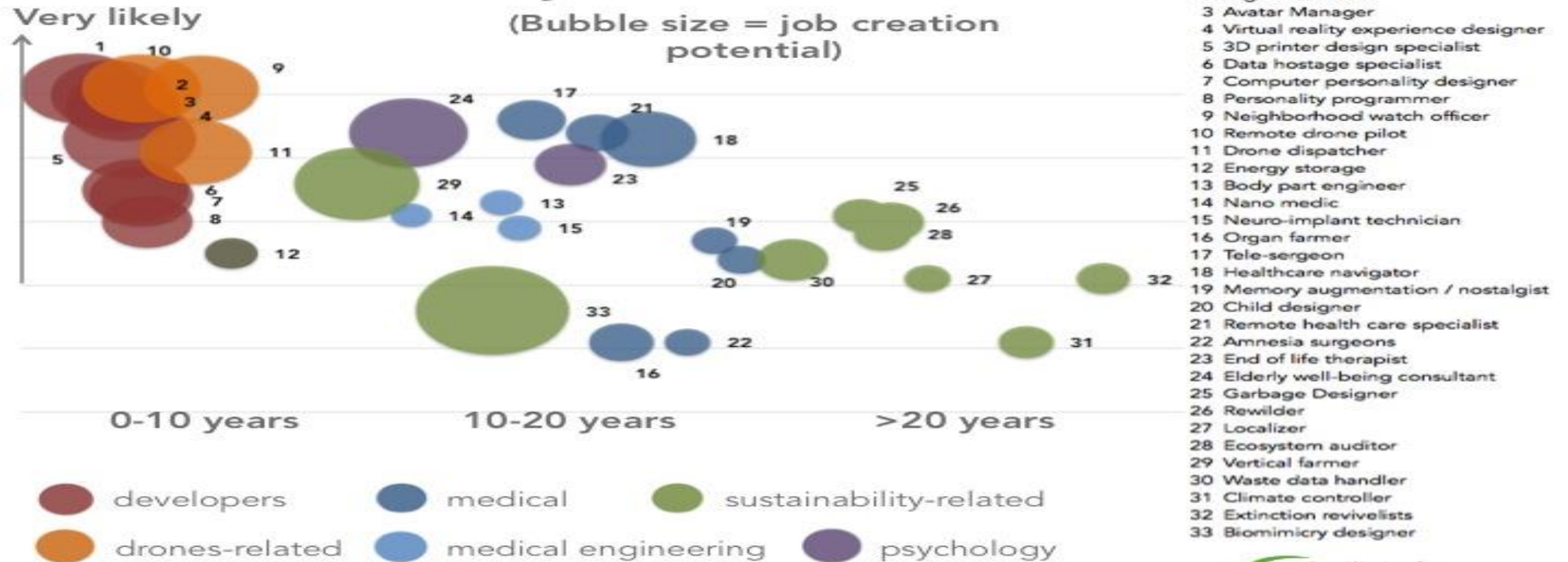
Employment outlook across job families jobs change in thousands, 2015-2020



Across major economies - see report for full list.

Source: Future of Jobs Report, World Economic Forum

Future jobs framework



Future Jobs Framework

- 18 Healthcare navigator
- 19 Memory augmentation / nostalgist
- 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 revivalists
- 33 Biomimicry designer



- 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-surgeon

Future Jobs Framework

Risk level of occupations

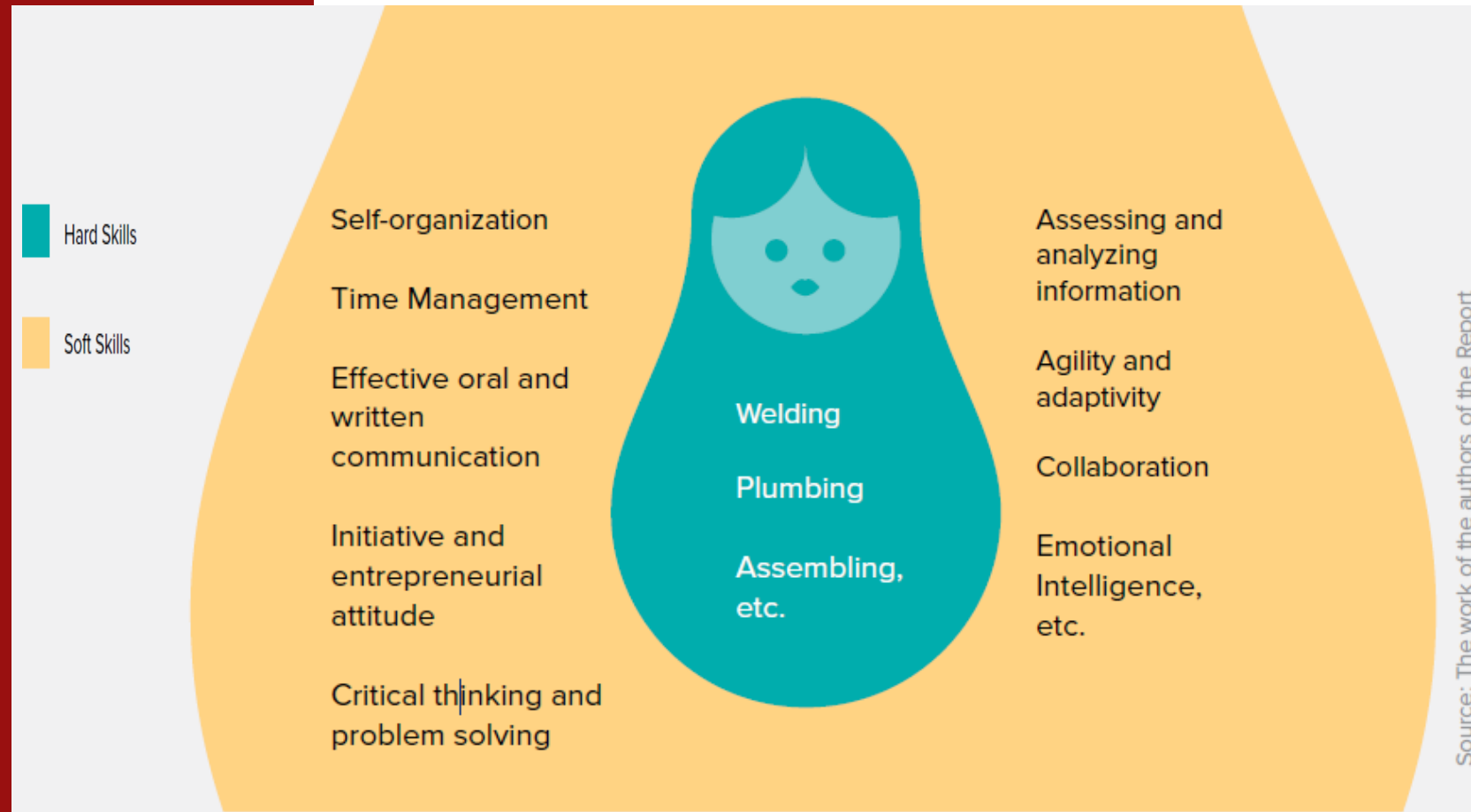
High Risk Tasks:

- Manual
- Routine
- Rule-based

Low Risk Tasks:

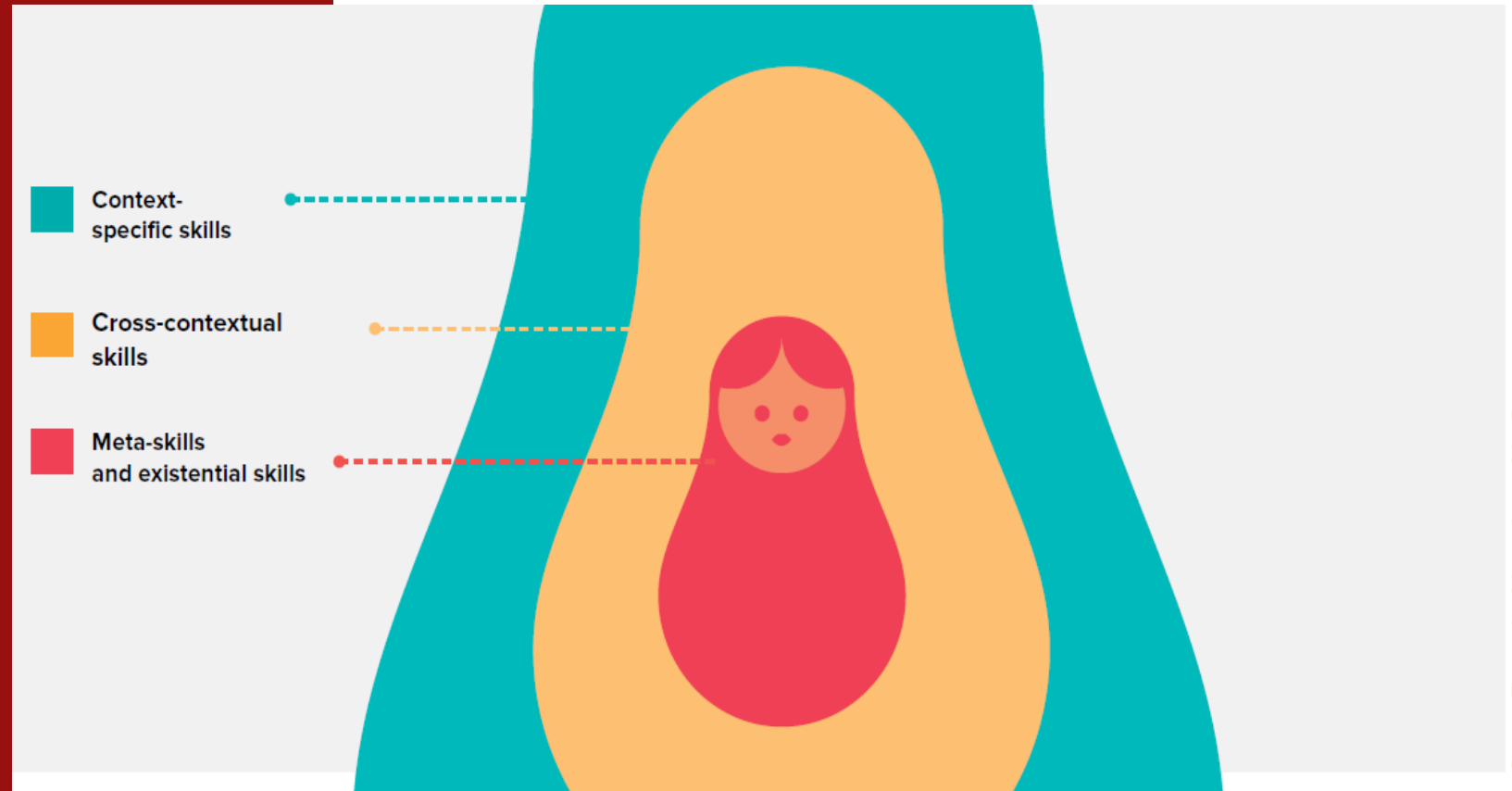
- Creativity
- Social Intelligence
- Quick response to changes

