## HUMANIZING THE INHUMAN:

How (and why) does this apply for robots & AI?

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#### **The Four Industrial Revolutions**



Industry 1.0

Mechanization and the introduction of steam and water power

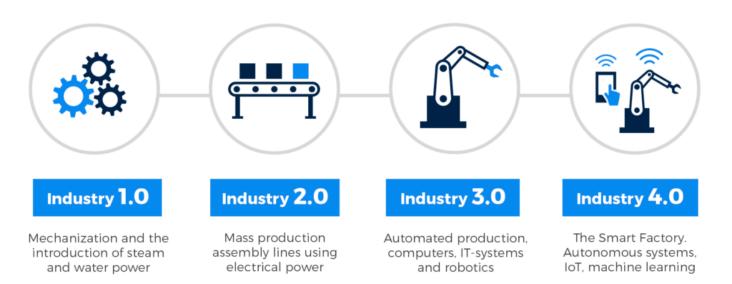
Industry 2.0

Mass production assembly lines using electrical power Industry 3.0

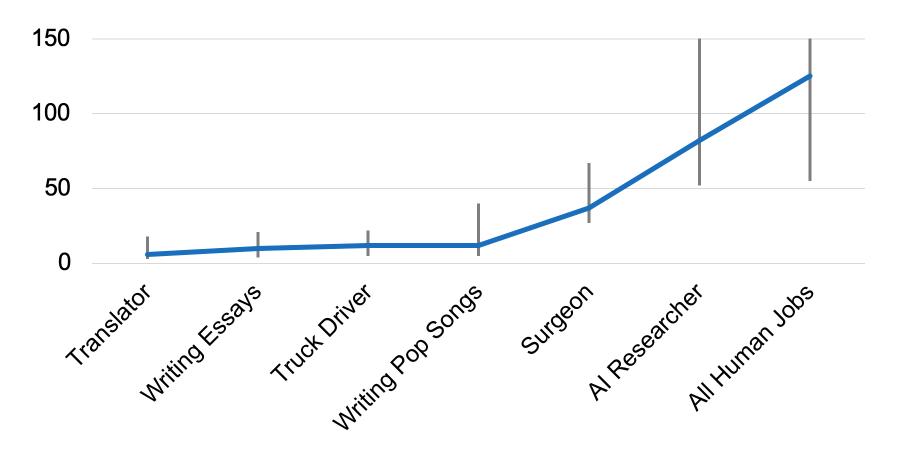
Automated production, computers, IT-systems and robotics Industry 4.0

The Smart Factory. Autonomous systems, IoT, machine learning "Al will impact every job, in every industry and every country." - Schwabel (2019), WEF

#### **The Four Industrial Revolutions**



#### Al experts' job replacement estimations (in years)



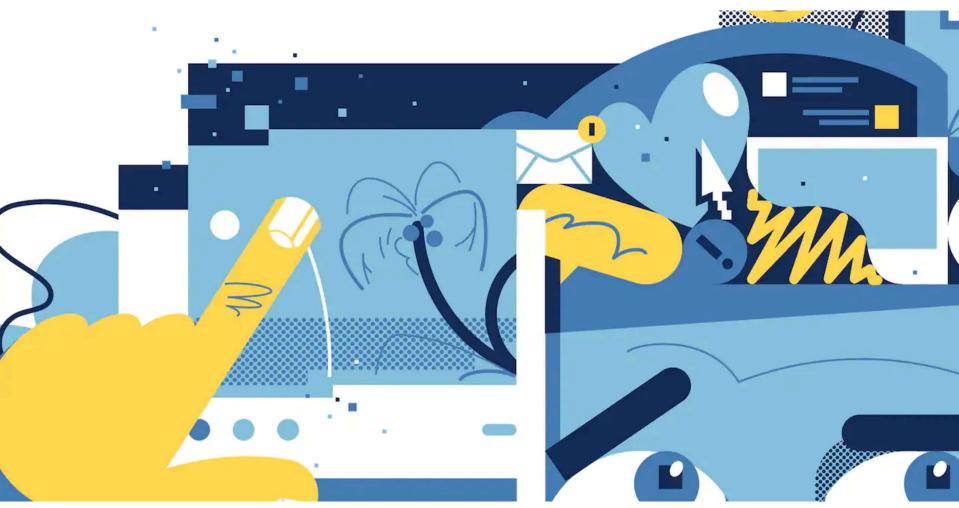
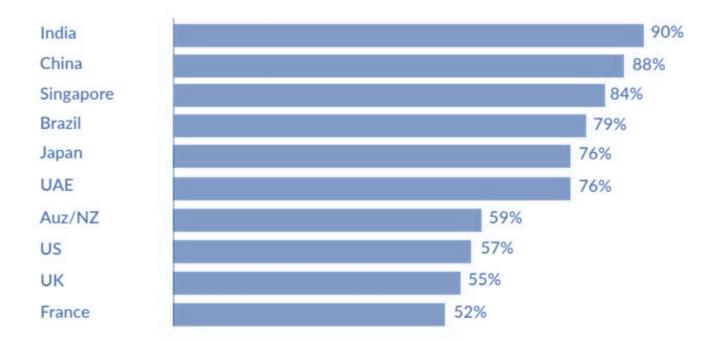


