L'usage de toute machine (calculatrice, traductrice, etc) est strictement interdit

Rédiger en anglais et en 400 mots une synthèse des documents proposés, qui devra obligatoirement comporter un titre.

Indiquer avec précision, à la fin du travail, le nombre de mots utilisés (titre inclus), un écart de 10 % en plus ou en moins sera accepté.

Vous aurez soin d'en faciliter la vérification, soit en précisant le nombre de mots par ligne, soit en mettant un trait vertical tous les vingt mots.

Veillez à bien indiquer, en introduction, la source et la date de chaque document. Vous pourrez ensuite, dans le corps de la synthèse, faire référence à ces documents par "document 1", "document 2", etc.

Les documents ont une égale importance

Document 1 – Jodi Kantor and Arya Sundaram, "The Rise of the Worker Productivity Score", *The New York Times*, March 14, 2022.

Document 2 – Robert Donoghue and Tiaogo, "Horrible Bosses : how algorithm managers are taking over the office", *The Conversation*, October 11, 2022

Document 3 – Pranshu Verma, "AI is starting to pick who gets laid off", *The Washington Post*, February 20, 2023

Document 4 – Illustration by Christophe Nieman entitled "Evolution" used for the cover of *The New Yorker*'s Technology issue, September 30, 2019.

Document 1 - The Rise of the Worker Productivity Score

Jodi Kantor and Arya Sundaram, *The New York Times*, March 14, 2022

A few years ago, Carol Kraemer, a longtime finance executive, took a new job. Her title, senior vice president, was impressive. The compensation was excellent: $200 an hour.

But her first paychecks seemed low. Her new employer, which used extensive monitoring software on its all-remote workers, paid them only for the minutes when the system detected active work. Worse, Ms. Kraemer noticed that the software did not come close to capturing her labor. Offline work — doing math problems on paper, reading printouts, thinking — didn't register and required approval as "manual time." In managing the organization's finances, Ms. Kraemer oversaw more than a dozen people, but mentoring them didn't always leave a digital impression. If she forgot to turn on her time tracker, she had to appeal to be paid at all. (…)

Since the dawn of modern offices, workers have orchestrated their actions by watching the clock. Now, more and more, the clock is watching them.

In lower-paying jobs, the monitoring is already ubiquitous: not just at Amazon, where the second-by-second measurements became notorious, but also for Kroger cashiers, UPS drivers and millions of others. Eight of the 10 largest private U.S. employers track the productivity metrics of individual workers, many in real time, according to an examination by *The New York Times.*

Now digital productivity monitoring is also spreading among white-collar jobs and roles that require graduate degrees. Many employees, whether working remotely or in person, are subject to trackers, scores, "idle" buttons, or just quiet, constantly accumulating records. Pauses can lead to penalties, from lost pay to lost jobs.

Some radiologists see scoreboards showing their "inactivity" time and how their productivity stacks up against their colleagues'. At companies including J.P. Morgan, tracking how employees spend their days, from making phone

calls to composing emails, has become routine practice. (…) Architects, academic administrators, doctors, nursing home workers and lawyers described growing electronic surveillance over every minute of their workday. They echoed complaints that employees in many lower-paid positions have voiced for years: that their jobs are relentless, that they don't have control — and in some cases, that they don't even have enough time to use the bathroom. (…)

But the most urgent complaint, spanning industries and incomes, is that the working world's new clocks are just wrong: inept at capturing offline activity, unreliable at assessing hard-to-quantify tasks and prone to undermining the work itself.

UnitedHealth social workers were marked idle for lack of keyboard activity while counseling patients in drug treatment facilities, according to a former supervisor. Grocery cashiers said the pressure to quickly scan items degraded customer service, making it harder to be patient with elderly shoppers who move slowly. […]

As these practices have spread, so has resistance to what labor advocates call one of the most significant expansions of employer power in generations. TikTok videos offer tips on outsmarting the systems, including with a "mouse jiggler," a device that creates the appearance of activity. (One popular model is called Liberty.) Some of the most closely monitored employees in the country have become some of the most restive — warehouse workers attempting to unionize, truckers forming protest convoys.

But many employers, along with makers of the tracking technology, say that even if the details need refining, the practice has become valuable — and perhaps inevitable.

Tracking, they say, allows them to manage with newfound clarity, fairness and insight. Derelict workers can be rooted out. Industrious ones can be rewarded. (..)

In-person workplaces have embraced the tools as well. Tommy Weir, whose company, Enaible, provides group productivity scores to Fortune 500 companies, aims to eventually use individual scores to calibrate pay. "The real question," he said, "is which companies are going to use it and when, and which companies are going to become irrelevant?" (624 words)

Document 2 - Horrible bosses: how algorithm managers are taking over the office

Robert Donoghue, PhD Candidate, Social and Policy Sciences, University of Bath
Tiago Vieira, PhD Candidate, Political and Social Sciences, European University Institute

The 1999 cult classic film "Office Space" depicts Peter's dreary life as a cubicle-dwelling software engineer. Every Friday, Peter tries to avoid his boss and the dreaded words: "I'm going to need you to go ahead and come in tomorrow." This scene is still popular on the internet nearly 25 years later because it captures troubling aspects of the employment relationship – the helplessness Peter feels, the fake sympathy his boss intones when issuing this directive, the never-ending demand for greater productivity.

There is no shortage of pop culture depictions of horrible bosses. There is even a film with that title. But things could be about to get worse. What is to be made of the new bosses settling into workplaces across all sectors: the algorithm managers?

The prospect of robots replacing workers is frequently covered in the media. But, it is not only labour that is being automated. Managers are too. Increasingly we see software algorithms assume managerial functions, such as screening job applications, delegating work, evaluating worker performance – and even deciding when employees should be fired.

