If AI is the answer, what is the question?

Mark Bauer Ruby

https://www.linkedin.com/in/markbauerruby/

"It will change the world much less than we all think and it will change jobs much less than we all think"
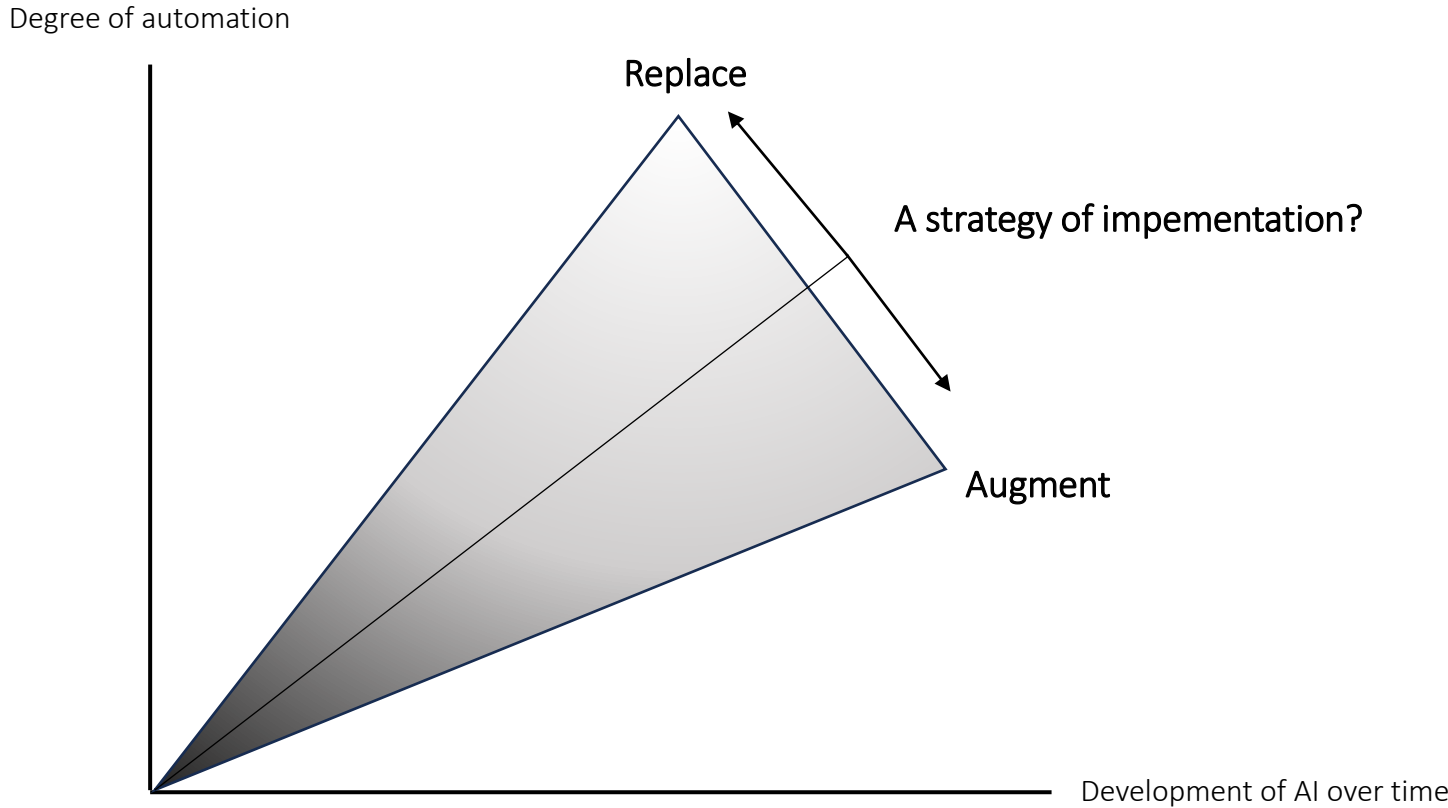
- Sam Altman, CEO and co-founder of OpenAI

"It's hard to say exactly what that moment is, but there will come a point where no job is needed"

- Elon Musk, co-founder of OpenAI

Two different visions of the future of AI

Degree of automation

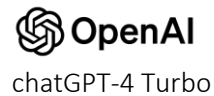Replace

A strategy of impementation?

