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# Ledelse i maskinalderen
## Hvordan kunstig intelligens kommer til å endre lederjobben

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# Entering the age of intelligent machines

- The rise of Artificial Intelligence (AI) and robotics is predicted to drive the biggest technology disruption in the workplace since the Industrial Revolution

  - 33-50+ % of jobs estimated to be computerized

- Artificial intelligence combines multiple technologies into applications that can sense, comprehend, act, and learn

- Prior waves of new technology in the workplace have mainly impacted workers, rather than managers

- This is different. Artificial intelligence will radically change knowledge work incl. core management tasks.



**BBC** NEWS

**Intelligent Machines: The jobs robots will steal first**

By Jane Wakefield
Technology reporter

14 September 2015 | Technology

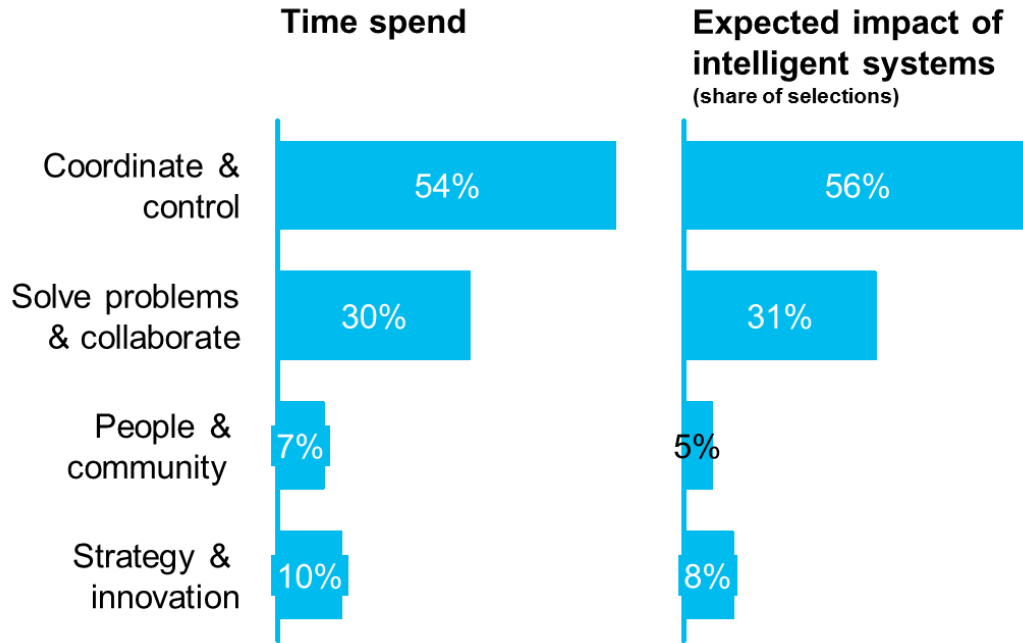# Are you ready for a machine your leadership team?



- In 2014 the Hong Kong VC firm appointed the intelligent algorithm VITAL* to its board and gave it voting rights in investment decisions

- Has voted on a number of investments



- How will artificial intelligence impact managers' work?

- What are the actions managers and employers must take to fully integrate the power of artificial intelligence into their organizations?
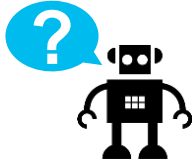
# Managers spend most of their time on tasks that intelligent machines will do in the future

## Time spent and expected impact of AI on management tasks



**Time spend**

**Expected impact of intelligent systems**
(share of selections)

| | Time spend | Expected impact |
|---|---|---|
| Coordinate & control | 54% | 56% |
| Solve problems & collaborate | 30% | 31% |
| People & community | 7% | 5% |
| Strategy & innovation | 10% | 8% |

Source: Kolbjørnsrud, Thomas and Amico (2016) "The promise of artificial intelligence: Redefining management in the workforce of the future," Accenture Institute for High Performance

# The greater the presence of machines, the greater the need for human judgement

**The human edge**

- It is amazing what AI can do with information, but some decisions require insight beyond what a information can tell

