# "Gender and Leadership" In the New Wave of Technology Innovation Revolution

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#### The New Wave of Technology Innovations

- Artificial Intelligence
- Machine Learning
- Deep Learning
- Robotics
- Autonomous Vehicles
- Cloud Computing
- Blockchain Technology
- Virtual, Augmented, Extended Reality
- 3D Technology



DAY ONE

Al vs ML vs Deep Learning (Understanding the difference)



MANUAL DISCRIPTION COM

## What is the Place for "Gender and Leadership" in this Technology Space?

#### Industry Al Gender Gaps



Health Care

Education

Nonprofit

Entertainment

Consumer Goods

Media & Communications

**Corporate Services** 

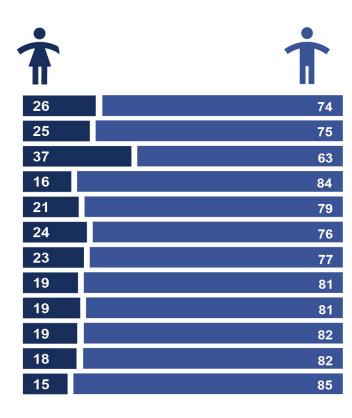
Hardware & Networking

**Finance** 

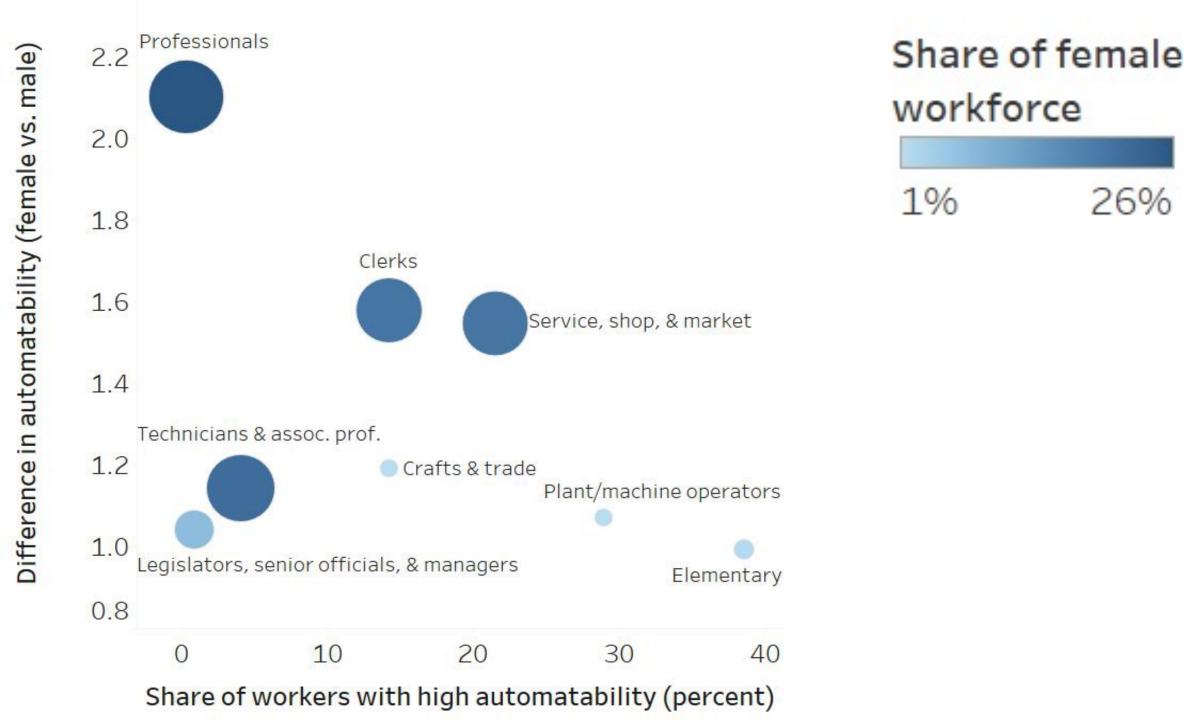
Software & IT Services

**Energy & Mining** 

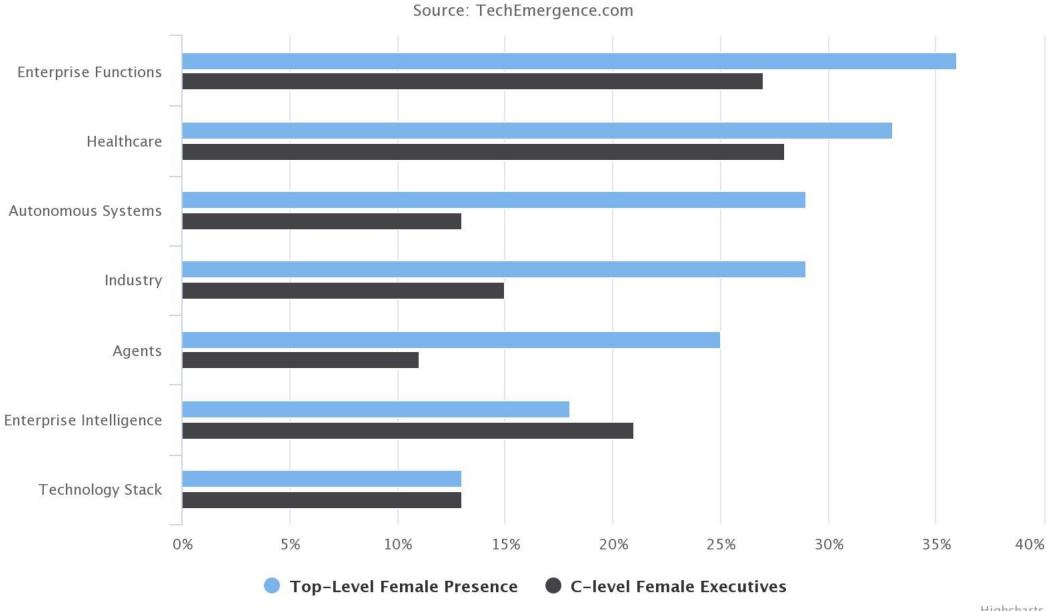
Manufacturing



Source: LinkedIn data featured in the Global Gender Gap Report 2018, World Economic Forum



#### Female Executive Presence Across AI/ML Industries



#### Female C-levels (compared to males) in AI/ML

Source: TechEmergence.com

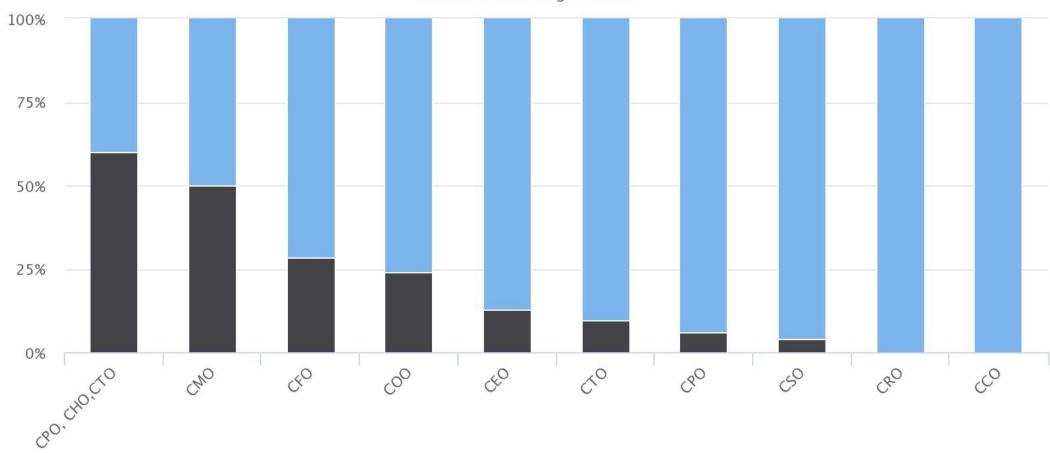
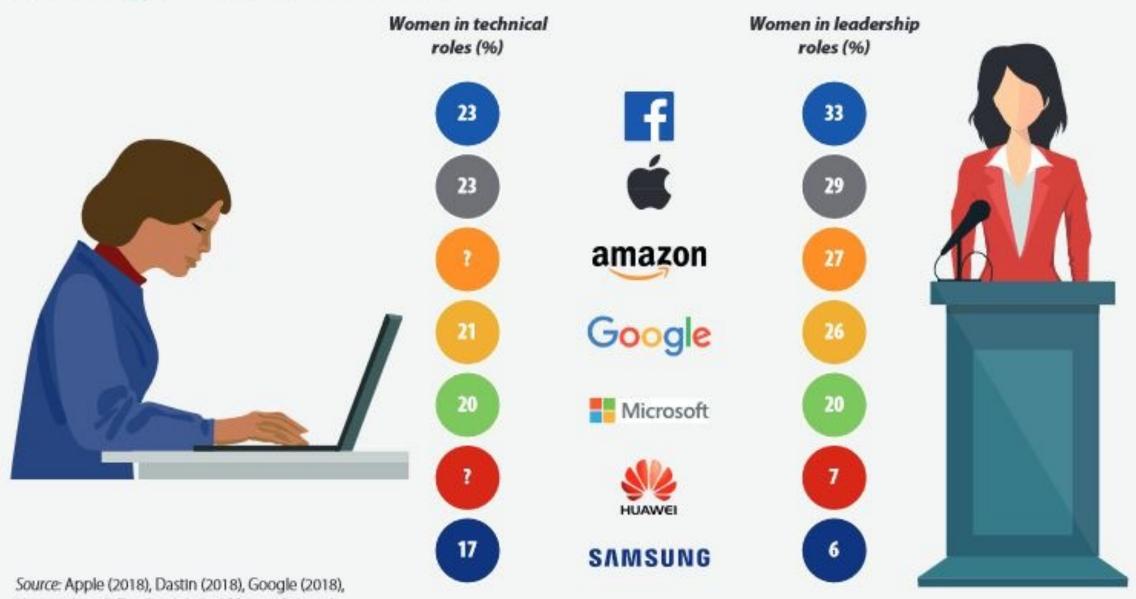
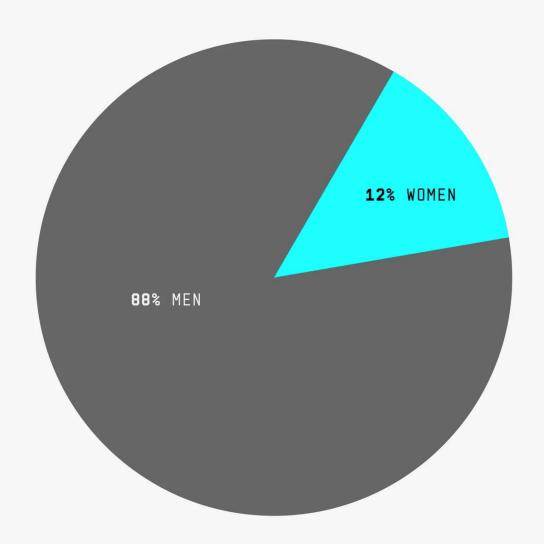


