



# Artificial Intelligence in the Boardroom: Will a Robot be Your Next CEO?

Lawrence Greenberg

November 29, 2018



# Prophets of Doom?

- Elon Musk:
  - I think we should be very careful about artificial intelligence. If I were to guess like what our biggest existential threat is, it's probably that.... With artificial intelligence we are summoning the demon. In all those stories where there's the guy with the pentagram and the holy water, it's like yeah he's sure he can control the demon. Didn't work out.
- Stephen Hawking:
  - Humans, who are limited by slow biological evolution, couldn't compete, and would be superseded.
- Bill Gates
  - First the machines will do a lot of jobs for us and not be super intelligent. That should be positive if we manage it well. A few decades after that though the intelligence is strong enough to be a concern. I agree with Elon Musk and some others on this and don't understand why some people are not concerned.
- Clive Sinclair
  - Once you start to make machines that are rivalling and surpassing humans with intelligence, it's going to be very difficult for us to survive.

# The End of Work?

- Oxford: “47 Percent of US workers have a high probability of seeing their jobs automated over the next 20 years.”
  - Carl Benedict Frey and Michael Osborne, “The Future of Employment: How Susceptible Are Jobs to Computerisation?” Oxford University paper, September 17, 2013.
- McKinsey in 2017: 1/3 of the US workforce and up to 800 million people globally could be displaced.
  - <https://www.cnbc.com/2017/11/29/one-third-of-us-workers-could-be-jobless-by-2030-due-to-automation.html>
- But: McKinsey in 2018 :companies using AI to innovate will boost employment
  - <https://sloanreview.mit.edu/article/why-ai-isnt-the-death-of-jobs/>



# A Robotic CEO?

---

- In 30 years, a robot will likely be on the cover of Time Magazine as the best CEO.
- It remembers better than you, it counts faster than you, and it won't be angry with competitors
- World Economic Forum from Cologne, Switzerland [CC BY-SA 2.0 (<https://creativecommons.org/licenses/by-sa/2.0/>)], via Wikimedia Commons



# Not Just Self Driving Cars

- Autopilot (for more than 100 years!)
- Siri, Alexa, and Google Home: NLP allows assistant to understand and respond to queries and comments
- Pandora: analyzes “musical DNA” to recommend songs
- Nest: Adjusts temperatures based upon heating and cooling behavior
- Algorithmic trading
- Medical imagery and heart sounds
- Weed control
- Journalism
- Customer Service
- Computer vision for store security
- And Microsoft designed this presentation

# What does the CEO do?

According to A.G. Lafley, legendary former CEO of Procter & Gamble, channelling Peter Drucker:

- Defining and interpreting the “meaningful outside”
- Answering, the two-part question, What business are we in and what business are we *not* in?
- Balancing sufficient yield in the present with necessary investment in the future
- Shaping the values and standards of the organization
- In other words, the CEO’s tasks include:
  - Strategic direction
  - Allocating people and resources
  - Communicating vision and values internally
  - Representing the company to the outside world
  - Addressing disputes





Sogou 搜狗

AI 合成主播

Not the CEO . . . Yet?

English AI Anchor

# Asimov's Three Laws of Robotics

First Law: A robot may not injure a human being or, through inaction, allow a human being to come to harm.

Second Law: A robot must obey the orders given it by human beings except where such orders would conflict with the First Law

Third Law: A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws





---

A dark blue, horizontal brushstroke with irregular, textured edges, resembling a thick stroke of paint or ink. It is centered horizontally and occupies the upper third of the slide.

Questions?