- This is the sweet spot for human judgment – applying experience and expertise to critical business decisions and practices
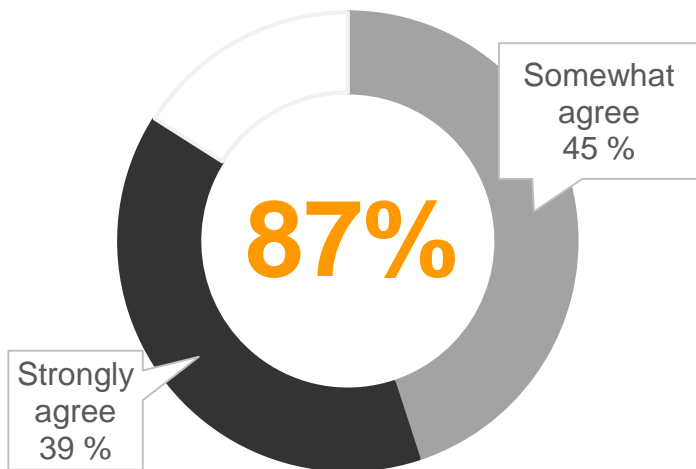
Source: Shanks, Sinha, Thomas (2016) "Judgment calls: Preparing managers to thrive in the age of intelligent machines," Accenture Strategy
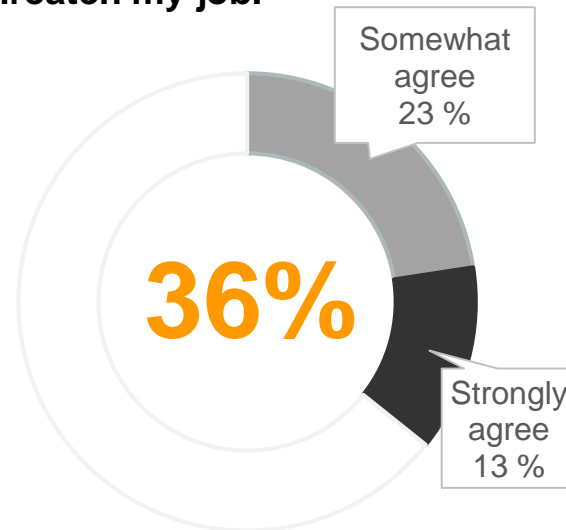
# AI stirs both excitement and fear

## Opportunity & Threat

**"Will make my work more effective and interesting"***

**"I fear that intelligent systems will threaten my job."****

87%

Somewhat agree 45 %

Strongly agree 39 %

36%

Somewhat agree 23 %

Strongly agree 13 %

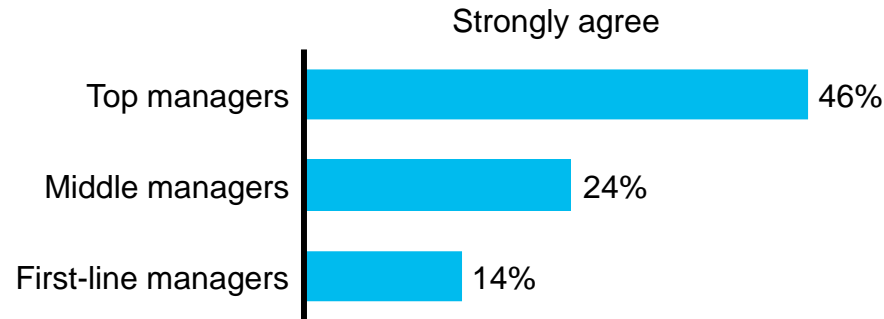Source: Accenture Cognitive Computing in Management Survey, Aug-Sept 2015
* Intelligent systems will help me to become more effective in my work and focus more on interesting and impactful tasks.
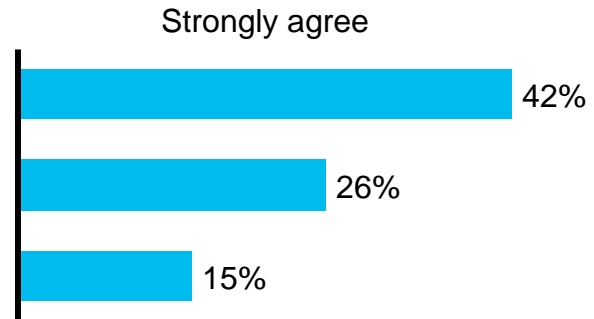** I fear that intelligent systems will threaten my job.

