Deloitte.

The Future of Work

Mining Indaba, Cape Town
Feb 2019

Our clients' realities are changing

Technological advances, demographic shifts, and the rate of change is driving new realities for how people work and the way organizations design jobs and workplaces

Today, we are experiencing unprecedented change in the marketplace

7 Drivers

Technology is everywhere
6.0 billion+
smartphones in the world by 2020[1]

AI, Cognitive Computing, Robotics
$500,000 in 2008
$22,000 today[5]

Tsunami of data
9x more in last 2 years[2]
Major enabler of machine learning

Jobs vulnerable to automation
35% UK; **47%** US; **77%** China[6]

Diversity & generational change
Millennials **50%**[3]
25% global pop in Africa by 2050
50 year+ careers[4]

Change in nature of a career
2.5 – 5 years: Half-life of skills
4.5 years: Average tenure in a job[8]

Explosion in contingent work
US Contingent workers
40% by **2020**[7]

1 http://news.ihsmarkit.com/press-release/technology/more-six-billion-smartphones-2020-ihs-markit-says
2 https://www-01.ibm.com/software/data/bigdata/what-is-big-data.html
3 Annual Global Millennial Study, https://www2.Deloitte.com/uk/en/pages/about-Deloitte-uk/articles/millennial-survey.html
4 https://www.newscientist.com/article/mg23130810-800-the-100year-life-how-should-we-fund-our-lengthening-lives/
5 https://www2.deloitte.com/content/dam/Deloitte/il/Documents/human-capital/Thriving_in_times_of_digita_disruption.pdf

6 http://www.oxfordmartin.ox.ac.uk/downloads/reports/Citi_GPS_Technology_Work_2.pdf
7 Intuit 2020 Report: Twenty Trends that will Shape the next Decade https://http-download.intuit.com/http.intuit/CMO/intuit/futureofsmallbusiness/intuit_2020_report.pdf
8 https://www2.deloitte.com/content/dam/Deloitte/global/Documents/HumanCapital/dttl-hc-english-opentalenteconomy.pdf

The Future of Work is three dimensional

In exploring how the future of work will change, we analyze three integrated dimensions of any workforce transformation
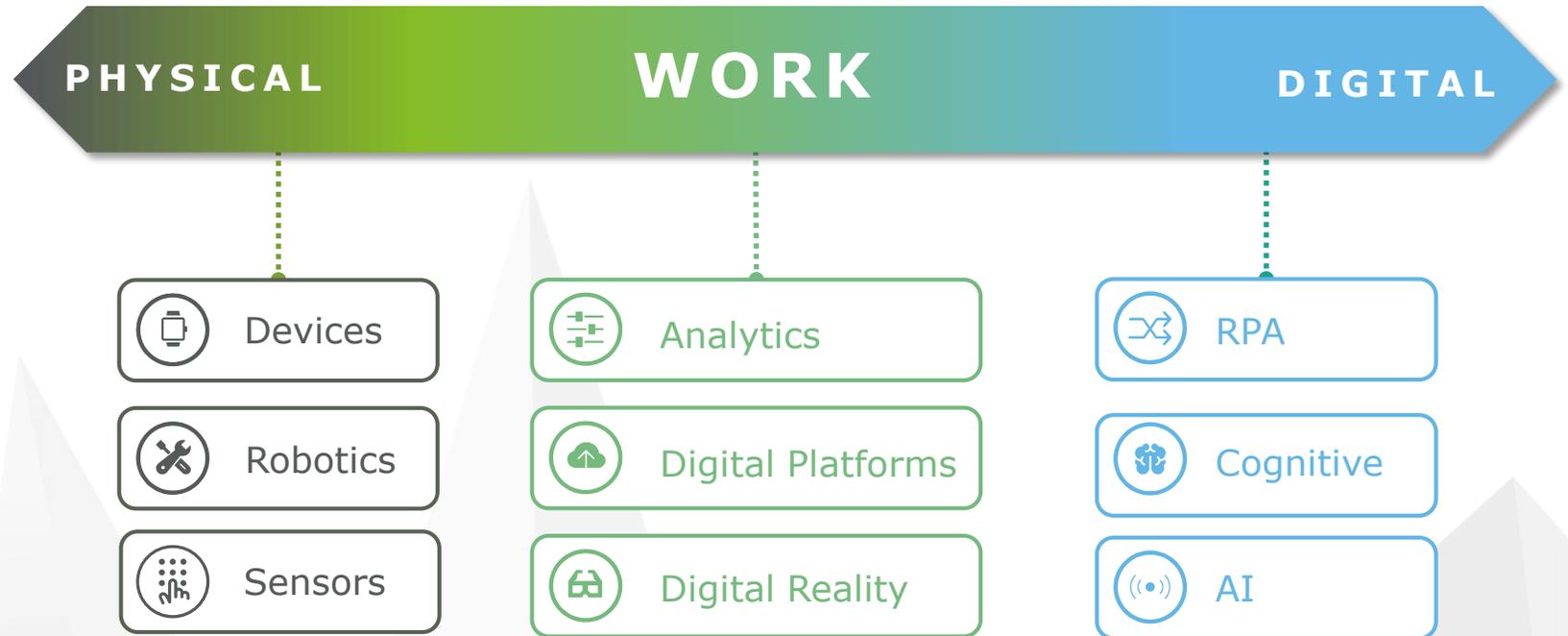
WORK

