Document 1

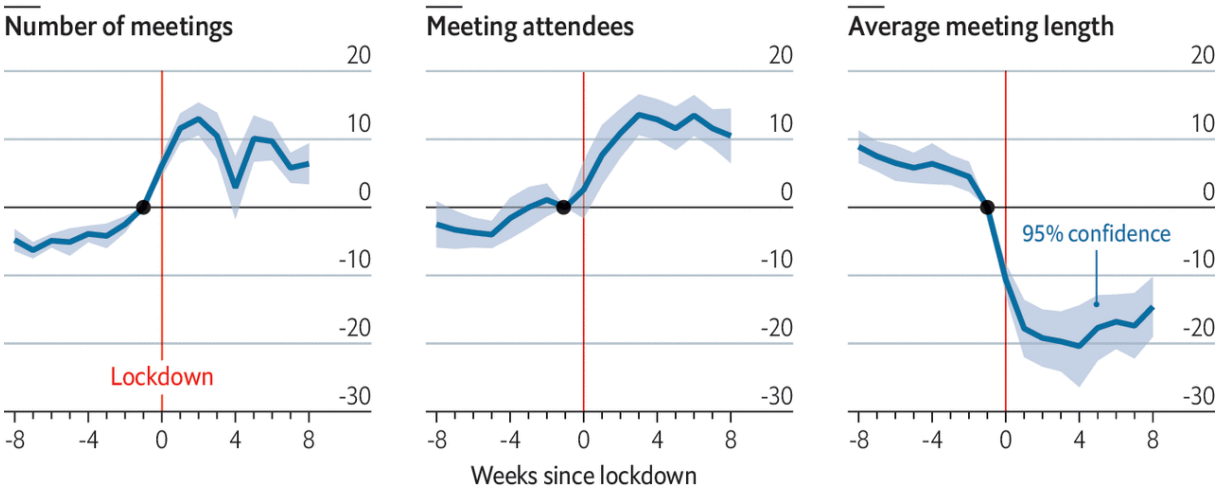
The Economist

How has the pandemic changed working lives?

A study concludes: more meetings, more emails, longer hours

Should this meeting have been an email?

Impact of covid-19 on meetings*, % change from week before lockdown



Source: "Collaborating during coronavirus" by Evan DeFilippis et al., 2020

*In 16 big cities in America, Europe and the Middle East

The Economist

Aug 20th 2020

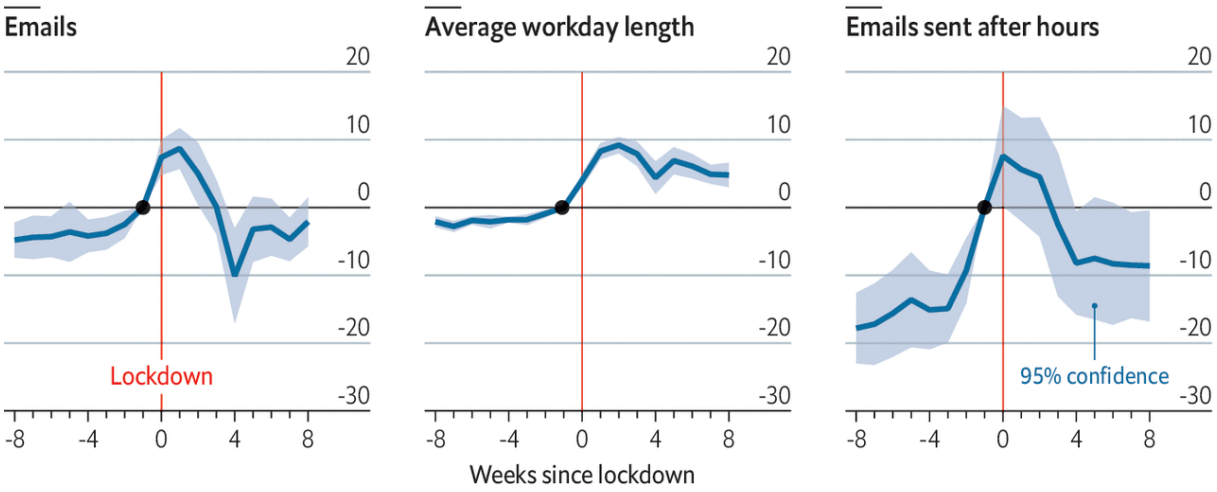
IN THE FUTURE, entire treatises may be written on how the covid-19 pandemic transformed the nature of work. As millions of employees have relocated to living rooms and kitchen tables, pundits are already touting the death of the office, a new era of flexible timetables and mass exoduses from cities. Whether these sweeping predictions prove true remains to be seen. Meanwhile workers' daily routines have changed in many small-scale, mundane ways. They do not add up to a golden age of white-collar liberation.