Image Source: The Telegraph

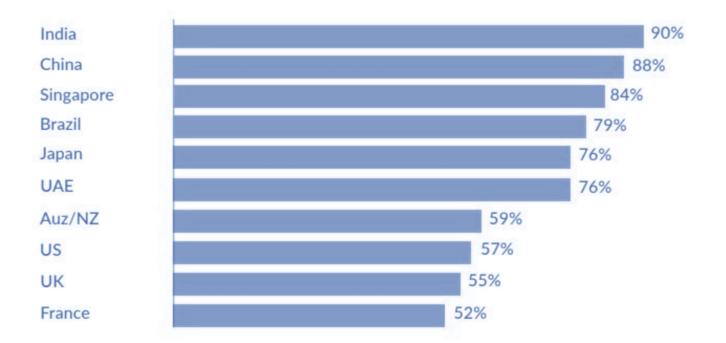
"Robots will take your jobs."

- Elon Musk (2018), Tesla/Solar City/SpaceX





## "Al will one day replace managers" (in %, N = 8,370)



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Published Thu, Dec 22 2016·1:27 PM EST • Updated Thu, Dec 22 2016·2:37 PM EST







#### Soruce: The Wall Street Journal

#### **Trending Now**

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## How Artificial Intelligence Will Redefine Management

by Vegard Kolbjørnsrud, Richard Amico, and Robert J. Thomas

November 02, 2016

Many alarms have sounded on the potential for artificial intelligence (AI) technologies to upend the workforce, especially for easy-to-automate jobs. But managers at all levels will have to adapt to the world of smart machines. The fact is, artificial intelligence will soon be able to do the administrative tasks that consume much of managers' time faster, better, and at a lower cost.

How can managers — from the front lines to the C-suite — thrive in the age of AI? To find out, we surveyed 1,770 managers from 14 countries and interviewed 37 executives in charge of digital transformation at their organizations. Using this data, we identified five practices that successful managers will need to master.

#### **Practice 1: Leave Administration to AI**

According to the survey, managers across all levels spend more than half of their time on administrative coordination and control tasks. (For instance, a typical store manager



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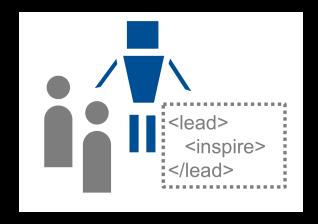
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leadership: a process of social influence (e.g., leader-follower)

- ...but can robots be social?
- ...and influential?