How the nature of work is changing to achieve new business goals, requiring new skills and capabilities given automation and augmentation

WORKFORCE

Who can perform the work as it changes and how organizations can close skills gaps by tapping into alternative talent pools or upskilling

WORKPLACE

Where the work can get done geographically and how we can maximize collaboration, productivity, and consistency with physical design and technologies

The Future of Work reimagined: Work

*Technology is changing how work gets done, and with it, the skills and focus of the workforce*
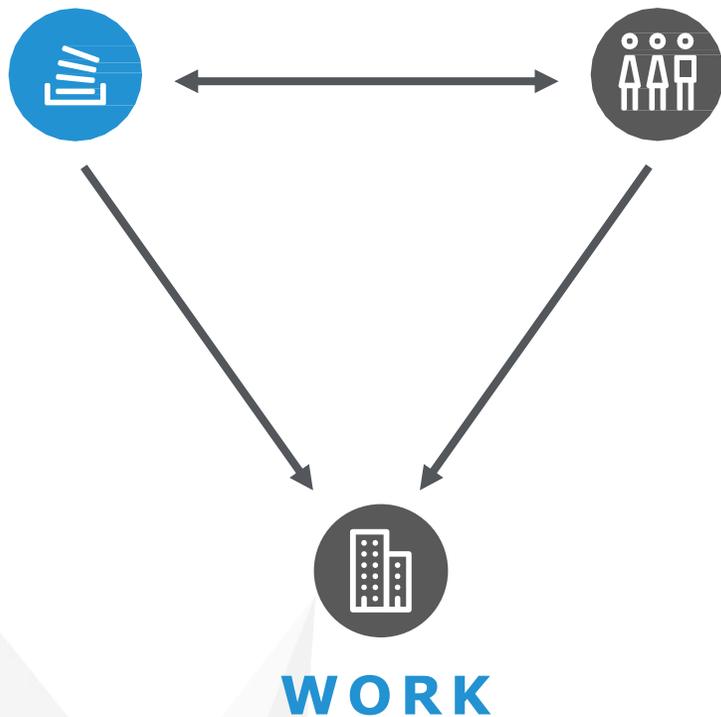
WORK

How the nature of work is changing to achieve new business goals, requiring new skills and capabilities given automation and augmentation