Current skills model



Source: The work of the authors of the Report

Future skills model



Lifelong learning

Lifelong learning is the "ongoing, voluntary, and self-motivated" pursuit of knowledge for either personal or professional reasons. Therefore, it not only enhances social inclusion, active citizenship, and personal development, but also self-sustainability, as well as competitiveness and employability.



Team worker

Team players are not only those who play on sport**teams**; they are also people who **work** for an organization. A **team player** is a person who plays or works well as a member of a **team** or group. **Teams** in organizations need strong **team** players to perform well and reach their goals



Analytical thinking

The **Analytical Thinker**. **Analytical Thinkers** are reserved, quiet persons. They like to get to the bottom of things - curiosity is one of their strongest motives. ... **Analytical Thinkers** like to work alone; their ability to concentrate is more marked than that of all other personality types.



Communicator

a person who communicates, especially one skilled at conveying information, ideas, or policy to the public. a person in the business of communications, as television or magazine publishing.



Digital orientation

Digital orientation is the deliberate strategic positioning of a person or organization to take advantage of the opportunities presented by **digital** technologies



Empathy

The ability to understand and share the feelings of another.



Entrepreneurship

A person who organizes and operates a business or businesses, taking on greater than normal financial risks in order to do so.



Creativity

USE OF THE
IMAGINATION TO CREATE
TO CREATE NEW IDEAS



Multi tasking

multitasker (plural **multitaskers**)

Someone who multitasks, who performs multiple tasks at the same time.



Future Trends

Organization





Digital Transformation Is Racing Ahead and No Industry Is Immune

July 19, 2017



Tweet



Post



Share



Save



Print



rate of churn, Innosight's research estimates three-quarters of today's S&P 500 will be replaced by 2027.

Digital disruption is the primary catalyst of change.

While the Constellation study is careful to say that companies rise and fall for many reasons, digital disruption is clearly responsible for a large share. Research shows that since 2000, 52 percent of companies in the Fortune 500 have either gone bankrupt, been acquired, or ceased to exist as a result of digital disruption. The collision of the physical and digital worlds has affected every dimension of society, commerce, enterprises, and individuals.

Digital transformation transcends technology.

Digital transformation is often viewed through a narrow technology lens, as just another mobile project or e-commerce initiative. Fundamentally, though, digital transformation is the result of enterprises seeking to adapt to the storm of new technology affecting markets and customers. Effective internal systems, processes, and value chains will always be essential, but enterprises will increasingly need to harness the skills, capabilities, and passions of the external market. Digital

Read more from DXC Technology:

[Embracing Digital Change Requires a Clear Strategic Focus](#)

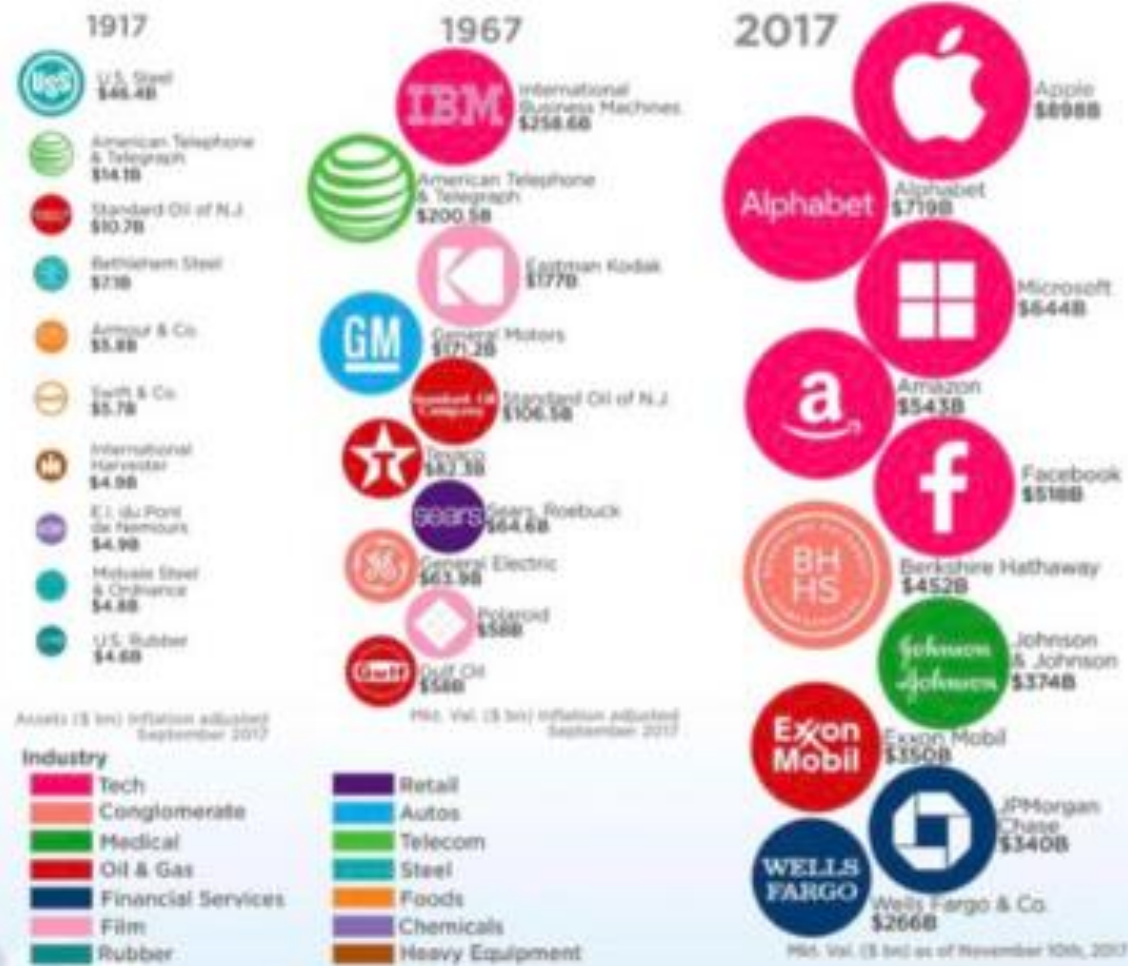
[How to Become a Digital Enterprise](#)

[Zurich Insurance Group Takes Its IT Infrastructure to the Agile Cloud](#)

[Advanced Analytics Are Crucial to Digital Transformation](#)

[6 Digital Trends Are Poised to Transform How We Work](#)