8

# Lower level managers are much more skeptical about taking advice from machines than their bosses

## Trust in and comfort with…

**"Trust system advice in business decisions"***

Strongly agree

| | |
|---|---|
| Top managers | 46% |
| Middle managers | 24% |
| First-line managers | 14% |

**"Comfortable with intelligent system monitoring and evaluating my work"****

Strongly agree

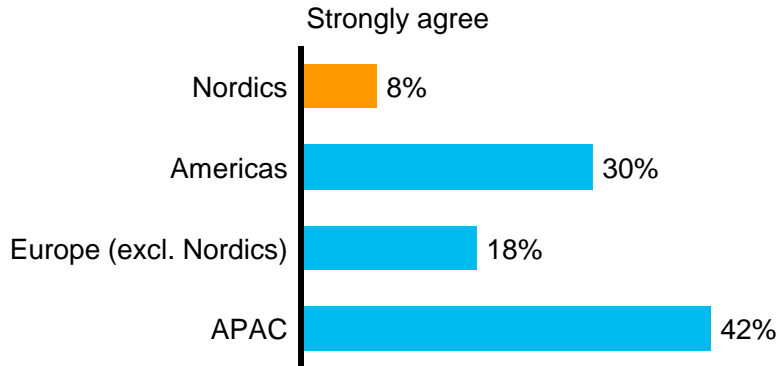| | |
|---|---|
| Top managers | 42% |
| Middle managers | 26% |
| First-line managers | 15% |

Source: Accenture Cognitive Computing in Management Survey, Aug-Sept 2015
*   I would trust the advice of intelligent systems in making business decisions in the future (e.g. an investment decision or deciding whom to hire or promote).
** I am comfortable with an intelligent system monitoring and evaluating my work.

# Are we so skeptical in the Nordics that we will be leapfrogged by emerging economies?
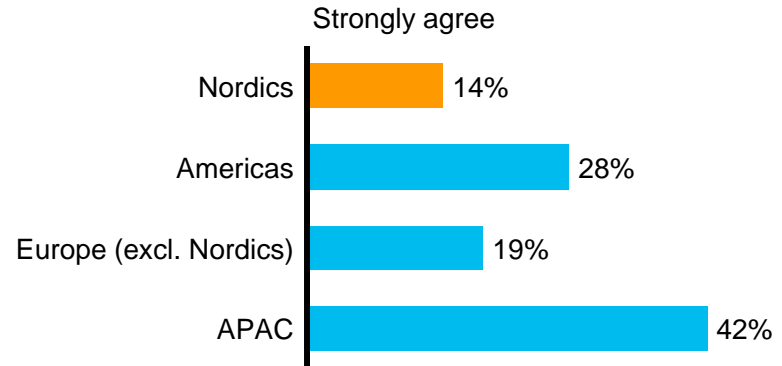
## Trust in Advice from AI*

### Strongly agree

| Region | % |
|---|---|
| Nordics | 8% |
| Americas | 30% |
| Europe (excl. Nordics) | 18% |
| APAC | 42% |

**Max/Min Observations**

| | % |
|---|---|
| Finland | 6% |
| India | 56% |

## Comfortable with System Monitoring and Evaluating My Work**

### Strongly agree

| Region | % |
|---|---|
| Nordics | 14% |
| Americas | 28% |
| Europe (excl. Nordics) | 19% |
| APAC | 42% |