Take those staples of modern office routine: meetings, emails and time spent at work. According to a recent study by researchers at Harvard Business School, employees have been attending more meetings—by video conference, rather than in person—sending more emails and putting in more hours since the widespread shift to home-working in March. The team analysed anonymous data, acquired from an information-technology services provider, covering more than 3m people in 16 cities in America, Europe and the Middle East. They found that, compared with pre-lockdown levels, the number of meetings an average worker attends has risen by 13% (see chart). The

number of people in the average meeting has risen too, by 13.5%, perhaps because video conferences, unlike office-bound ones, are not constrained by space. One ray of hope is that meetings are shorter, by about 20%, or 12 minutes, on average. Europeans have been keener than Americans to cut meetings short: the trend is most marked in Brussels, Oslo and Zurich.

Should this email have been a meeting?

Impact of covid-19 on emails*, % change from week before lockdown



Source: "Collaborating during coronavirus" by Evan DeFilippis et al., 2020

*In 16 big cities in America, Europe and the Middle East

The Economist

Surely, the lack of a commute at least means workers have more time to themselves? Alas, no, the researchers find. In a modern variant of Parkinson's Law, working hours have expanded to soak up the extra minutes, and more. This is so across all 16 cities. On average, people have clocked up an extra 48.5 minutes a day—more than the average commuting time in America or Europe. This is largely because of a rise of 8% in the number of emails sent after normal business hours. Internal emailing during normal hours has risen too, along with the average number of recipients, presumably as a substitute for talking face to face (see second chart). The true figure for working hours may be higher. NordVPN, a virtual-private-network provider, reckoned in April that workdays had expanded by an average of three hours. Finished reading this? Good. Don't you have a meeting to get to?

Document 2

Forbes

Five Years After COVID—Work Didn't Return To 2019, It Evolved

By Nirit Cohen,

Mar 05, 2025

Remember COVID?

Remember the lockdowns, the empty offices, the endless Zoom calls?

Did you think that when it was over, work would just snap back to normal? Did your employer think so too? That we'd all return to our desks, log our nine-to-five, and pretend the biggest workplace disruption in history never happened?

That didn't happen. And it never will.

Five years later, work hasn't "returned to normal." It has evolved—not into the fully remote, hyper-flexible utopia some predicted, nor into the rigid, office-bound structure companies once controlled. Instead, we've landed somewhere in between: a world where employees expect more autonomy, career security is no longer tied to a single employer, and work has permanently integrated into life rather than dictating it.

Some changes were temporary. Others rewired how people think about work forever. And some are still evolving, shaping the next era of work. Five years after the first lockdowns, it's time to take a look back and understand what truly changed, what quietly reversed, and what remains in flux.

Work Didn't Go Remote—It Went Flexible

In 2020, it seemed like remote work had won. Companies abandoned office leases, workers embraced Zoom, and many believed that in-person work would become obsolete. But five years later, that prediction hasn't fully materialized. Instead, work settled into something in between—not fully remote, but permanently flexible.

Offices still exist, but their purpose has changed. They are no longer the default location where all work happens, but rather one of many places where work occurs. Employees move between home, co-working spaces, company offices, and sometimes even different geographies, integrating work into their lives rather than structuring their lives around work.

This is also why the four-day workweek, despite its popularity in discussions, has not become a widespread reality. People don't want a shorter workweek—they want control over their time. Imposing a rigid four-day structure doesn't address the deeper desire for autonomy, which has become one of the most significant workforce expectations post-COVID.

Career Security Is No Longer About Employers—It's About Staying Relevant

For decades, job stability meant studying a solid profession, finding a secure employer and staying put. The pandemic shattered that illusion. Entire industries collapsed overnight while others—tech, e-commerce, healthcare, cybersecurity—boomed. Workers who once felt safe in

their jobs suddenly found themselves unemployed, while those in rapidly growing fields had more opportunities than ever.

