AI-based Employment Services, Algorithmic Management and Skills Gap

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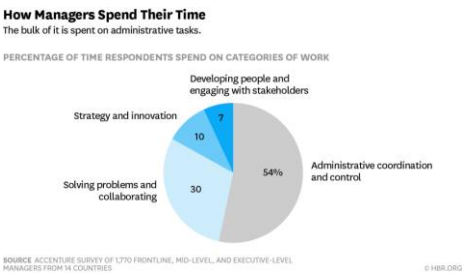
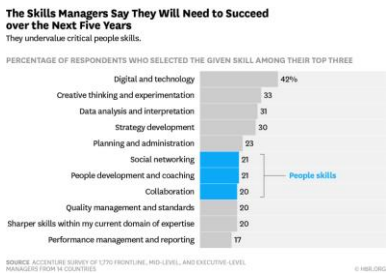
Artificially Intelligent Organisation

You can't manage what you don't measure
Deming & Drucker

- **Decision making is based on analytics rather than intuition.**
- **Companies born digital (Google and Amazon) are masters of data.**
- **Organizations need to redefine their understanding of strategic 'judgment'.**





Kolbjørnsrud et al. (2016); McAfee & Brynjolfsson (2012)

AI Adoption

AI makes sense when these factors are high

How much time does the task require without AI assistance?

How highly paid are the people who perform this task?

Is the AI capable of completing the task correctly?

Is it easy for humans to determine whether the AI output is accurate?

Source: John Horton, MIT Sloan

MIT MANAGEMENT SLOAN SCHOOL

AI Advantages

Examples of Where Generative AI Is Used in the Human Capital Domain

Talent Development
- Recruitment
- Induction
- Career management
- Well-being

Productivity
- Assessment and feedback
- Skills training
- Managing collaboration

Change Management
- Conversational analysis
- Internal knowledge management
- External knowledge management

Credit: Adapted from Lynda Gratton, London Business School

MIT MANAGEMENT SLOAN SCHOOL

Unilever's AI-based Recruitment

- Unilever's AI technology left a deep impression on the fledgling college students:
- They found interesting job postings by browsing social networking sites.
- They no longer needed to fill out online application forms, but could import them directly from their LinkedIn accounts with one click.
- They played a neuroscience game on their mobile phones for 20 minutes and learned how well they matched the job they applied for.
- hey did not meet the interviewer during the interview, but instead had a human-machine conversation with an AI robot in their apartment
- They happily received the offer and signed the contract electronically using DocuSign without leaving their homes.
- However, compared with face-to-face recruitment interviews, AI interviews lead to a significant decrease in the sense of interaction and fairness perceived by applicants, which makes some companies hesitant about whether to fully embrace AI technology in recruitment. How can companies embrace "AI+Recruitment"?

Unilever's AI-based Recruitment

- Since 2016, Unilever has started to use algorithms to screen resumes around the world, and has designed a recruitment process that includes three rounds of AI interviews for initial screening and a final round of on-site experience interviews.
- Unilever posts job announcements on social platforms such as Facebook, allowing job seekers to browse and select suitable positions to complete online applications.
- It then uses Pymetrics and HireVue software to conduct assessments and interviews, record candidates' tone of voice, body language, etc., and use AI to analyze each answer and form an analysis report to help interviewers complete initial screening.
- In the first year of its launch, by deploying "AI+Recruitment" in multiple languages in 68 countries, Unilever shortened its recruitment cycle from 4 months to 2 weeks, saved more than 1 million pounds in costs, and increased employee diversity by 16%.