PHYSICAL — **WORK** — **DIGITAL**

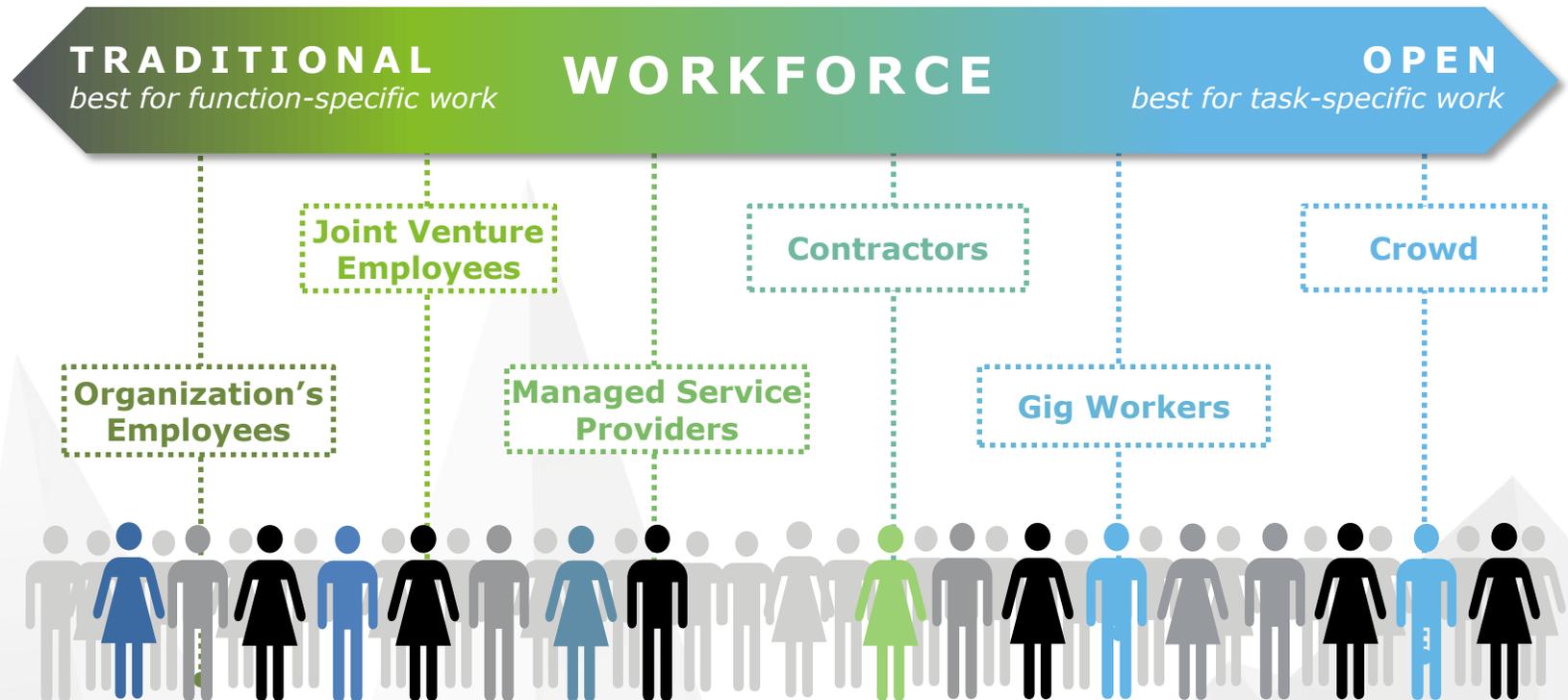| Physical	Work	Digital
Devices	Analytics	RPA
Robotics	Digital Platforms	Cognitive
Sensors	Digital Reality	AI

