

CAPITA

Machine v. Human

Enabling an Authentic Workforce
For Improved Productivity and
Engagement



November 2018

Who are we?



Lee Johnson
Head of HR Consulting

Prior to joining Capita to establish and lead the HR Consulting Practice, Lee was a Global HR Director for a number of organisations including Biwater Plc, Croda Plc (FTSE 100), Premier Oil (FTSE 250), Lonmin Plc (FTSE 100) and has worked for other firms such as Shell Plc (FTSE 100), Network Rail and Ericsson. Lee has worked in Europe, Africa, Asia Pacific, North America, Australia, the Middle East and Latin America.

Lee has achieved FCIPD, B.Com, B.Econ, IOSH & NEBOSH Quals and is currently completing his Masters in Behavioural Economics.



Doug Brown
Chief Data Scientist

Doug has extensive practical experience of delivering award winning digital transformation projects gained from working at IBM, EY (Partner) and start-ups both in Europe and the US.

Doug has held a variety of senior management, partner and executive consultancy/ programme roles. Doug has achieved ACIL, MSc and MBA qualifications as well as lecturing at Cranfield University. Doug's motivation is to deliver disruptive and differentiating data driven propositions to both educate and delight our customers



The rise of humans

Future Employees

The factory of the future will have only two employees, a man and a dog.

The man will be there to feed the dog.

The dog will be there to keep the man from touching the equipment



Warren G Bennis

Work today is more diverse, dynamic, and distributed than ever before

2.5 quintillion
bytes of data
per day



133m+ by
2022



The world is home to 7.2
billion gadgets, and they're
multiplying five times faster
than we are



225.3BN



4%



175,000+



50%+ Advanced
Tech Skills by
2030



MBA
2026



£7.43T
£11.84T



Question?

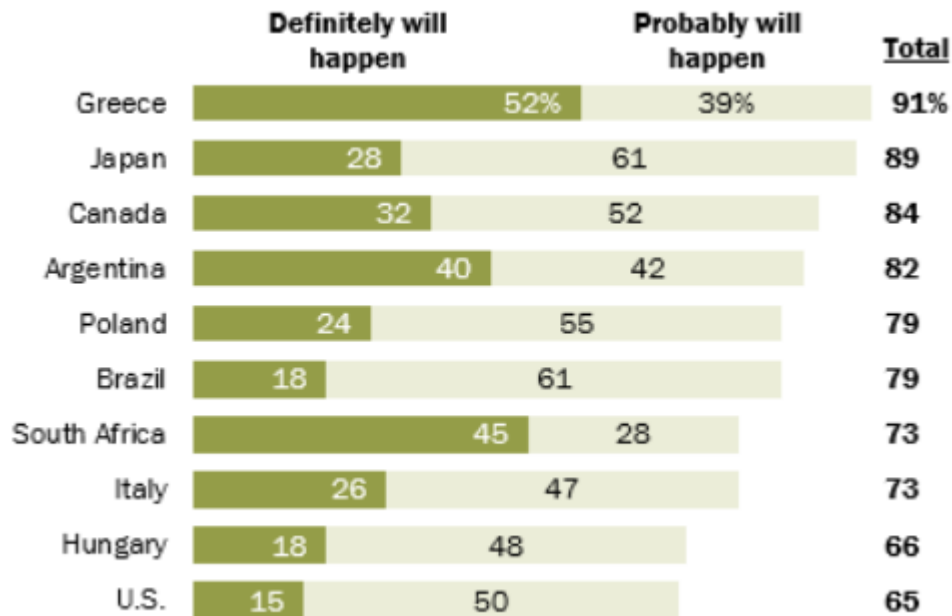
As an ex HRD, and from talking to executive colleagues, there are a few observations I would like to share:

- At board level 85% of executives want to invest more in AI
- Simple Linear Algorithms have been proven to out perform human judgement e.g. 86% of healthcare life science and technologies companies in the healthcare market re using AI today

Are you fearful or insecure about the future of your job?