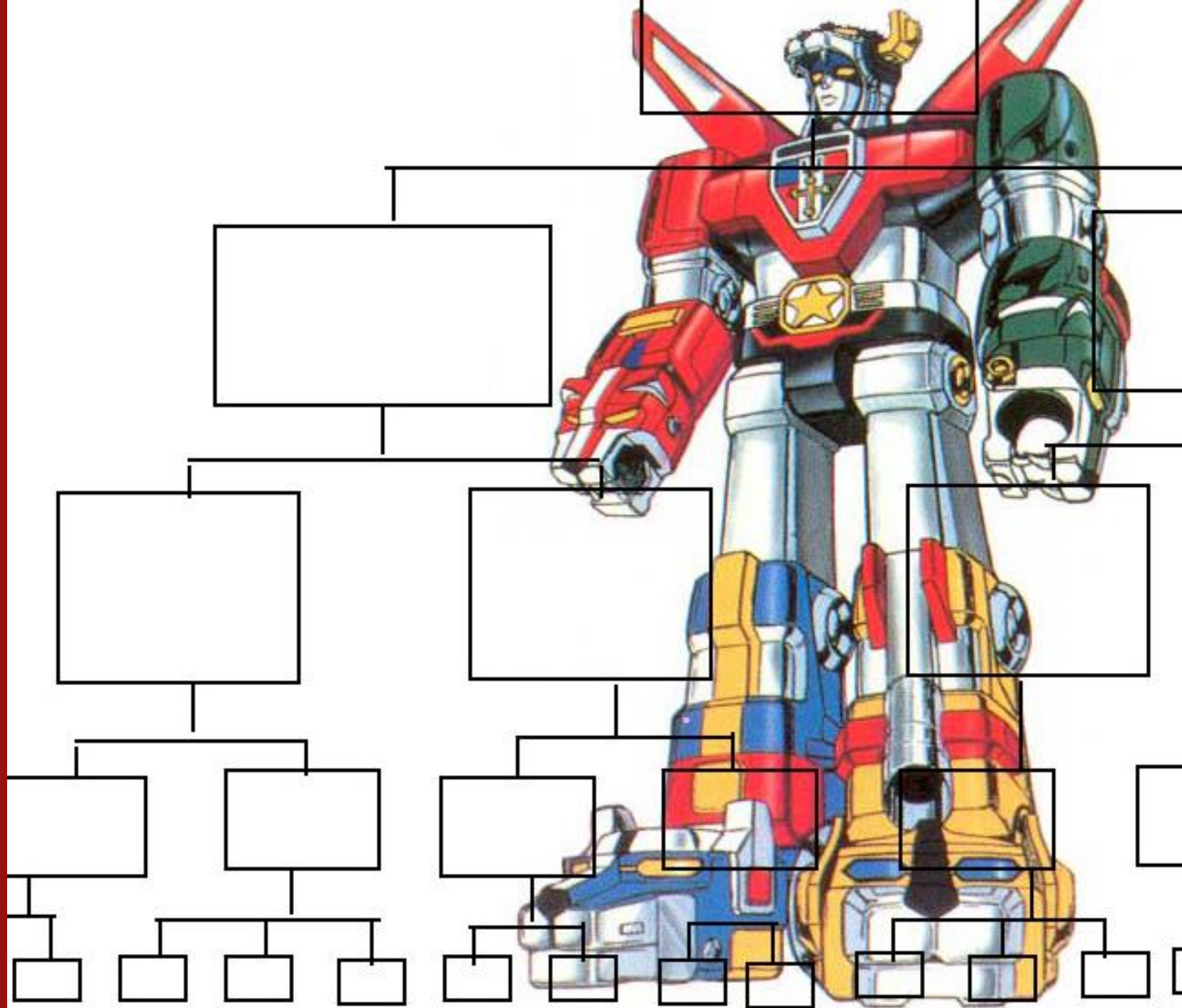
Since 2000, 52% of Fortune 500 Companies Are Gone



2019 Most Valuable Companies

1. Microsoft
2. Amazon
3. Apple
4. Alphabet
5. Facebook
6. Alibaba Group
7. Tencent
8. Berkshire Hathaway
9. Johnson & Johnson
10. JP Morgan Chase





The journey to an agile organization

You know what an agile organization is, and why it's important. Figuring out how to pull off an agile transformation is another story.

by Daniel Brosseau, Sherina Ebrahim, Christopher Handcomb, and Shail Thaker



May 2019

Exhibit 1

A comprehensive transformation touches every facet of the organization, including people, process, strategy, structure, and technology.

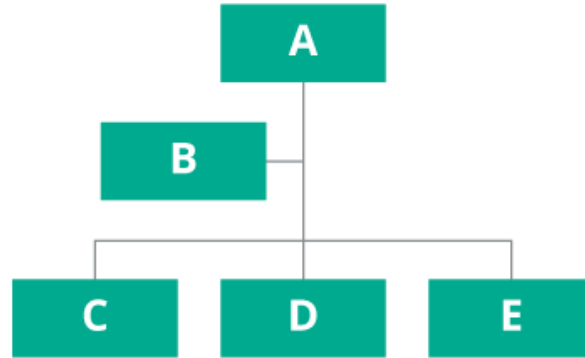


¹ Wouter Aghina, Aaron de Smet and Kirsten Weerda, "Agility: It rhymes with stability," *McKinsey Quarterly*, December 2015, McKinsey.com.

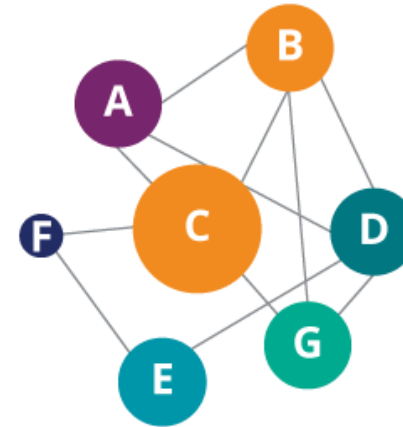
Networks of teams

2. A network of teams

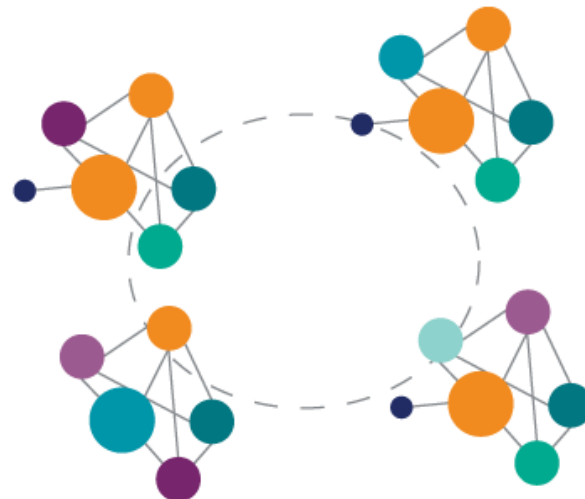
How things *were*



How things *are*



How things *work*



- Shared values and culture
- Transparent goals and projects
- Free flow of information and feedback
- People rewarded for their skills and abilities not position

The organization

14 PRINCIPLES OF THE FUTURE ORGANIZATION



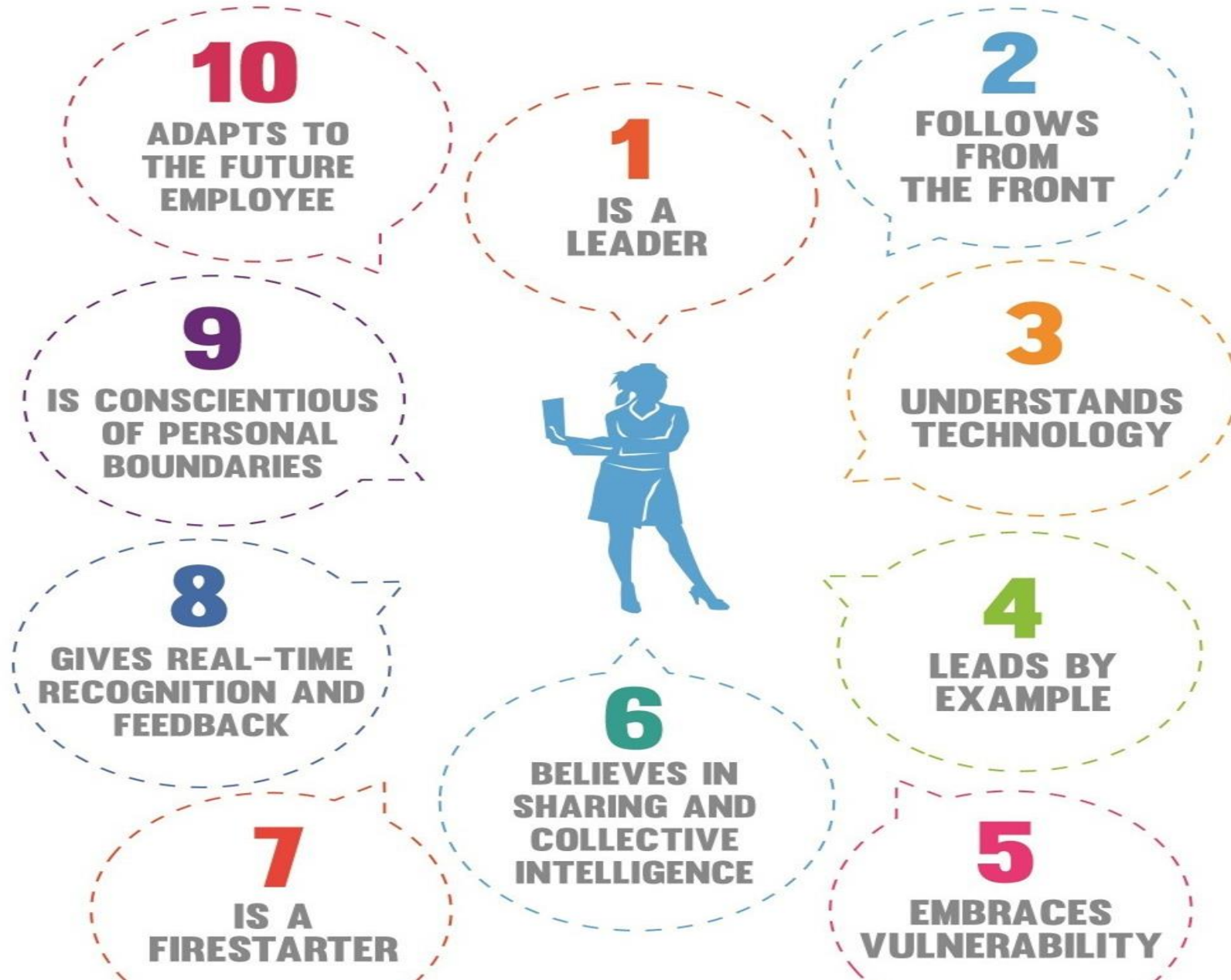
Future Trends

Management



The future manager

10 PRINCIPLES OF THE FUTURE MANAGER



Google Manager Behaviors

1

Is a good coach

2

Empowers team and does not micromanage

3

Creates an inclusive team environment, showing concern for success and well-being