The Future of Work reimagined: Workforce

The shape of the workforce is changing, and selecting the optimal mix of talent is critical for organizations to keep pace with rate of change
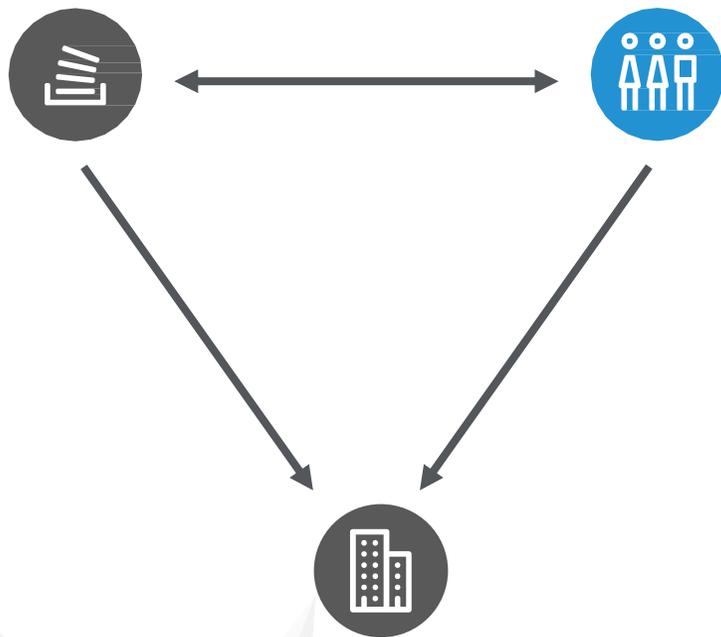
WORKFORCE

Who can perform the work as it changes and how organizations can close skills gaps by tapping into alternative talent pools or upskilling

TRADITIONAL
best for function-specific work

WORKFORCE

OPEN
best for task-specific work

Joint Venture Employees

Contractors

Crowd

Organization's Employees

Managed Service Providers

Gig Workers

The Future of Work reimagined: Workplace

Traditional models of workforce deployment are being challenged as technology disrupts the processes and practices that workplaces were built upon
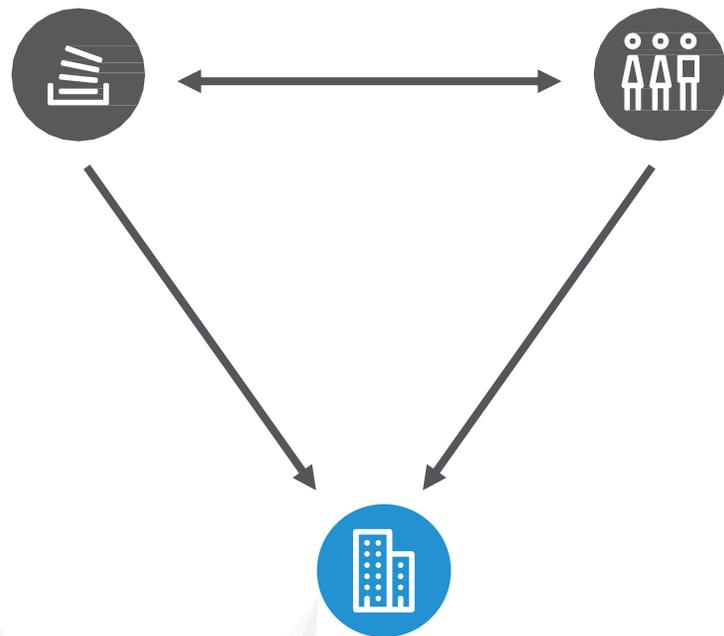
CO-LOCATED   WORKPLACE   DISTRIBUTED

WORKPLACE

Where the work can get done geographically and how we can maximize collaboration, productivity, and consistency with physical design and technologies

Physical – Physical Interactions

In person meetings, common working spaces, and campuses

Physical – Virtual Interactions

Most participants are in-person with a combination of remote and distributed workforces, increasingly mobile with use of key technologies (i.e. collaboration platforms, tele/video conferencing)

Virtual – Virtual Interactions

Remote and distributed teams, increasingly leveraging virtual reality (VR) and augmented reality (AR). Experts connected to distributed workers

The "new rules" as a result

IN FUTURE OF WORK...