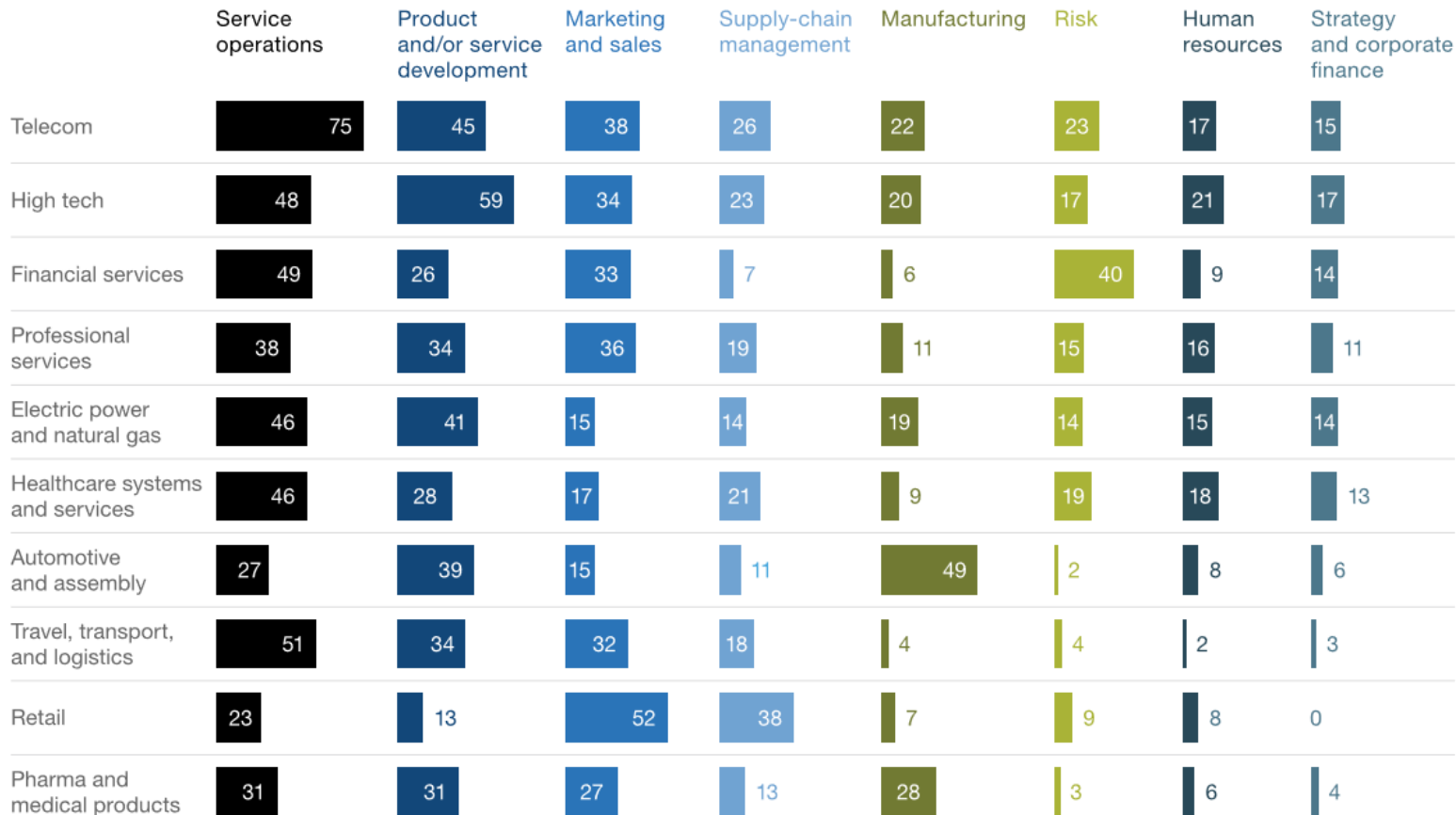
Many think that robots and computers will take over many jobs now done by humans

How likely do you think that in the next 50 years robots and computers will take over many jobs now done by humans?