**Max/Min Observations**

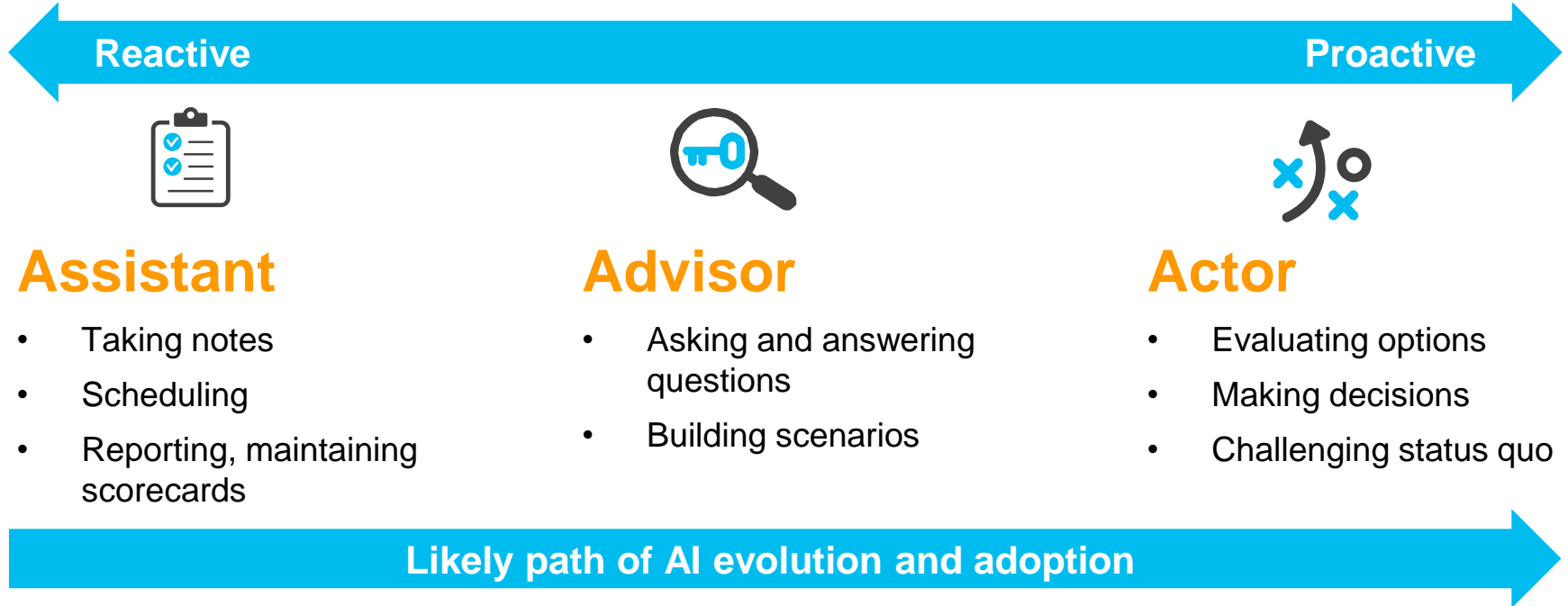| | % |
|---|---|
| Sweden | 8% |
| China | 61% |

Source: Accenture Cognitive Computing in Management Survey, Aug-Sept 2015
* I would trust the advice of intelligent systems in making business decisions in the future (e.g. an investment decision or deciding whom to hire or promote).
** I am comfortable with an intelligent system monitoring and evaluating my work.

# Intelligent machines will fill a variety of roles in management

## Roles of intelligent machines

**Reactive** ———————————————————————→ **Proactive**

### Assistant

- Taking notes
- Scheduling
- Reporting, maintaining scorecards

### Advisor

- Asking and answering questions
- Building scenarios

### Actor

- Evaluating options
- Making decisions
- Challenging status quo

**Likely path of AI evolution and adoption** ———————→

Source: Fuchs, Silverstone & Thomas (2016). "A machine in the c-suite," Accenture Strategy

# Steps to success

**Leaders must be prepared for technology to take on more routine tasks**

Explore early, **experiment and engage** with new technology and pilots

Assign **new key performance indicators** to drive successful adoption of AI

Develop **training and recruitment strategies** for creativity, collaboration, empathy and judgment skills

Start building **the intelligent enterprise**—combine AI and collective human intelligence for optimal outcomes