A homogenous workforce *becomes* **diverse workforces**

Hierarchical, siloed structure *becomes* **networks of collaborative teams**

A significantly permanent workforce *becomes* **a significantly contingent workforce**

Slow to adapt *becomes* **agile**

People as workers *becomes* **people and intelligent machines co-working**

Innovation department *becomes* **innovation by everyone**

Profit driven *becomes* **purpose driven**

Command and control leadership *becomes* **inclusive digital leadership**

Knowledge *becomes* **emotional, creative and digital intelligence**

The traditional office *becomes* **frictionless, smart workspaces**

Technology drives people *becomes* **people drive technology**

Energy & Resources is not immune to the coming changes

The nature of work, the workforce and workplace are all changing as the industry evolves and adapts to technological innovation
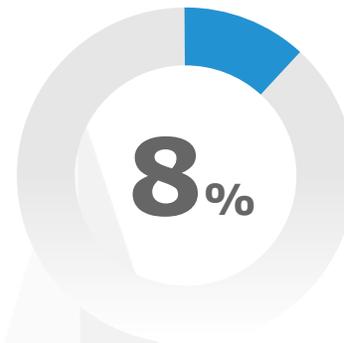
The Energy & Resources industry is not immune to digitization, disruption and the changes this will bring to the future of work. Specifically, research has shown[2]:
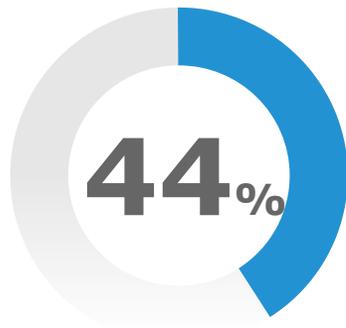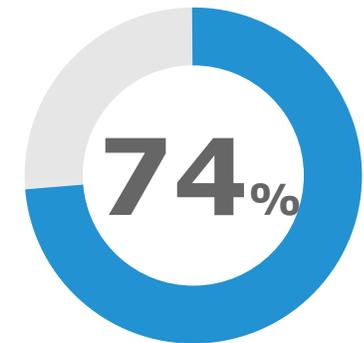
44% of jobs can be **offshored**
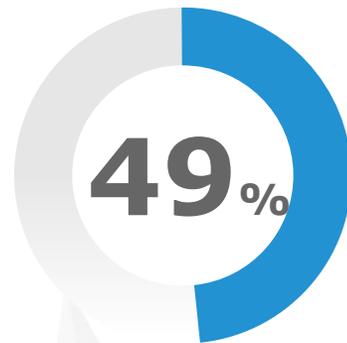
49% of jobs can be **automated**

8% of jobs can be **outsourced**

74% of jobs can be **done remotely**

The future of work is coming… In some organizations, and in parts of many businesses, it is already here…

[2]*These are indicative numbers from Deloitte's Future of Workforce Planning data model*

Companies need to prepare for a new skill set going forward

Do you have strategies in place for your future workforce regarding the change in roles and tasks, the timeframe needed to retrain people and when and how to engage with stakeholders, including unions?

Workforce jobs and skills

- analytical thinking and innovation
- active learning and learning strategies
- creativity, originality and initiative
- technology design and programming
- critical thinking and analysis
- complex problem-solving
- leadership and social influence
- emotional intelligence
- reasoning
- problem-solving and ideation

Skills loading…

How should you plan the **Future of Work** in your organization?

It should be solved at the intersection of talent, community and technology

IMAGINE

Imagine the possibilities of the future by leveraging **industry and community-specific data, analytics** and insights to **define your workforce transformation strategy** and **strengthen the communities** in which you operate

COMPOSE

Redesign your **workforce composition** to maximize the value of **automation, alternative talent sources**, and **collaborative workplaces** while redesigning **alternative mechanisms** to **share value and unite interests** with communities

ACTIVATE

Align workforce and community development programs to **access skills, curate next generation experiences, share value** and **engage** the workforce and community of the future