Pew Research 2018

Business Functions where AI has been adopted, by industry



AI and Human Relationships

Human behaviour and interaction can be difficult to replicate via self learning



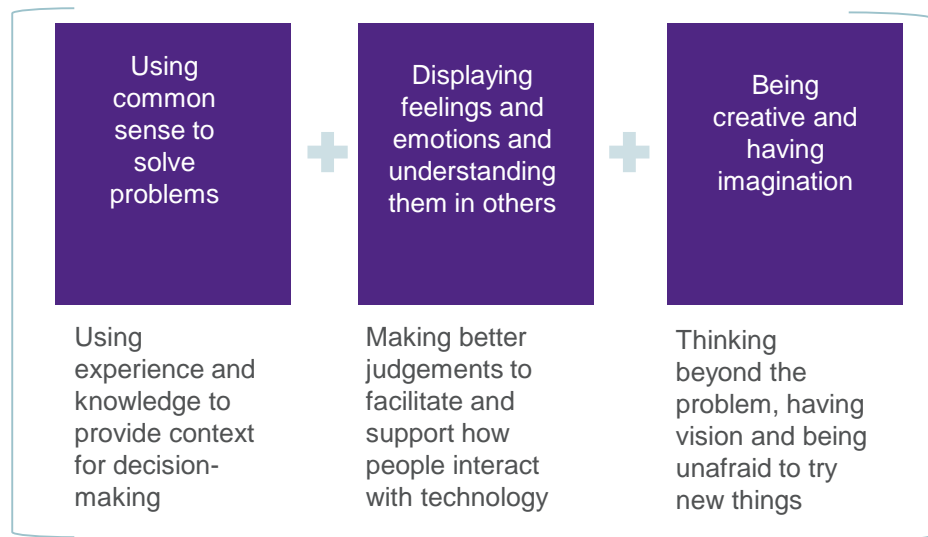
Amazon scraps 'sexist AI' recruiting tool that showed bias against women



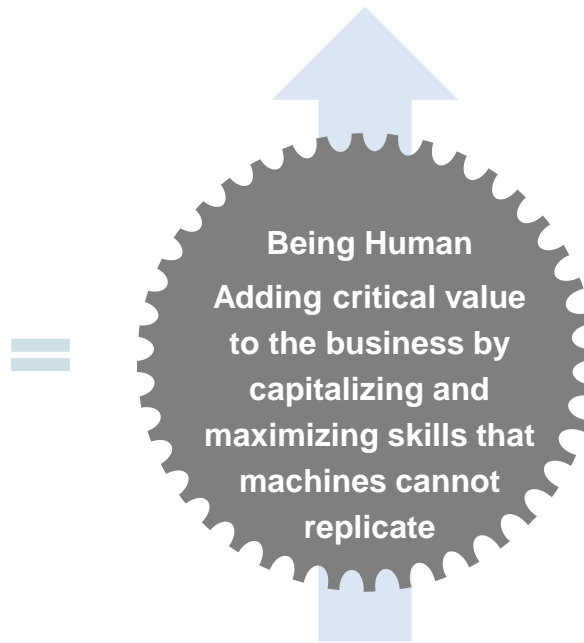
Microsoft unveiled Tay: It took less than 24 hours for Twitter to corrupt an innocent AI chatbot.

Can employees still be their authentic selves in a digitally driven workplace?

Three Things that Humans can do that Robots cannot



These things become richer with workforce diversity, openness and a culture that supports people to bring their 'authentic selves' to work.



"The difference is that humans can participate in the social process of creating knowledge, while machines can only apply what has already been discovered"

Deloitte, 2017 "Reconstructing Jobs: Creating good jobs in the age of artificial intelligence"

Human intervention: Essential or recipe for disaster? How to keep the human touch as part of your company culture

AI should support people in work, not replace them completely. AI should not rob people of control

Managers need to make this clear and help introduce and embed AI sensitively

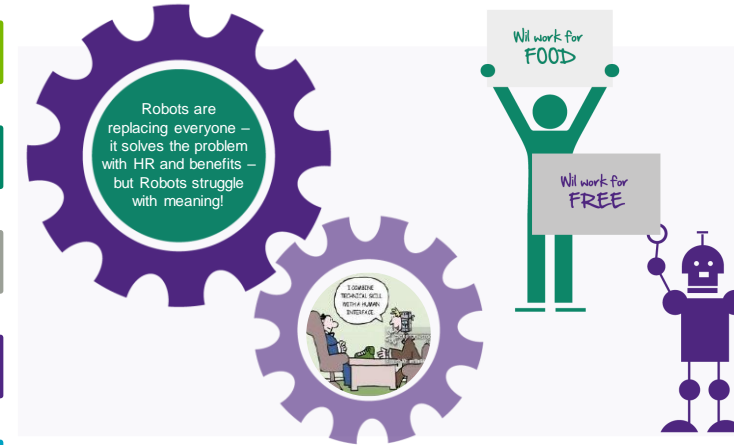
Your people need to understand the value of their skills over AI...