Figure 3.3: Women in technical and leadership roles in selected top multinational technology companies, 2018–2019

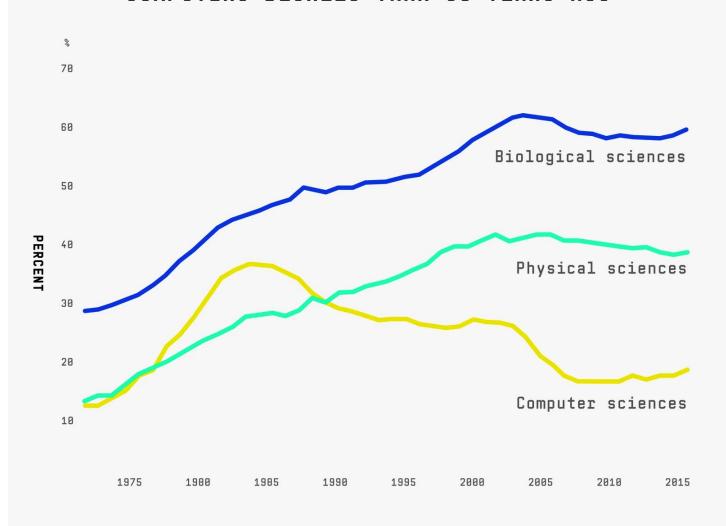


Source: Apple (2018), Dastin (2018), Google (2018), Huawei (2019), Facebook (2019) Microsoft (2019), Samsung Electronics (2019) A recent AAUW study noted—number of female computer engineers has decreased by 9% since 1990

#### WOMEN ARE A SMALL MINORITY IN MACHINE-LEARNING RESEARCH



#### WOMEN EARN A SMALLER SHARE OF COMPUTING DEGREES THAN 30 YEARS AGO



## What are the reasons this deeper gender divide in the tech industry??

#### Please share your reflections



#### **Barriers to Entry**

#### Sociocultural

- Social and family values
- Awareness in family
- School culture
- Family support

#### Structural

- Network and sponsor relationships
- Professional mentors
- Organizational culture to support women—more talk about gender equality less implementation

#### Generational

- Age is about responsibility-Women culturally take more responsibilities for raising children, taking care of elderly etc.
- Millennial and Gen-X men are more ambitious than Women

#### Implications of Gender Gaps in Tech-Industry

- Gender-balanced leadership
  - Results in 6-point gain in net-profit margins
  - Creates a collaborative work culture
  - Provides a room for more thoughtful and inclusive discussions to solve technology problems.
  - Can bring a more human-centric approach in machine and deep learning

#### Implications of Gender Gaps in Tech-Industry

 In AI solutions- women are more inclusive and empathetic to stakeholders needs

 Women can pick body languages and gestures more aptly

- Less women in AI may result in algorithmic biases
  - Coded Bias Documentary



#### **Best Practices**

More than women it's the responsibility of men to be sensitive, inclusive, and not dominating

Mutual respect and listening

Organizational leadership sensitive towards gender equality

Create deliberate policies and practices to have a gender diverse workplace.

A culture of mentorship and support to encourage women

Identify women with technology prowess

Recognition and appropriate promotion for women both in general and tech fields.

### Comments and Questions??