4

Is productive and results-oriented

5

Is a good communicator — listens and shares information

6

Supports career development and discusses performance

7

Has a clear vision/strategy for the team

8

Has key technical skills to help advise the team

9

Collaborates across Google

10

Is a strong decision maker

re:Work
rework.withgoogle.com

The 7 Principles Of The Future Employee, by Forbes

Has a flexible work environment

Can customize work

Shares information

Uses new ways to communicate and collaborate

Can become a leader

Shifts from knowledge worker to learning working

Learns and teaches at will

7 PRINCIPLES OF THE FUTURE EMPLOYEE



Future Trends

Working Environment





Technology



Learning Evolution

(our ability to learn the new skills; our ability to adapt)

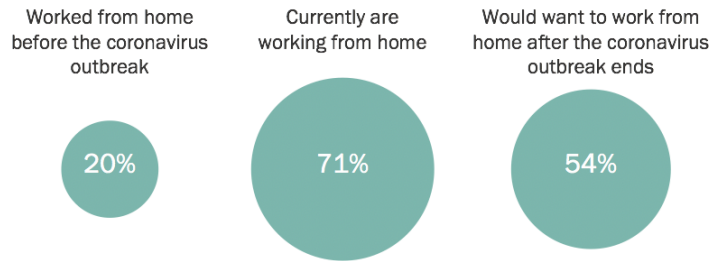


Talent Mobility

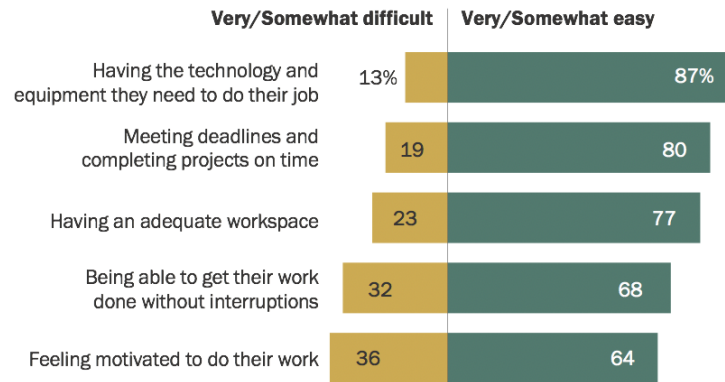
(the extent to which we will move for work)

Many workers would like to telework after the pandemic is over; transition to working from home has been relatively easy for many

Among employed adults who say that, for the most part, the responsibilities of their job can be done from home, % saying they ____ all or most of the time



Among employed adults who are currently working from home all or most of the time, % saying that, since the coronavirus outbreak, each of the following has been ____ for them

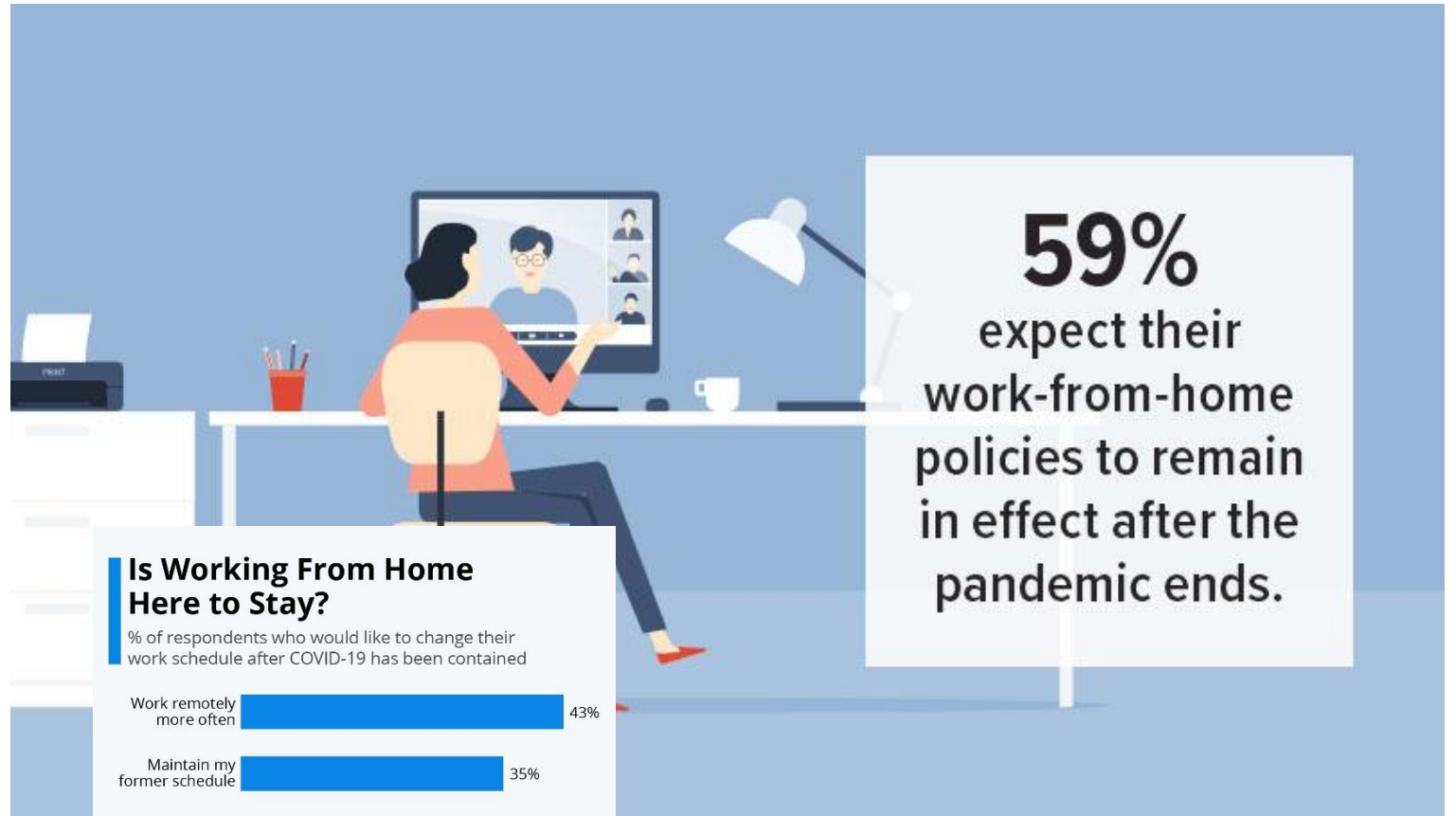


Note: For bottom panel, share of respondents who didn't offer an answer not shown.

Source: Survey of U.S. adults conducted Oct. 13-19, 2020.

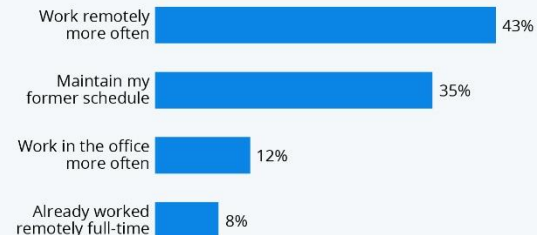
"How the Coronavirus Outbreak Has - and Hasn't - Changed the Way Americans Work"

PEW RESEARCH CENTER



Is Working From Home Here to Stay?

