

Applied Machine Learning Days 2020
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Automation and Employment

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Head of Wealth Management Operations Europe



Bio

- 1989 – 2002 SBC/UBS (Geneva, Basel, Zurich, New York, London) – Project Mgmt
- 2003 – 2011 Banque Cantonale de Genève – Head of IT
- 2012 – 2014 Deutsche Bank Geneva – Head of IT CH and LUX
- 2014 – Present Deutsche Bank Geneva – Head of WM Operations Europe

Current role

- Head of Wealth Management Operations Europe
- Responsible for all banking back-office activities (payments, securities processing, client on-boarding and maintenance)
- Heavily outsourced environment

Facts and Figures

Countries

- Switzerland
- UK
- Luxembourg
- Saudi Arabia
- Channel Islands
- Spain
- Germany
- Italy

140 employees

30 million EUR budget

Types of Automation



Process Automations

Repeat either with or without intelligence an existing human process

Examples: Robotics, OCR, AI



Mimicking humans

Systems that emulate a human interaction

Examples: Chatbots



Predictive

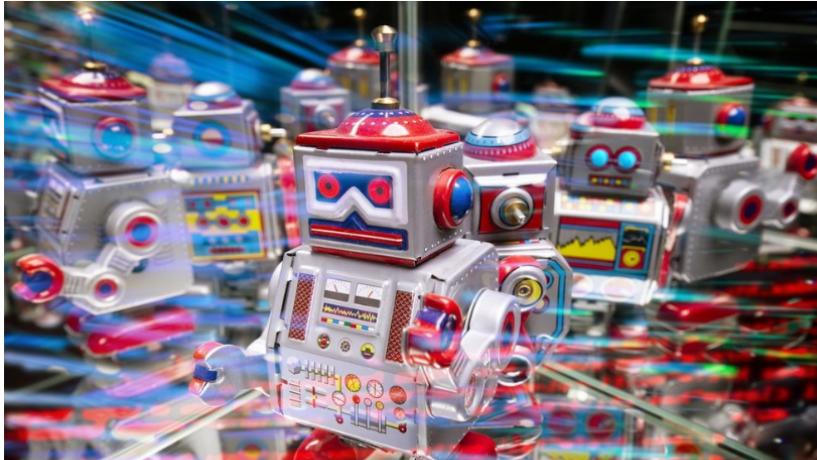
Based on various data sources, the system will provide analytical services for decision taking

Examples: Pattern recognition, Advanced CRM, fraud detection

Deutsche Bank deploys an army of robots to replace 18,000 workers

24 Nov, 2019 05:43

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As part of a radical \$8.3 billion restructuring plan, the multinational Deutsche bank has so far axed over 4,000 jobs, with some 18,000 more staff cuts to come by 2022.

The use of artificial intelligence has *"massively increased productivity"* in certain sectors of the business, according to Mark Matthews, the head of operations for Deutsche's corporate and investment bank.

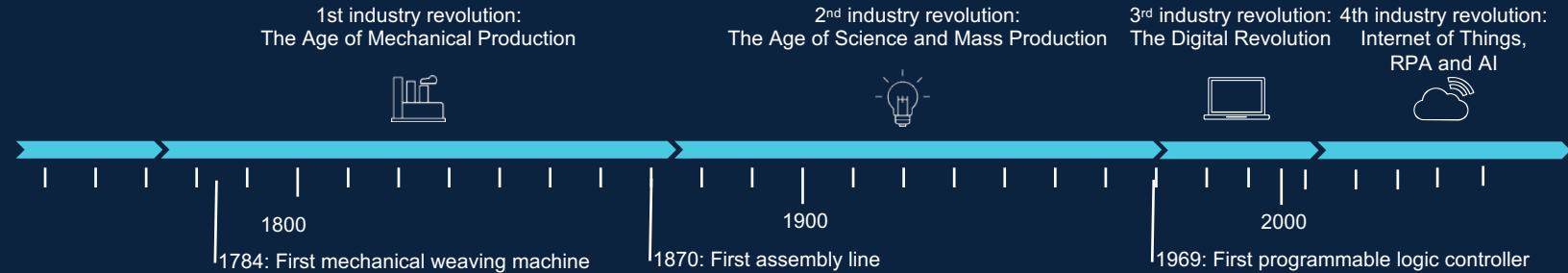
He told the Financial News that so far *"680,000 hours of manual work"* has already been saved. The bank has *"used bots to process 5 million transactions in its corporate bank and perform 3.4 million checks within its investment bank."*

According to a new analysis from Bank of America Merrill Lynch, around 800 million jobs could disappear worldwide by the year 2035.

McKinsey Global Institute: between 40 million and 160 million women worldwide may need to transition between occupations by 2030, often into higher-skilled roles.

World Economic Forum survey concluded that around 75 million jobs will be lost to AI but it will also create 133 million new jobs around 47 percent of total US employment is in the high risk category

What is different from the previous industry revolutions?



Previous industry revolutions replaced muscle with machines. We are now replacing brains with machines.