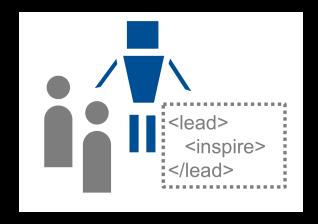


https://www.youtube.com/watch?time\_continue=454&v=Bg\_tJvCA8zw&feature=emb\_logo\_



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### successful humor

- 1. appropriate
- 2. appreciated
- 3. laugh-inducing
- -> leader selection & effectiveness

(Bitterly & Schweitzer, 2019; Cooper, Kong, & Crossley, 2018; Bitterly, Brooks, & Schweitzer, 2017; Evans, Slaughter, Ellis, & Rivin, 2019; Lehmann-Willenbrock & Allen, 2014; Yam, Christian, Wei, Liao, & Nai, 2018)

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"reskilling imperative"...of

'human skills' which will retain
or increase in value

with the 'rise of robots' comes the rise of **soft skills** 



soft skills: personality traits, noncognitive skills/abilities, socioemotional skills, goals, motivations, and preferences that are valued in labor market

(Heckman & Kautz, 2012)

social robots in education, healthcare, entertainment, communication, tasks requiring collaboration (Breazeal, Dautenhahn, & Kanda, 2016)

social robots in education, healthcare, entertainment, communication, tasks requiring collaboration...and leadership?

#### ISN'T IT IRONIC?

## Scientists Have a Plan to Make Humans Accept Robots: Give Them a Sense of Humor

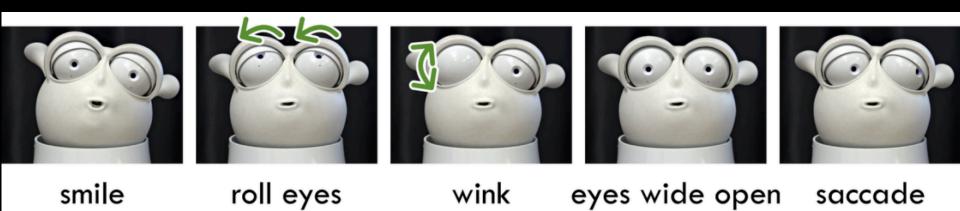
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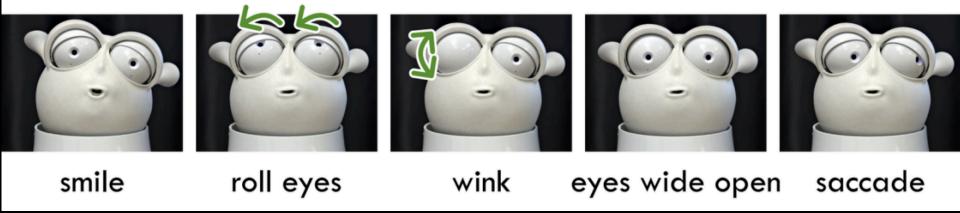
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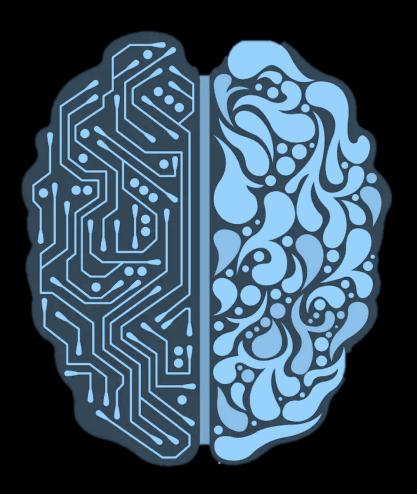
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(Bitterly & Schweitzer, 2019; McGraw, Warren, & Kan, 2015)





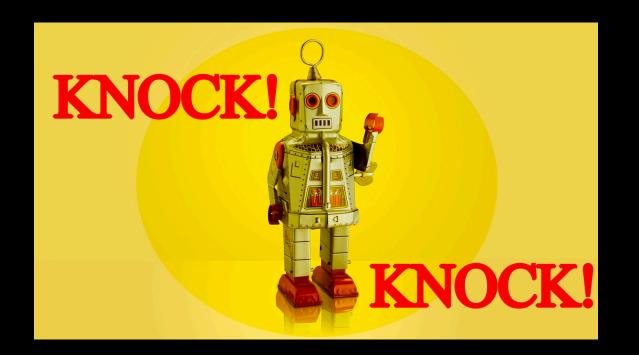




## GOOD BOSS,

#### BAD BOSS





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