% of respondents who would like to change their work schedule after COVID-19 has been contained



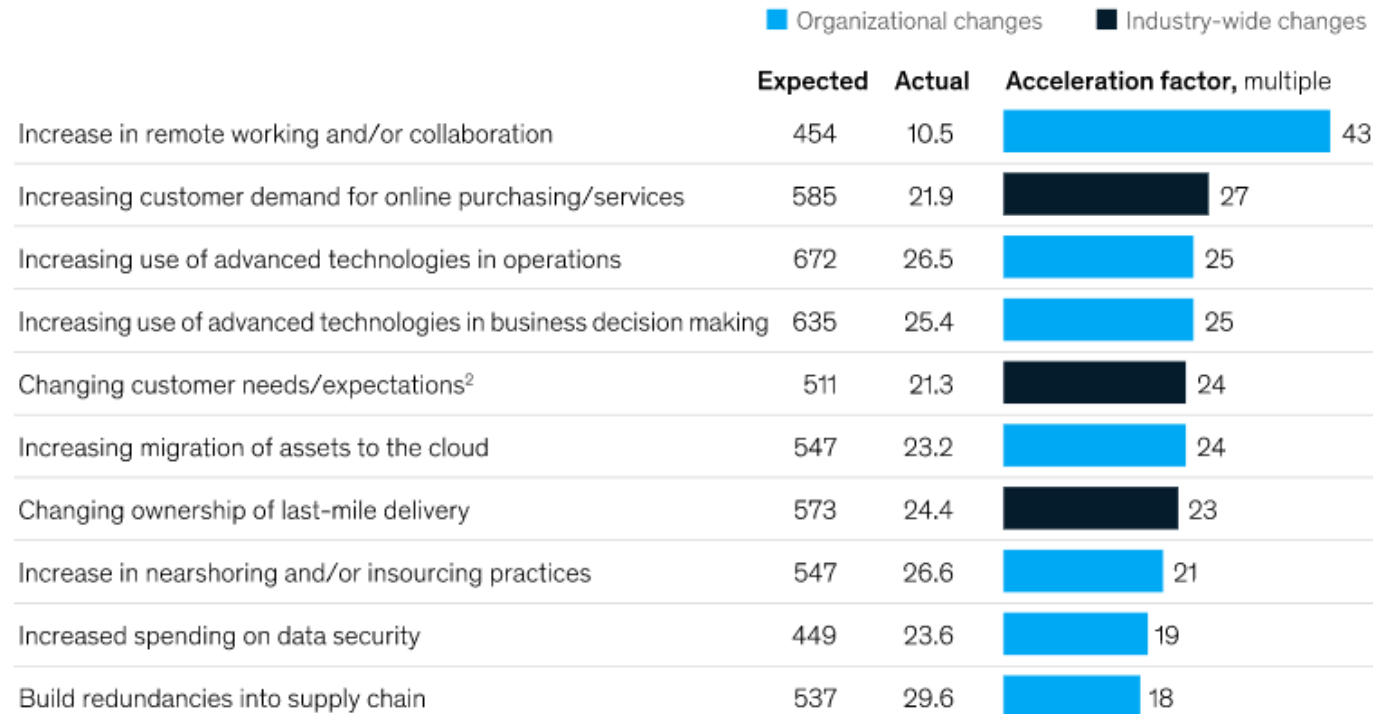
Based on a survey of 1,200 full-time employees in the U.S. conducted April 16-17, 2020
Source: getAbstract



statista

Executives say their companies responded to a range of COVID-19-related changes much more quickly than they thought possible before the crisis.

Time required to respond to or implement changes,¹ expected vs actual, number of days



¹Respondents who answered "entry of new competitors in company's market/value chain" or "exit of major competitors from company's market/value chain" are not shown; compared with the other 10 changes, respondents are much more likely to say their companies have not been able to respond.

²For instance, increased focus on health/hygiene.

The changing work environment

- Adjustment to millennials generation
- Flexible working hours
- Freelancers
- Variety of employees
- Integration of AI and robots
- Cross generation learning models
- New working spaces
- Sustainability in organizations
- Healthy organization



Future Trends

Learnings and teaching



Skills 360 °



Interskill



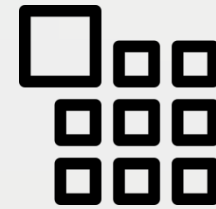
Metaskill



Outskill



Inskill

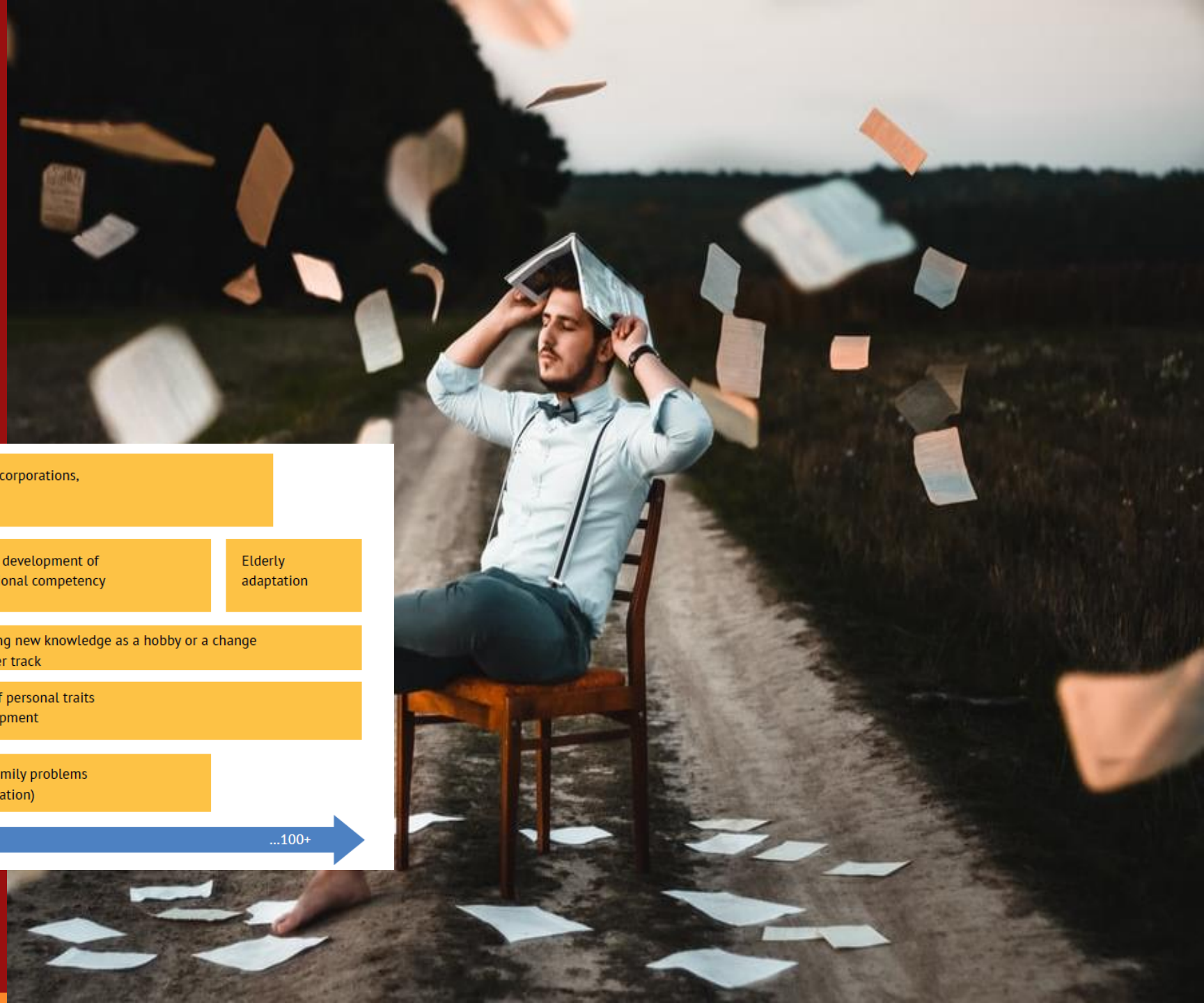
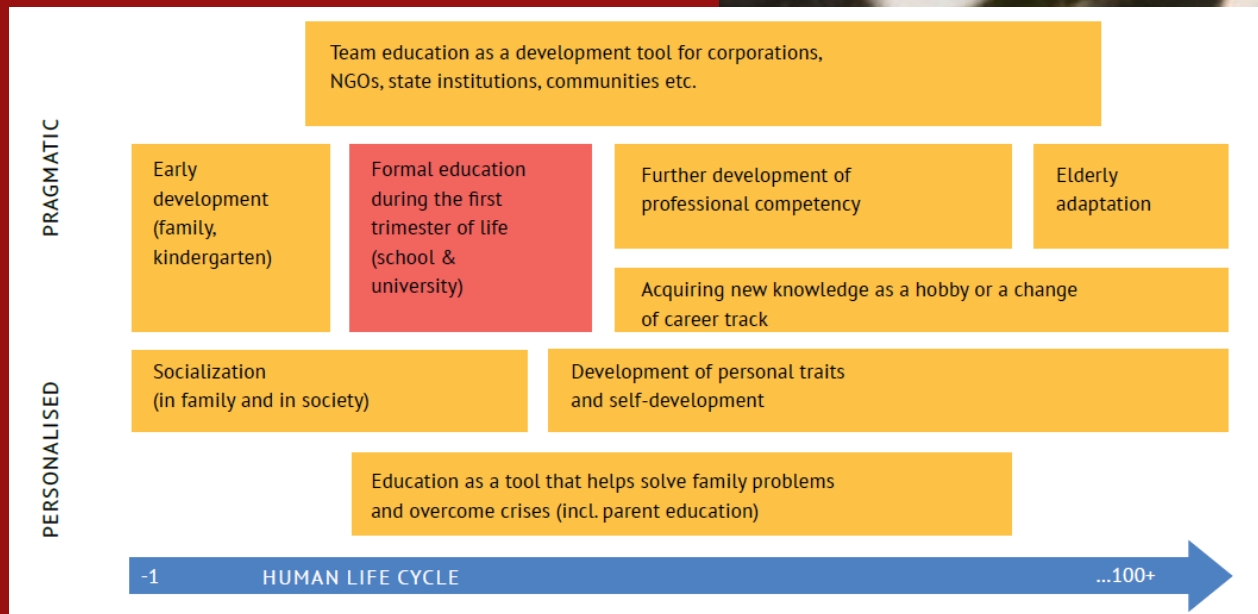