This shift rewired how people think about career security. Instead of relying on one employer or even one profession, people now focus on staying relevant through continuous learning, adaptability, and multiple income streams. Skills—not job titles—have become the new currency of career stability.

At the same time, the number of people engaged in freelance, gig work, and side businesses has skyrocketed. COVID made alternative income sources a necessity, but many discovered they preferred this model. Even those in full-time roles now think like independents, maintaining side hustles or positioning themselves for future career pivots. The loyalty that once defined the employer-employee relationship has eroded—workers stay where it benefits them, and they move on when it doesn't.

Work Is No Longer Separate from Life—It's Integrated into It

Before COVID, "work-life balance" was a buzzword that rarely translated into reality. For many, work dictated their schedules, their stress levels, and their ability to engage in personal life. The pandemic forced a reckoning: workers demanded workplaces that recognize them as full humans, not just employees.

That shift wasn't just about remote work or flexible schedules—it was about how employees define career success. It's no longer just about promotions, salary bumps, or job titles—it's about whether work fits into life in a sustainable way. People are less willing to sacrifice everything for career advancement, especially when they've experienced a different way of working. And so they expect their employers to actively care for their life as a whole including their well-being, mental health, and sustainability in work practices. Companies that ignored these concerns saw record levels of burnout, disengagement, and turnover. Those that took them seriously retained talent and gained a competitive edge.

The Digital Workplace Didn't Stop with Zoom—It's Evolving with AI

Covid transitioned work into the digital realm and forever added the digital space to the range of "places" where work happens. In the early days of COVID, this was about enabling work to happen through video calls. But overuse quickly led to Zoom fatigue, and we all realized that digital transformation couldn't stop at endless virtual meetings.

Today, the workplace continues to evolve digitally—but now, AI is the driving force. From automation tools to generative AI models that assist with content creation, decision-making, and workflow optimization, technology is reshaping how work gets done. The question isn't whether technology will continue to transform how we work, but how organizations and employees will adapt to it. As technology reshapes how we work, both people and organizations must adapt to new ways of working—anywhere, anytime.

Five Years Later: What Comes Next?

The past five years have shown that work didn't settle into a new normal—it kept evolving. Some things returned to the way they were, like in-person meetings and business travel. Other shifts became permanent, like flexible work and the emphasis on career adaptability. And some issues, like AI's role in the workplace, are still unfolding.

But one truth is undeniable: you can't go back into the future. People now expect more autonomy, more control, and more respect for their well-being. Organizations that evolve how they work will thrive. Those that try to force outdated models will lose the best talent to those who understand that work is transforming.

Change isn't coming—it's already here. The only question is: who will evolve, and who will be left behind?

Document 3

BBC

The Great Resignation is 'over'. What does that mean?

2 August 2023

Kate Morgan

A years-long period of record-high quits rocked the workforce in ways we couldn't have imagined. But the mass exodus is done, say experts.

Since the Covid-19 pandemic took hold in 2020, millions of workers have left their jobs.

In the US, 47 million people quit in 2021, and 50 million more in 2022, according to data from the US Bureau of Labor Statistics (BLS). The continued exodus was so significant that in May 2021, Anthony Klotz, then-associate professor of management at Texas A&M University, coined the term 'Great Resignation' to put a name to the trend.

The Great Resignation was unprecedented – and particularly striking against a backdrop of incredible global uncertainty. Now, however, economists say it's over.

May 2023 numbers from the BLS's Job Openings and Labor Turnover Survey (JOLTS) suggest quits have slowed, normalising to pre-pandemic figures. "Looking at the overall resignation numbers, and seeing they're back to 2019 levels, I think we can say it's over. It's not just a simple start-and-stop, of course, but it does seem that we're at the tail of it," says Klotz, now a professor of management at University College London's School of Management.

One explanation for the changing US resignation numbers, he says, is the impact of the current economic instability on the labour market – something workers quitting throughout the pandemic didn't grapple with.

"Even if you want to quit your job, you look out at the market [now] and think, 'maybe I shouldn't'," he says. "The economy has slowed down, there's layoffs in the headlines, warnings in the headlines that AI is going to take all of our jobs – it all makes people think twice before they quit a job."