The offloading of tasks from human managers to machines is only set to increase as surveillance and monitoring devices become increasingly sophisticated. In particular, wearable technology that can track employee movements.

From an employer's point of view, there is much to be gained from transferring managers' duties to algorithms. Algorithms lower business costs by automating tasks that take longer for humans to complete. Uber, with its 22,800 employees, can supervise 3.5 million drivers according to the latest yearly figures.

Artificial intelligence systems can also discover ways to optimise business organisations. Uber's surge pricing model (temporarily raising prices to attract drivers during busy times) is only possible because an algorithm can process real-time changes in passenger demand.

Some problems associated with algorithm management receive more attention than others. Perhaps the risk most discussed by journalists, researchers, and policymakers is algorithmic bias.

Amazon's defunct CV ranking system is an infamous example. This program, which was used to rate applicant CVs on a one-to-five scale, was discontinued because it consistently rated CVs with male characteristics higher than comparable ones deemed more feminine.

But several other issues surround the growth of algorithm management.

One is the problem of transparency. Classic algorithms are programmed to make decisions based on step-by-step instructions and only give programmed outputs. Machine-learning algorithms, on the other hand, learn to make decisions on their own after exposure to lots of training data. This means they become more complex as they develop, making their operations opaque even to programmers.

When the reasoning behind a decision like whether to sack an employee is not transparent, a morally dubious arrangement is afoot. Was the algorithm's decision to fire the employee biased, corrupt or arbitrary? If so, its output would be considered morally illegitimate, if not illegal in most cases. But how would an employee demonstrate that their dismissal was the result of unlawful motivations? (…)

Algorithms cut a critical human function from the employment relationship. It's what late philosopher Jean-Jacques Rousseau called our "natural sense of pity" and "innate repugnance to seeing one's fellow human suffer". Even though not all human managers are compassionate, there is zero per cent chance that algorithm managers will be. Algorithms designed to maximise efficiency are indifferent to childcare emergencies. They have no tolerance for workers moving slowly because they are still learning the job. They do not negotiate to find a solution that helps a worker struggling with illness or disability.

While businesses may find management algorithms to be highly lucrative, the need to make a profit is no reason to tolerate employee suffering. (603 words)

Document 3 - AI is starting to pick who gets laid off

By Pranshu Verma, *The Washington Post*, February 20, 2023

Days after mass layoffs trimmed 12,000 jobs at Google, hundreds of former employees flocked to an online chatroom to commiserate about the seemingly erratic way they had suddenly been made redundant. They swapped theories on how management had decided who got cut. Could a "mindless algorithm carefully designed not to violate any laws" have chosen who got the axe, one person wondered in a Discord post *The Washington* Post could not independently verify.

Google says there was "no algorithm involved" in its job-cut decisions. But former employees are not wrong to wonder, as a fleet of artificial intelligence tools become ingrained in office life. Human resources managers use machine learning software to analyze millions of employment-related data points, churning out recommendations of whom to interview, hire, promote or help retain.

But as Silicon Valley's fortunes turn, that software is probably dealing with a more daunting task: helping decide who gets cut, according to human resources analysts and workforce experts.

A January survey of 300 human resources leaders at U.S. companies revealed that 98 percent of them say software and algorithms will help them make layoff decisions this year. And as companies lay off large swaths of people — with cuts creeping into the five digits — it's hard for humans to execute alone.

Big firms, from technology titans to companies that make household goods often use software to find the "right person" for the "right project," according to Joseph Fuller, a professor at Harvard's business school who co-leads its Managing the Future of Work initiative. These products build a "skills inventory," a powerful database on employees that helps managers identify what kinds of work experiences, certifications and skill sets are associated with high performers for various job titles. These same tools can help in layoffs. "They suddenly are just being used differently," Fuller added.

Human resource companies have taken advantage of the artificial intelligence boom. Companies, such as Eightfold AI, use algorithms to analyze billions of data points scraped from online career profiles and other skills databases, helping recruiters find candidates whose applications might not otherwise surface.

Since the 2008 recession, human resources departments have become "incredibly data driven," said Brian Westfall, a senior HR analyst at Capterra, a software review site. Turning to algorithms can be particularly comforting for some managers while making tricky decisions such as layoffs, he added.

Many people use software that analyzes performance data. Seventy percent of HR managers in Capterra's survey said performance was the most important factor when assessing whom to lay off. Other metrics used to lay people off might be less clear-cut, Westfall said. For instance, HR algorithms can calculate what factors make someone a "flight risk," and more likely to quit the company.

This raises numerous issues, he said. If an organization has a problem with discrimination, for instance, people of color may leave the company at higher rates, but if the algorithm is not trained to know that, it could consider non-White workers a higher "flight risk," and suggest more of them for cuts, he added. "All of a sudden, these data points where you don't know how that data was created or how that data was influenced suddenly lead to poor decisions." (…)

The reliance on software has ignited a debate about the role algorithms should play in stripping people of jobs, and how transparent the employers should be about the reasons behind job loss, labor experts said. "The danger here is using bad data," said Westfall, "[and] coming to a decision based on something an algorithm says and just following it blindly."

But HR organizations have been "overwhelmed since the pandemic" and they'll continue using software to help ease their workload, said Zack Bombatch, a labor and employment attorney and member of Disrupt HR, an organization that tracks advances in human resources.

Given that, leaders can't let algorithms solely decide whom to cut, and should review suggestions to ensure they aren't biased against people based on color, gender or age — which would bring lawsuits, he said. "Don't try to pass the buck to the software," he said. (679 words)

Document 4