Upskill



Reskill

On Going Learnings

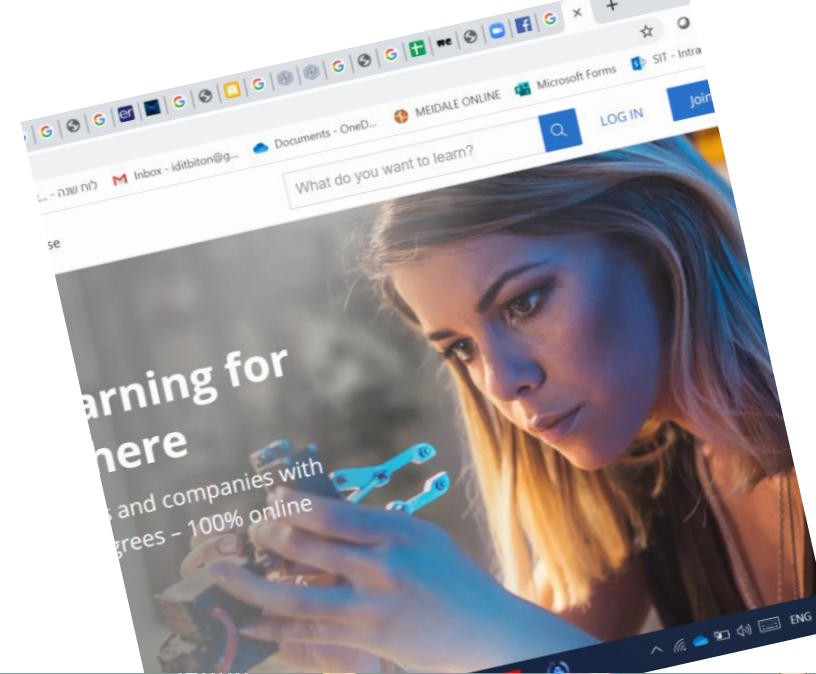


Changes Shaping The Future Of Education Technology

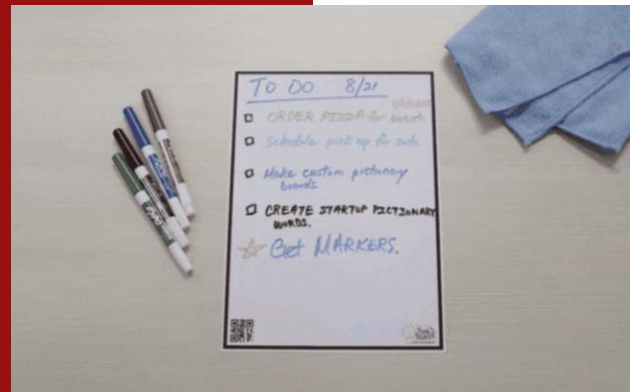
1. Compatibility With New Learning Technology
2. User Experience
3. Amazon And Google Have Changed Expectations
4. Hybrid solutions
5. Long Life Learning
6. Anytime anywhere
7. Make It Personal
8. Skills integrated with knowledge
9. Hands on and practice
10. Data Is The New Currency



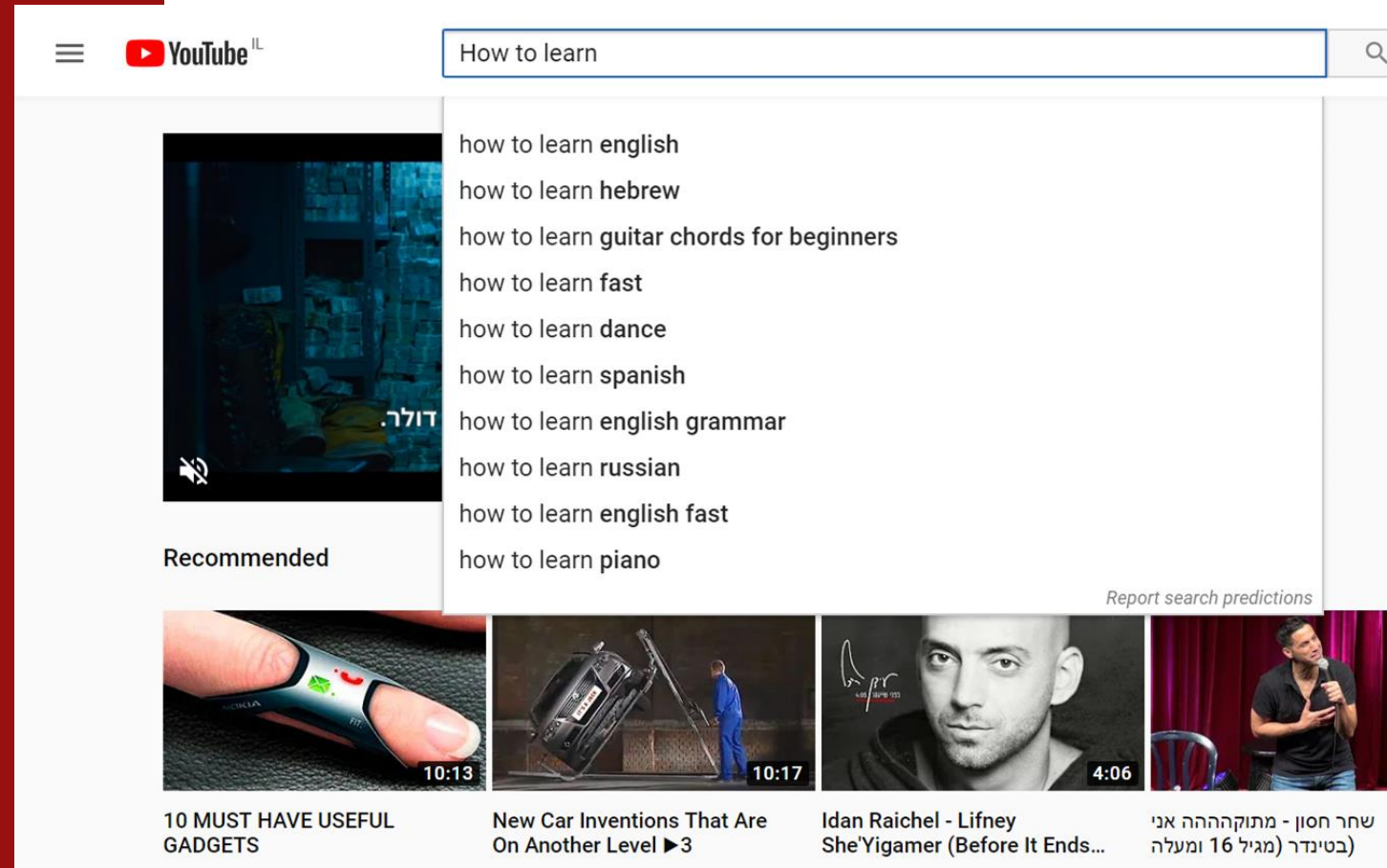
E-learning



Users experience



Amazon, YouTube And Google Have Changed Expectations



The screenshot shows the YouTube interface with a search bar containing 'How to learn'. Below the search bar, a list of suggested search terms is displayed:

- how to learn english
- how to learn hebrew
- how to learn guitar chords for beginners
- how to learn fast
- how to learn dance
- how to learn spanish
- how to learn english grammar
- how to learn russian
- how to learn english fast
- how to learn piano

Below the search suggestions, a 'Recommended' section displays four video thumbnails:

- 10 MUST HAVE USEFUL GADGETS**: A thumbnail showing a finger with a small device attached, with a duration of 10:13.
- New Car Inventions That Are On Another Level ▶3**: A thumbnail showing a car being lifted by a crane, with a duration of 10:17.
- Idan Raichel - Lifney She'Yigamer (Before It Ends...**: A thumbnail showing a man's face, with a duration of 4:06.
- שחר חסון - מתוקהרהה אני (בטינדר מגיל 16 ומעלה)**: A thumbnail showing a man speaking into a microphone.

At the bottom right of the recommended section, there is a link that says 'Report search predictions'.

Hybrid solutions



Long Life Learning



Anytime Anywhere



Make It Personal

INDIEGOGO Explore ▾ What We Do 🔍

For Entrepreneurs Start a Campaign Log In Sign Up

**KENYA** **SPEAK EARTH**

By donating to this project you will be helping people from all over the world to broaden their knowledge of many different languages and cultures.