The falling resignation statistics make sense says California-based Julia Pollak, chief economist at jobs site ZipRecruiter. Many of the people who made a big, one-time career decision are now settled in a new role that they're holding onto.

From internal summits at ZipRecruiter, and economic data the company has analysed, Pollak says many people shifted from less desirable industries to more sought-after ones – a phenomenon some have described as a 'Great Reshuffle'. "For example, people who might have been cashiers before, were like, 'wait a second, I can be a call centre representative from my couch, with my dog at my feet and a TV in the background'. That led to a lot of movement, but it was a one time jump."

Some people have also stopped quitting, says Klotz, simply because they have less reason to.

“Work for millions of people has gotten better over the last two years,” he says. “Many jobs are more flexible than they were two years ago, in many jobs pay is much fairer than it was pre-pandemic, and in many cases, benefits have been improved. Companies have taken employee wellbeing more seriously over the last couple of years, and invested much more in making their workplaces more inclusive and diverse.”

Some of these changes can be chalked up to companies trying to stem attrition, says Pollak. And there’s evidence to suggest it’s worked. “We're hearing a lot of anecdotal evidence from companies that turnover is normalising,” she says. “They're just having a much easier time holding on to workers.”

In fact, job satisfaction is now higher than it’s been in nearly four decades, according to survey data from the Conference Board, a non-profit think tank that has tracked job satisfaction since 1987. In a late 2022 survey of nearly 2,000 US workers, more than 60% reported being content with their jobs, and some of the most satisfied are those who quit one job for a better one during the pandemic.

“Broadly speaking, employees are actually happier than ever,” says Klotz. “The economy can't explain that as much as the reality that, because of the last couple of years, employers have had to get better. Now you have people who are saying, I'm not quitting my job because my job is actually pretty good.”

But although the big picture shows the Great Resignation may be winding down in general, some industries are still feeling the sting of mass quitting, especially in certain sectors.

“Healthcare, manufacturing, construction – resignation rates in those industries are well above 2019 levels,” says Klotz. “When you say the Great Resignation is over, there’s probably going to be people who are leading healthcare or manufacturing organisations who are still really struggling to find workers or with high turnover.” But a worsening economy might start to lower resignation rates in those industries, too: historically, fewer people quit during economic dips.

Both economists say they’re willing to call the Great Resignation officially over, but Klotz cautions that people will continue quitting in high numbers, relative to pre-pandemic years. “I think it’s important to keep in mind that the resignation rate is still at about the level it was in 2019. Pandemic aside, resignations in 2019 were the highest in the 20 years the Bureau of Labor Statistics has been recording it.”

He adds: “I'd say what comes next is just an unsettled labour market.”

Document 4

insider.co.uk

Burnout: the unseen economic drain

A business advisor argues that prevention must be a priority for employers

Charlène Gisèle

As a high-performance coach, I've worked with countless professionals who are running on empty.

Their ambition is undeniable, their commitment unquestionable, yet burnout has taken its toll. What's striking is how often this outcome is avoidable.

Burnout isn't just a personal struggle - it's an economic problem that costs the UK billions. The price we pay for not addressing it early is steep, while the solution is simple: prevention is far more effective - and affordable - than the cure.

The true cost of burnout to the UK economy is staggering. According to the Mental Health Foundation, mental health problems cost the UK economy up to £45bn every year. This is not just a statistic - it's a reflection of lost productivity, the burden on the healthcare system and the long-term effects that burnout has on businesses.

Every day, professionals across the UK are battling burnout, leading to absenteeism, decreased performance and the painful cycle of recruitment and training when employees eventually leave. In fact, recent Deloitte research showed that 59% of employees say burnout impacts their work.

This is a problem that can no longer be ignored.

But the most significant issue isn't the cost - it's that we've been addressing burnout all wrong. We wait for it to happen, then scramble to fix the damage.

The focus is on treatment, on mitigating the crisis, but by then, the damage is done. Recovery is difficult, costly and never as effective as preventing the issue from arising in the first place.

The key to mitigating burnout is prevention. And while many companies take steps to address burnout only after employees have reached a breaking point, the solution is not reactive; it's proactive. Prevention should be built into the culture from the start.

The most successful organisations are those that make mental health and well-being part of their core strategy. They understand that creating a sustainable, supportive environment for their employees isn't just the right thing to do - it's the smart thing to do.