- Resistance to change
- Skillset inadequacy
- Fear of losing the job
- Strong dependency on machines
- Uncertainty around the next (r)evolutions
- Sense of loss of control despite remaining the owner of the process
- Loss of knowledge
- Increased added value required (no more “easy jobs”)
- New types of risk
- Ambiguity in the process ownership
- Fear of the unknown

Skills required in an AI/Robotized environment



Skills in demand

- Analytical skills
- Complex decision making
- Creativity
- Critical thinking
- Leadership
- Emotional intelligence
- Learning
- Adaptability
- Collaborative working
- Interpersonal skills
- Diversity and cultural intelligence
- Data literacy



Skills less in demand

- Manual skills
- Memory
- Quality control
- Financial control
- Precision
- Mathematics
- Coding

Recruiting

What kind of profiles to recruit in a department using robots/AI?

- **Soft skills** are more important than hard ones (they cannot be replaced by AI)
- Profiles that can **talk business and process**
- Move from specialist to **analyst**
- Capacity to understand **end to end processes** and document them
- Willingness to get out of their **comfort zone** and **learn**
- Embrace **change**

Retaining staff

- Human workers will require **more education** and skill to keep up with technological changes.
- Anticipate the change and **redeploy** staff that cannot be “upgraded” to other tasks to allow for the transition.
- **Align workforce planning** with digital and business strategic planning to identify the skills most needed in the workforce.
- Collaborate with HR to **adapt compensation** and employee engagement initiatives so they appeal to the different skill profiles that will make up the future workforce.

Motivating

Explain

- Clarify why we are moving to RPA and AI
- Go beyond just savings and highlight employee experience
- Identify what's in it for me
- Demystify RPA. "RPA for dummies"

Document

- Ensure proper process documentation
- Go manual once in a while
- Organize workflow - not role - shadowing

Train

- Support people in reskilling
- Become lifelong learners.
- Make training part of the job
- Re-task employees
- Create new job profiles
- Job rotation/talent mobility
- Re-insource knowledge

Implement

- Have a clear objective
- Break it down in steps
- Create a POC
- Identify ambassadors
- Prioritize the painful tasks first so that the staff can see the benefits

Training (practical example at DB)

The bank is piloting a digital training program called BOOST (which stands for Build, Operate, Own, Share and Transform).

The goal is to increase awareness and allow employees to interact and work alongside new technologies.

The program was launched in Singapore to give Operations employees the digital skills they need. During the 6-month, BOOST introduces participants to topics like:

- artificial intelligence
- design thinking
- robotics

The objective is to set them up to bring this knowledge back to their teams and apply what they've learnt.

How AI will change the way we manage



AI will **remove administrative** tasks away from the managers

- More capacity to focus on high value activities
- Role will evolve to focus more on soft over hard skills
- Creative thinking. Bring together diverse ideas into integrated, workable, and appealing solutions



AI will provide **enhanced management support**

- Less subjective reviews
- Data-Driven Management
- Augmented reality management
- AI can help managers giving more timely feedback to team members and improving team accountability



AI will **reduce collective knowledge**

- Treat Robots as “Colleagues”
- Ensure knowledge is not lost and develop high quality documentation
- Develop social skills and networks

Where can corporations and state contribute?



Closer collaboration between governments and corporations

- Provide **common AI visions** and set priorities accordingly



The education system needs to evolve

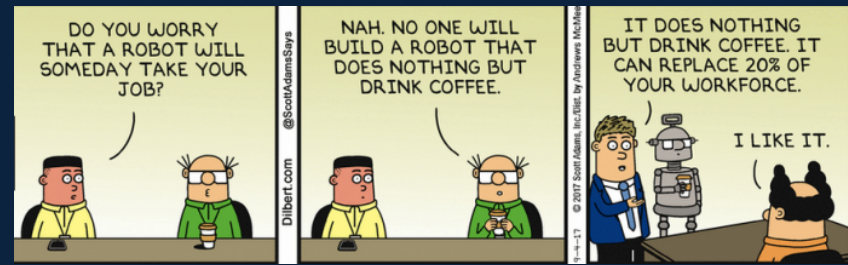
- **Anticipate requirements** and future evolutions
- Develop **new education structures** for adaptive and lifelong learning
- Increase **soft skills** education
- Focus on skills to **complement and not compete** with AI



Social security models need to be reviewed

- Will also **hit the middle class and low labor cost countries**
- **Taxation models** need to be reviewed
- Universal **basic income**

Conclusion



- AI will kill certain categories of jobs but create entirely new ones.
- We don't know what the next evolution will be.
- The training curriculum needs to be reviewed.
- AI excels at applying decision rules, searching data and identifying patterns, but it cannot strategize, empathize or improvise.
- AI will change management skills required, particularly for roles requiring few social skills.
- Senior leaders throughout the organization can successfully manage AI's impact on the future workforce by aligning workforce planning with digital and by developing plans to reskill the workforce.
- Governments and corporations need to work together to anticipate the future.