Augment

Development of AI over time

AI Augmentation

Removing language as a barrier...
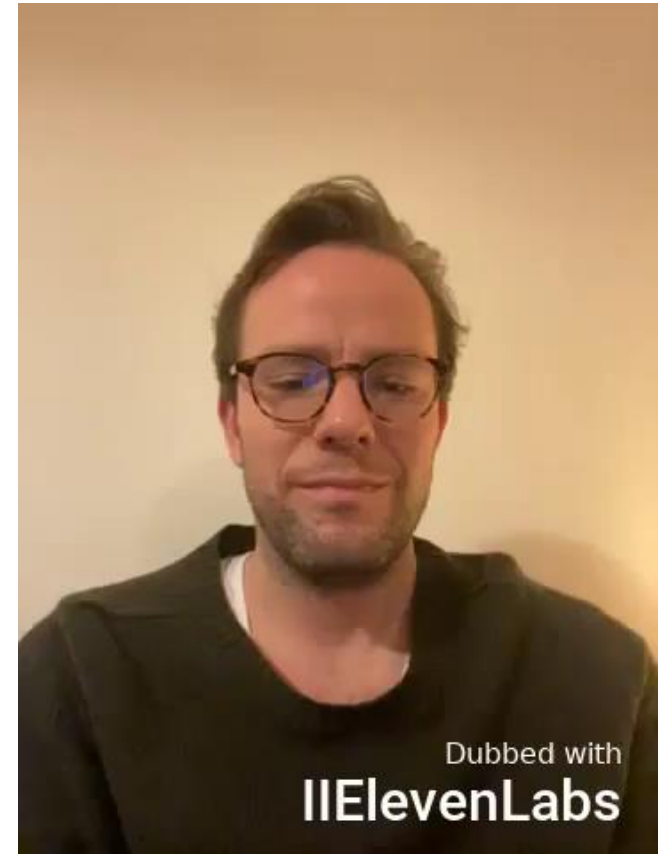
AI Automation

How to predict future hire volume based on historical data…

OpenAI
chatGPT-4 Turbo

"If I were to make a speculative guess, I might assume that the increase could be around the average of the last few increases we've seen, but this is not based on a statistical method or calculation."
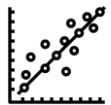
Regression analysis

Predicting the volume of DK requisitions six months in advance with an error margin of 3%

Types of AI

EU AI Act can help…

"Intended purpose" AI

- *Examples: CV screening or video interview analysis.*

- Trained on curated and context-specific data to accomplish a certain goal.

- The intended purpose increases explainability (see "Explainable AI", ie. XAI)

Shin, D. (2021). The effects of explainability and causability on perception, trust, and acceptance: Implications for explainable AI. *International Journal of Human-Computer Studies*, *146*, 102551. https://doi.org/10.1016/j.ijhcs.2020.102551

Training bias – bad examples from the past

"That is because Amazon's computer models were trained to vet applicants by observing patterns in resumes submitted to the company over a 10-year period. Most came from men, a reflection of male dominance across the tech industry. In effect, Amazon's system taught itself that **male candidates were preferable.** It penalized resumes that included the word "women's," as in "women's chess club captain.""

Insight - Amazon scraps secret AI recruiting tool that showed bias against women | Reuters

The "crash-test-dummy" design problem

"Sierra Sam," developed for the U.S. Air Force in 1949 to test ejection seats, represented the median height and weight of the 95th percentile adult male U.S. population.

National U.S. automotive crash data from 1998 to 2008 revealed that **the odds for a belt-restrained female driver to sustain severe injuries were 47% higher** than those for a belt-restrained male driver involved in a comparable crash, when controlling for weight and body mass (Bose et al., 2011)

Inclusive Crash Test Dummies: Analyzing Reference Models | Gendered Innovations (stanford.edu)

Types of AI

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"General purpose" AI (foundation model)

- *Examples: Large languange models such as chatGPT or LLaMA*

- Developed with broad and general purpose

- Trained on "big data" with billions of parameters

- Many emergent functions (including making napalm or writing job ads).