Here's why: according to the Health and Safety Executive, work-related stress, anxiety and depression are responsible for a staggering 17.9 million lost working days annually in the UK.

The human toll is undeniable, but the economic impact is even more staggering. The costs of recruitment, retraining and the loss of intellectual capital are just the beginning. When employees are burnt out, their productivity diminishes, their creativity stagnates and their decision-making suffers.

It’s not just the employee who is affected; the entire organisation takes a hit. In fact, the financial cost of burnout to businesses - through turnover, absenteeism and lower productivity - runs into billions each year.

The good news is that we don’t have to wait for burnout to happen.

Prevention starts with creating a culture of support, where mental health is prioritised and employees are equipped with the tools to manage stress. Simple but effective strategies - such as offering coaching, implementing flexible working arrangements and encouraging regular mental health check-ins - can go a long way in preventing burnout before it becomes a crisis.

Even simply raising awareness - educating teams on the signs and symptoms of burnout and identifying the easily changeable habits that can exacerbate it - can make a significant impact. This approach not only saves money in the long run, but also ensures that employees remain engaged, productive and loyal.

For organisations, the choice is clear: we can continue to absorb the hidden costs of burnout, or we can take proactive steps to prevent it; saving money in the process.

The bottom line is that the cost of inaction far outweighs the investment in prevention. By focusing on mental wellbeing, companies can reduce turnover, retain top talent and maintain high levels of productivity - all while fostering a healthier, more sustainable work environment.

Burnout isn’t just an individual issue - it’s a strategic business issue. And it’s time we start addressing it with the urgency and foresight it deserves.

Prevention isn’t a luxury, it’s a necessity for a prosperous, sustainable future.

Document 5

Will AI make work burnout worse?

23 October 2024

MaryLou Costa

When ChatGPT burst onto the scene in late 2022, PR agency founder Anurag Garg was eager for his team of 11 to quickly incorporate the technology in their workflow, so the business could keep up with its competitors.

Mr Garg encouraged his employees to use the AI language tool for the agency's long list of daily tasks, from coming up with story ideas for clients, pitches to offer the media, and transcribing meeting and interview notes.

But rather than increase the team's productivity, it created stress and tension.

Staff reported that tasks were in fact taking longer as they had to create a brief and prompts for ChatGPT, while also having to double check its output for inaccuracies, of which there were many.

And every time the platform was updated, they had to learn its new features, which also took extra time.

"There were too many distractions. The team complained that their tasks were taking twice the amount of time because we were now expecting them to use AI tools," says Mr Garg, who runs Everest PR and divides his time between the US and India.

The entire aim of introducing AI to the company was to simplify people's workflows, but it was actually giving everyone more work to do, and making them feel stressed and burnt out."

As a business leader, Mr Garg also began to feel overwhelmed by the growing number of AI tools being launched, and feeling he had to keep pace with every new addition. Not only was he using ChatGPT like his team, but Zapier to track team tasks, and Perplexity to supplement client research.

"There's an overflow of AI tools in the market, and no single tool solves multiple problems. As a result, I constantly needed to keep tabs on multiple AI tools to execute tasks, which became more of a mess. It was hard to track which tool was supposed to do what, and I started getting utterly frustrated," says Mr Garg.

"The market is flooded with AI tools, so if I invest in a specific app today, there's a better one available next week. There's a constant learning curve to stay relevant, which I was finding hard to manage, leading to burnout."

Mr Garg backtracked on the mandate that the team should use AI in all their work, and now they use it primarily for research purposes - and everyone is much happier.

“It was a learning phase for us. The work is more manageable now as we are not using too many AI tools. We’ve gone back to everything being done directly by the team, and they feel more connected and more involved in their work. It's much better,” says Mr Garg.

Some office workers say that AI is adding to work and decreasing productivity

The stress Mr Garg and his team experienced using AI tools at work is reflected in recent research.

In freelancer platform Upwork’s survey of 2,500 knowledge workers in the US, UK, Australia and Canada, 96% of top executives say they expect the use of AI tools to increase their company’s overall productivity levels - with 81% acknowledging they’ve increased demands on workers over the past year.

Yet 77% of employees in the survey say AI tools have actually decreased their productivity and added to their workload. And 47% of employees using AI in the survey say they have no idea how to achieve the productivity gains their employers expect.