...and they need to be encouraged to develop these skills

People need to be developed to understand the significance of the data

They need to oversee the machines and not be afraid to challenge when things go wrong

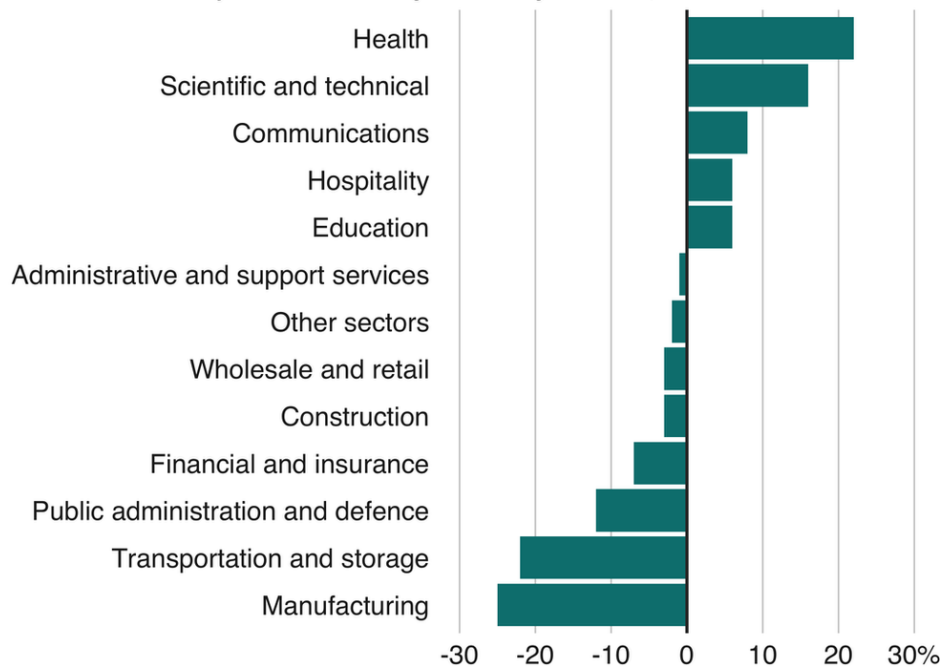
People need to be trained to undertake more sensitive tasks that require judgement and empathy



Inevitably, some jobs will be displaced, some will change and new roles will emerge.

How AI could change the job market

Estimated net job creation by industry sector, 2017-2037



Source: PwC



Inevitably, some jobs will be displaced, some will change and new roles will emerge

21st Century Skills

These skills, abilities and types of knowledge are used heavily in occupations that have the best chance of growing.

Top Social Skills

- Instructing: Teaching/Instructing
- Co-Ordination: Assessing others' performance
- Monitoring: Adjusting to others' actions
- Management: Motivation

Top Cognitive Skills

- Fluency of Ideas: Teaching/Instructing
- Originality: Novel Solutions
- Active Learning: Understanding new information

Nesta – Top 20 Skills, Abilities and Knowledge

Skill	Ability	Knowledge
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Commercial in Confidence

1. Judgement and Decision Making

2. Fluency of Ideas

3. Active Learning

4. Learning Strategies

5. Originality

6. Systems Evaluation

7. Deductive Reasoning

8. Complex Problem Solving

9. Systems Analysis

10. Monitoring

11. Critical Thinking

12. Instructing

13. Education and Training

14. Management of Pers Resources

15. Co-ordination

16. Inductive Reasoning

17. Problem Sensitivity

18. Information Ordering

19. Active Listening

20. Administration and Management

The changing role of HR | Challenges












As globalisation, economics and technology continue to transform the business environment, organisations will lean ever more on their HR leaders to drive successful change management and to deliver more with less.

However:

- **Activities, not occupations:** Rather than replacing entire jobs, robots will automate particular tasks within those jobs.
- **Consciousness vs. Control**
- **Ethical Tourette's**
- **Super Human Resources**
- **We may not be replaced but we need to replace our thinking**
- AI Value '**Augmented Humanity**'

HR industry challenges

-  Benefits, pay and rewards
-  Employee engagement
-  Recruitment and staff retention
-  Employee wellbeing and mental health
-  Technology
-  Cyber breaches and data security
-  Workforce planning
-  Legislation
-  Diversity and inclusion

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- The information provided is based on our understanding of current law and taxation as at 12 November 2018.
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