What We Need & What You Get

I am working very closely with an app development firm to design and create the app. The app will be completed in 3 phases:

- Phase one: design the look of the app. This is where we will determine the style we want the app to have. **FUNDED AND COMPLETED!**
- Phase two: design a prototype. This is where we will start working with the app's functions and making sure it runs the way we want it to. This will take around 6-8 weeks to complete and will cost approximately \$2,500. This phase still needs funding!
- Phase three: completion and release of the app. This phase still needs funding!

We plan to start the app out in the Android market and offer the most common languages (Spanish, French, German, Italian, etc.) These languages will probably

0 names

\$25 USD

Bilingual

You will be given a free Speak Earth app and an Amazon gift card!

0 out of 25 earned

\$35 USD

German Practice

You will be invited to a video call (via Skype or a similar program) where you will be able to practice your German with me. This will only be offered in German because that is the only other language I know.

0 earned

\$50 USD

You will receive a free Speak Earth App along with a hand written thank you letter and an Amazon gift card!

0 out of 25 earned

Watch later

Share

CLOSED

Speak Earth: a personalized language learning app

Speak Earth is designed to create personalized lessons based on the things that are relevant to you!

PROJECT OWNER

**kenya stanford**
Ames, United States
1 Campaign | [More](#)

\$415 USD raised
16% of \$2,500 flexible goal

About ₪1,493 ILS

 Browse Indiegogo's products on Amazon! Our Launchpad Collection has the latest innovations ready to ship!

[SEE COLLECTION](#)

✕



(1) WhatsApp f Idit Biton Outlook ... - לוח שנה - Inbox - iditbiton@g... MEIDALE ONLINE SIT - Intranet Portal... SIT - Systematic Inv... Wix Website Editor Mysite

INDIEGOGO Explore ▾ What We Do 🔍

For Entrepreneurs Start a Campaign Log In Sign Up

CLOSED

EVO Planner: The First Personalized Flow System

A customized planner and app designed for your unique Brain Type

PROJECT OWNER

**Project EVO**
San Diego, United States
1 Campaign | [More](#)

\$1,036,646 USD raised
2447% funded on February 9, 2018

About ₪3,728,996 ILS

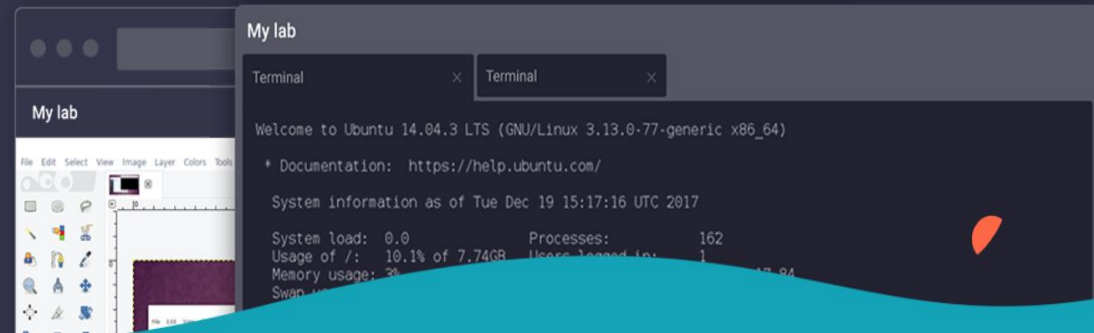
[Edit currency settings](#)

Hands on and practice



Cloud-based labs

Practical, hands-on learning labs for essentially any software application



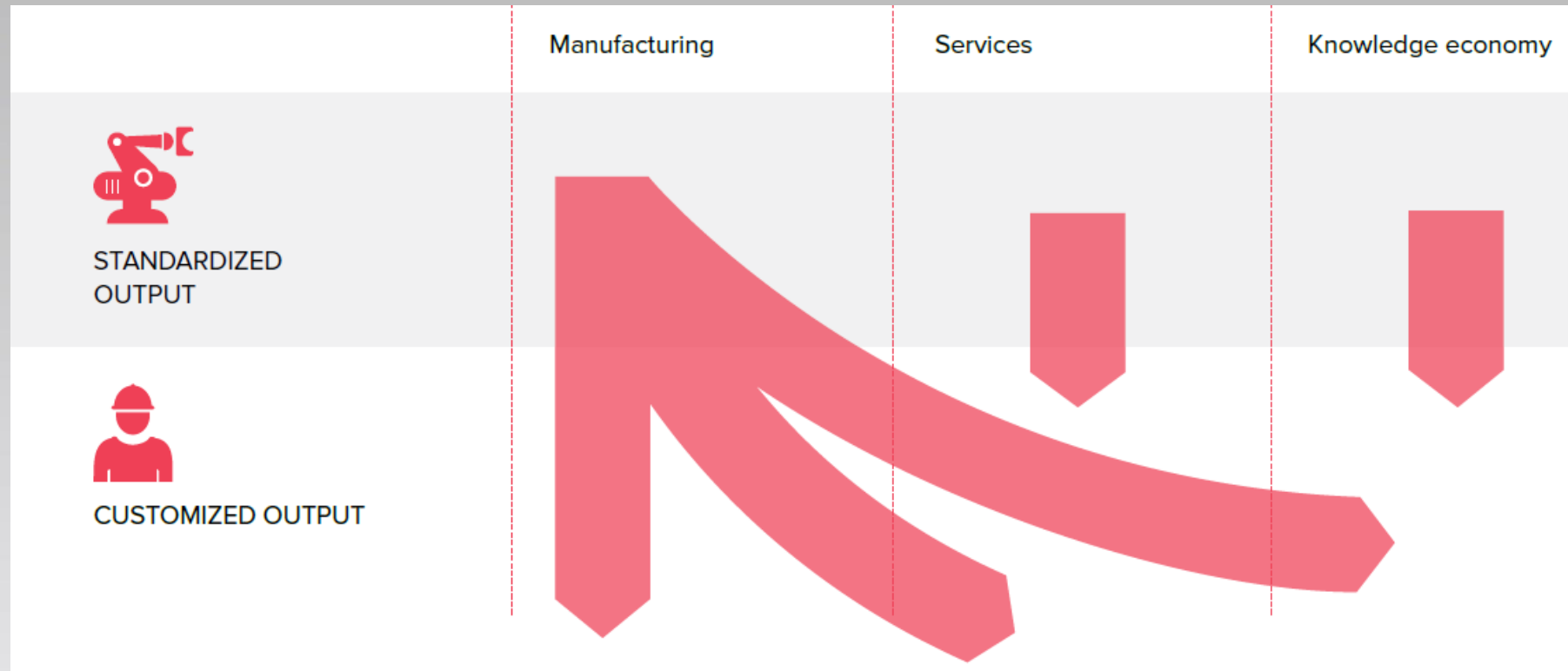
Skills integrated with knowledge



Future Trends

Products and process





From mass production to services and knowledge

EXHIBIT 1 | Data-Driven Companies Have Become the Most Valuable



COMPANY: MARKET CAPITALIZATION

RANK	APRIL 2017	Q4 2011	Q4 2006
1	Apple: 741	Exxon Mobil: 406	Exxon Mobil: 447
2	Alphabet: 585	Apple: 376	General Electric: 384
3	Microsoft: 505	PetroChina: 277	Microsoft: 294
4	Amazon: 432	Royal Dutch Shell: 237	Citigroup: 274
5	Facebook: 408	ICBC: 228	Gazprom: 271
6	Berkshire Hathaway: 404	Microsoft: 218	ICBC: 255
7	Exxon Mobil: 344	IBM: 217	Toyota: 241
8	Johnson & Johnson: 330	Chevron: 212	Bank of America: 240
9	JPMorgan Chase: 303	Walmart: 205	Royal Dutch Shell: 226
10	Alibaba Group: 278	China Mobile: 196	BP: 219

 Data-driven company

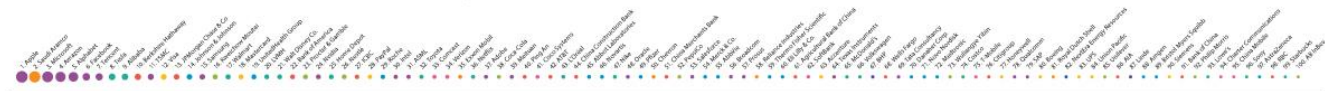
Source: S&P Capital IQ, "Top 10 Companies with Highest Market Capitalization Worldwide."

Note: Market capitalization figures have been rounded and are in \$billions.