As a result, 61% of people believe that using AI at work will increase their chances of experiencing burnout - rising to 87% of people under 25, as revealed in a separate survey of 1,150 Americans, by CV writing company Resume Now.

Resume Now’s survey also highlights how 43% of people feel AI will negatively impact work-life balance.

Whether the tech is based on AI or not, surveys suggest many workers are already feeling overwhelmed.

A further study by work management platform Asana highlights the effect of introducing more work-based apps.

In its survey of 9,615 knowledge workers across Australia, France, Germany, Japan, the UK and the US, it found that, of those that use six to 15 different apps in the workplace, 15% say they miss messages and notifications because of the number of tools.

For those that use 16 or more, 23% say they are less efficient, and their attention span is reduced because of constantly having to switch apps.

As Cassie Holmes, management professor at the University of California in Los Angeles, commented in the study: “Using multiple apps requires additional time to learn them and switch between them, and this lost time is painful because we are so sensitive to wasted time.”

Leah Steele says workers are expected to do more with less

Lawyer turned coach Leah Steele now specialises in helping legal professionals overcome burnout, with many coming to her feeling burdened by their companies’ increased workload demands after introducing AI-based productivity tools. It’s an experience she’s familiar with, after the introduction of a new technology platform in a previous role saw her client caseload rise from 50 to 250.

“The biggest thing I'm seeing is this continuous competing demand to do more with less - but companies are not really considering whether the systems and the tech that they’re introducing are giving an outcome that isn't helpful,” says Bristol- based Ms Steele.

“Everything's moving so quickly. It's a constant battle to keep on top of things to develop expertise in such a cutting edge area.”

The burnout lawyers are now experiencing, Ms Steele adds, is not only about the growing volume of work tech and AI tools are facilitating, but the knock on effects.

“When we're looking at burnout, it's not just about the volume of the work we're doing, but how we feel about the work and what we're getting from it,” says Ms Steele.

“You could feel stressed about having ended up in an environment of high volume and low control, when what you originally wanted to do was interact personally with clients and make a difference to them.”

Ms Steele adds: “You could also feel stressed about the risk of losing your job, and the fear of being replaced because you’re no longer enjoying the work as it’s become so tech driven.”

The Law Society of England and Wales acknowledges that lawyers need better support from law firm leaders to make the most of new technology like AI.

“While AI and new technologies can make legal work more efficient by automating routine tasks, they can also create more work for lawyers, not less,” says president Richard Atkinson.

“Learning to use these tools takes time and lawyers often need to undertake training and adapt their work processes. Many technologies were not originally designed for the legal sector, which can make the transition more challenging.”

AI can be a big help for smaller firms says Alicia Navarro

Alicia Navarro is the founder and chief executive of Flown, an online platform and community which helps people focus on “deep work” - tasks that require sustained concentration. She agrees that there is an “avalanche” of AI tools, but says they need to be used correctly.

“There's such a huge amount of filtering and learning that has to take place before these tools can even start to become productive elements in our lives”.

But she argues that for small firms, with limited resources, AI can be a big help.

“It’s an incredibly empowering thing for start-ups to be able to do a lot more, or companies to be able to pay more dividends or pay their team more.”

Document 6

Does a 4-day workweek work? Companies share results after 1 year

Dozens of companies participated in a four-day week pilot study in the U.K.

By **Leah Sarnoff**

March 1, 2024

Do fewer working hours boost a company's overall productivity? A recent study out of the United Kingdom suggests the four-day workweek model benefits businesses and employees alike.

One year after 61 U.K. companies opted to participate in a four-day week pilot study, 89% of the companies continued to keep the structure in place.

More efficiency, happier employees and lower turnover rates are among the positive results found by the study, announced this week.

The 2022 study, conducted by the think tank Autonomy alongside the 4-Day Week Campaign and 4-Day Week Global, began as a six-month trial that has extended to the one-year mark and, in some cases, made permanent.

Forgoing the standard five-day, 40-hour workweek model, the participating organizations agreed to complete 100% of the usual workload in 80% of the time worked, shortening the workweek to 32 hours -- with no reduction of pay.

After one year, 51% of the companies have decided to implement the four-day workweek permanently and 89% have decided to continue the structure through the year.

In a follow-up survey with the participating companies' managers and CEOs, 100% reported that the four-day week had a "positive" or "very positive" impact on their organization, according to the study.