AI+Recruitment

- "AI+Recruitment" has two main functions.
- Function one is to achieve job matching, generate labels and complete portraits through key factor association, and build a knowledge graph that connects entities. It is mainly implemented in three scenarios: talent search, resume analysis, and talent assessment.
- Function two is to improve interview efficiency, which is mainly implemented in AI interviews and robot chat scenarios.
- The two major functions correspond to four main application scenarios
  - *Talent Search*
  - *Resume Analysis*
  - *Talent Assessment*
  - *AI Interviews and Daily Communication*
- Potential risks of “AI+recruitment”:
  - *“Illusion of fairness” caused by algorithmic bias and discrimination.*
  - *The “digital distance” between organizations and candidates*

AI-based Employment Service in Korea

- Ministry of Employment and Labor and Korea Employment Information Service will launch seven pilot projects to support the improvement of employment capabilities based on data such as job seekers’ preferences and careers, and increase the convenience of services in the talent recruitment process, such as writing job postings and presenting hiring conditions.
- The focus is on strengthening job matching services through advanced job and talent recommendations.
- The Ministry of Employment and Labor plans to complete the proof of concept (PoC) service for the seven pilot projects by the end of this year, and plans to launch a full-scale public service in the second half of next year after a pilot application in the first half of next year.

AI-based Employment Service in Korea

- The **recruitment** service will be improved so that companies can find more suitable talent through customized corporate consulting based on the employment probability model and support for writing job postings through generative artificial intelligence (AI).
- The **job search** service will be strengthened so that job seekers can find jobs that match their aptitude and capabilities early through the introduction of intelligent job psychology tests, customized job support based on employment probability analysis, and strengthened job training recommendations to improve job capabilities.
- The **job matching** service focuses on improving employment outcomes in the job matching process through the advancement of existing job recommendation and talent recommendation services.
- Director of the Employment Policy Office said, "By fully introducing AI technology to digital employment services, we expect a dramatic improvement in customized services for individuals and companies"

Skills Gap

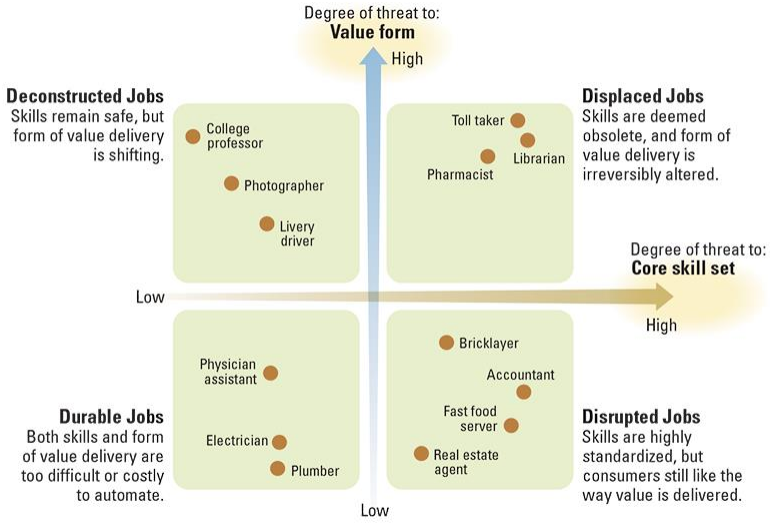
EXHIBIT 13

The skills gap is a particular pain point, impeding innovation and prompting higher people costs

QUESTION

What impact is 'availability of key skills' having on your organisation's growth prospects? (asked of those 'extremely concerned' about availability of key skills)

CEOs also affirmed that the 'availability of key skills' does affect their growth prospects. Moreover, the number one impact noted by 55% of respondents is the 'inability to innovate effectively', followed closely by 'higher than expected people costs' (see Exhibit 13).



Threat to Core Skills & Value Form

Conclusion

- AI-based employment services and algorithmic decision-making holds great promise for efficiency and predictablity.
- However, if used in an unconstrained, incorrect, or unregulated manner, the loss of privacy, widespread manipulation, discrimination or constrained self-determination are some of the consequences that can arise.
- Future technological developments related to AI or machine learning relying on algorithmic decision-making are unpredictable today. However, what can be done *today* is to initiate a critical and timely discourse about how algorithms can be used responsibly in assisting employment services.