The potential of data-Driven companies (BCG)

Top 10 Companies by Market Capitalization



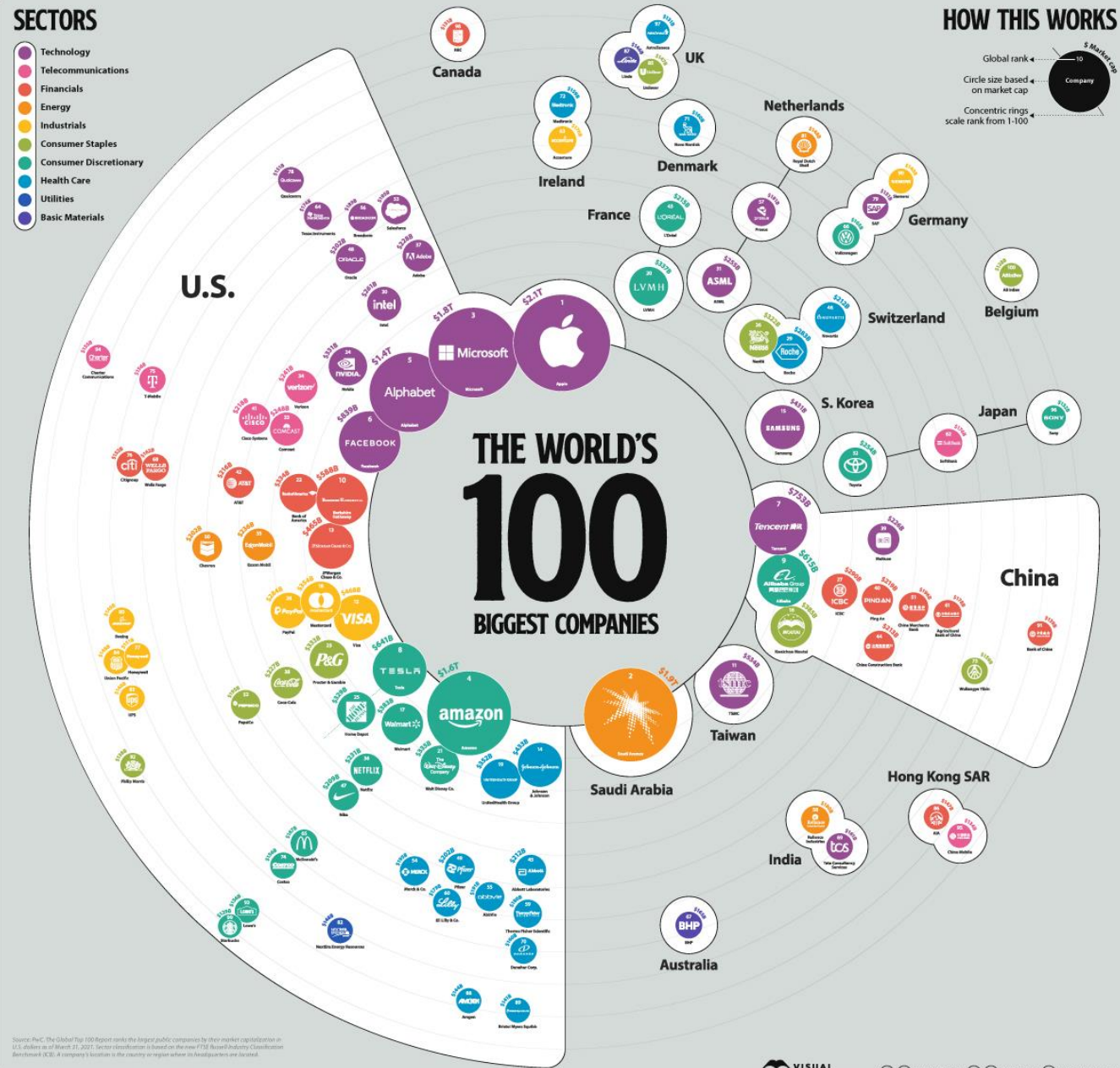


SECTORS

- Technology
- Telecommunications
- Financials
- Energy
- Industrials
- Consumer Staples
- Consumer Discretionary
- Health Care
- Utilities
- Basic Materials

HOW THIS WORKS

- Global rank ←
- Circle size based on market cap
- Concentric rings scale rank from 1-100



Source: PwC, The Global Top 100 Report ranks the largest public companies by their market capitalization as of March 31, 2021. Sector classification is based on the new F100-based Industry Classification Benchmark (ICB). A company's location is the country or region where its headquarters are located.

COLLABORATORS RESEARCH • WRITING Ananya Basu | DESIGN VC



Visualcapitalist.com @visualcap



RANKING THE TOP 50 MOST INNOVATIVE COMPANIES OF 2021

Innovation is critical to business survival. To be successful, companies must:

- Prioritize innovation
- Support innovation through funds and talent
- Transform innovation investments into results

TYPE OF COMPANY

- Technology
- Consumer goods & services
- Transportation & energy
- Healthcare
- Media & telecommunications

Boston Consulting Group surveyed over 1,500 innovation executives to rank the top 50 most innovative companies of 2021, based on four variables:

- Global "Mindshare"**
Based on votes from all innovation executives
- Industry Peer Review**
Based on votes from executives within a company's industry
- Industry Disruption**
A diversity index that measures votes across industries
- Value Creation**
Total share return over the last three years (Dec 31, 2017-Dec 31, 2020)





In Jan 2020, Toyota invested \$400 million in Joby Aviation, a company that specializes in flying electric cars.

Pfizer was one of four COVID-19 vaccine producers to make the list.

Companies with "return" ranking have appeared on the ranking before but not in the prior year.



Companies with "new" ranking are appearing on the list for the first time.

10 healthcare companies made the list in 2021, more than double compared to the previous year.

- 1 The amount of data generated in **two days** is as much as all data generated in **human history before 2003**.



- 2 Improved use of data could generate **\$3 trillion** in additional value each year in **seven industries**.



2019

- 3 The Big Data analytics and services industry is worth **\$3 billion** and is expected to hit **\$20 billion** in the next five years.

AMAZON *shipment prediction*



ReCAPTCHA converting system



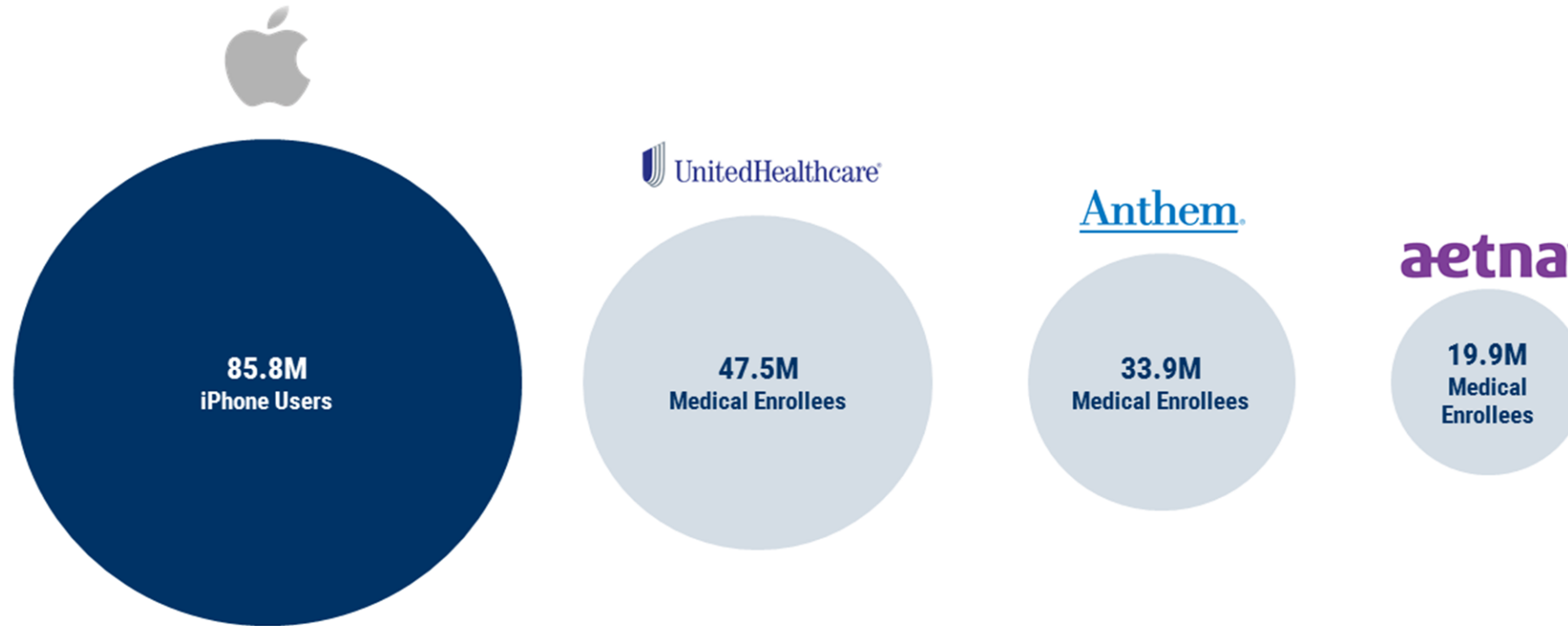
Smart Products



Wearable Technology



APPLE in HEALTH: *the power of numbers*



**2016 iPhone Users, 2016 US Medical Enrollees*

CBINSIGHTS

ComScore, AIS Health

www.cbinsights.com

Samsung predict to prevent

Available to download from April 2018, Predict to Prevent is a mobile app from Samsung. Designed to help prevent communication issues which can occur with individuals suffering from depression, the app uses predictive phrasing to monitor when users may be about to send a potentially-harmful message. Predict to Prevent then suggests a more-supportive phrase to send instead. The app is available in Thai or English, with a database of over 100,000 phrases.



CREATIVE
COLLISION

Dare to Change!



SIT
Systematic
Inventive
Thinking