- Harder to explain (black box problem)

Shin, D. (2021). The effects of explainability and causability on perception, trust, and acceptance: Implications for explainable AI. *International Journal of Human-Computer Studies*, *146*, 102551. https://doi.org/10.1016/j.ijhcs.2020.102551

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52021PC0206

General-Purpose-AI-systems-in-the-AI-Act.pdf (bu.edu)
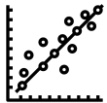
Using the "right" type of AI for the task

How to predict future hire volume based on historical data...

OpenAI

"If I were to make a speculative guess, I might assume that the increase could be around the average of the last few increases we've seen, but this is not based on a statistical method or calculation."
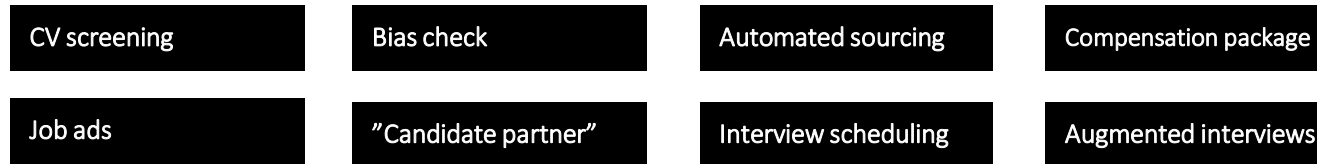
Attempts to teach you

Regression analysis

Predicting the number of closed DK requisitions six months in advance with an error margin of 3%

What's in the litterature on using AI in TA and HR?

CV screening	Bias check	Automated sourcing	Compensation package
Job ads	"Candidate partner"	Interview scheduling	Augmented interviews

Pillai, R., & Sivathanu, B. (2020). Adoption of artificial intelligence (AI) for talent acquisition in IT/ITeS organizations. *Benchmarking: An International Journal*, *27*(9), 2599–2629. https://doi.org/10.1108/BIJ-04-2020-0186

Kaushal, N., Kaurav, R. P. S., Sivathanu, B., & Kaushik, N. (2023). Artificial intelligence and HRM: Identifying future research Agenda using systematic literature review and bibliometric analysis. *Management Review Quarterly*, *73*(2), 455–493. https://doi.org/10.1007/s11301-021-00249-2

Johnson, R. D., Stone, D. L., & Lukaszewski, K. M. (2021). The benefits of eHRM and AI for talent acquisition. *Journal of Tourism Futures*, *7*(1), 40–52. https://doi.org/10.1108/JTF-02-2020-0013

Implementation in light of legislation

HIGH-RISK AI SYSTEMS

"AI systems intended to be used for recruitment or selection of natural persons, notably for advertising vacancies, screening or filtering applications, evaluating candidates in the course of interviews or tests"

EU AI ACT - EUR-Lex - 52021PC0206 - EN - EUR-Lex (europa.eu)

If AI is the answer, what is the <u>purpose</u>?

When implementing

- Clearly defining the intended purpose
- Having transparent and curated data
- What bad looks like
- Monitoring and quality testing of the output
- Deploying in "low stakes" scenarios first, where human correction is possible: e.g. writing job ads, scheduling interviews, candidate career page guidance

Automation bias (aka HALO effect) from Q&A session

- Agudo, U., Liberal, K. G., Arrese, M., & Matute, H. (2024). The impact of AI errors in a human-in-the-loop process. *Cognitive Research: Principles and Implications*, *9*(1), 1. https://doi.org/10.1186/s41235-023-00529-3
- Araujo, T., Helberger, N., Kruikemeier, S., & De Vreese, C. H. (2020). In AI we trust? Perceptions about automated decision-making by artificial intelligence. *AI & SOCIETY*, *35*(3), 611–623. https://doi.org/10.1007/s00146-019-00931-w
- Skitka, L. J., Mosier, K., & Burdick, M. D. (2000). Accountability and automation bias. *International Journal of Human-Computer Studies*, *52*(4), 701–717. https://doi.org/10.1006/ijhc.1999.0349