When researchers asked what the four-day structure had changed, 82% of surveyed companies reported positive impacts on staff well-being. 50% saw positive effects on reducing staff turnover and 32% said the policy had noticeably improved their recruitment, the study reports.

In a separate follow-up survey with the staff members of the participating companies, the benefits of the four-day workweek were felt both in and out of the office.

"Improvements in physical and mental health, work-life balance and general life satisfaction, as well as reductions in burnout, found at the end of the original pilot have all been maintained one year on," researchers said.

Looking to the future, a recent poll commissioned by the U.K. 4-Day Week Campaign found that 58% of the public expects the four-day workweek to be the standard way of working by 2030, according to the study.

Internationally, the study notes that the four-day workweek has become a key demand in some trade union negotiations in countries such as the United States, Germany and Italy.

Spain, Iceland and South Africa are among the nations that have implemented a trial of the four-day workweek for select companies and workers.

In November 2023, Belgium imposed a law that requires employers to offer full-time workers the right to request a four-day workweek.

At the state level in the U.S., lawmakers in Massachusetts introduced a bill in April 2023 that would provide employers with a tax credit if they shift at least 15 workers to four days a week without cutting their pay.

In California, a lawmaker re-introduced his 32-hour Workweek Act to Congress in March 2023, which would set the standard workweek at 32 hours.

At the time, Rep. Mark Takano said the act would be "a significant change which will increase the happiness of humankind. That's a very big statement. But it was a big deal 100 years ago when we gave people the weekend by passing the Fair Labor Standards Act."

Takano initially introduced the legislation to Congress in 2021.

While a 4-day workweek has proven to be a success for some companies, would the shortened model translate to all industries? Eric Loomis, professor and labor historian at the University of Rhode Island, told ABC News in June 2023 that the policy has faced difficulty spreading from white-collar professions to low-wage ones.

"I can see in an office getting a job done in 32 hours instead of 40 hours," Loomis told ABC News. "If you're a ticket taker at a theater or you're wearing a costume at Disney World, you need to be there."

The prospect of federal legislation enshrining a four-day workweek standard, meanwhile, is highly unlikely, Loomis added. "The U.S. hasn't passed significant pro-labor legislation that's in any way comprehensive in almost 90 years," he said.

ABC News' Max Zahn contributed to this report.

Document 7

Four-day workweek trial: The firms where it didn't work

20 March 2023

Alex Christian

Nearly all firms that took part in the UK pilot are keeping reduced hours – but not all are fully embracing the new set-up.

Long-awaited data from the large-scale UK four-day workweek pilot arrived in February – and results were overwhelmingly positive.

Among the 60-plus companies that participated in the trial, from marketing agencies to financial firms, education services to fish and chip shops, 92% of employers said they would continue with a shorter workweek following the programme – with 30% making the change permanent. Among nearly 3,000 employees, 71% reported feeling reduced levels of burnout; there were also improvements in physical health and wellbeing.

In many cases, firms that participated in the pilot, organised by non-profit 4 Day Week Global, reported their workers have been able to spend more time with their families, pursue hobbies and take greater personal care.

"Our staff have had the intensity of their work ramp up following the pandemic and cost of living crisis," explains Alison Dunn, chief executive of consumer-advice helpline Citizens Advice in Gateshead. "Burnout has been an issue, so the four-day week has given them space to decompress: we've had people spend their extra day off with their children, take forest walks and monetise their hobbies."

Employers on the trial also say a truncated workweek has boosted productivity and output. "When people enjoy having an extra day off, that creates better work-life balance which, in turn, makes people happier and less stressed," says Claire Daniels, CEO of Leeds-based digital marketing agency Trio Media. "And happier people perform better at work."

Yet, despite these headline-grabbing results, the trial didn't work for every business. Some firms abandoned the experiment; others haven't yet made the move to adopt the format full-time. Even those firms continuing with reduced hours are navigating new challenges arising from shortened workweeks. Though this reflects a small portion of the trial's participants, it means the four-day workweek isn't an automatic solution for all.

'We couldn't afford to give staff one day off every week'

In June 2022, Mark Roderick's engineering and industrial supplies company Allcap joined the UK four-day workweek trial. After operating at full tilt through the pandemic, the managing director of the Gloucester-based firm hoped that the six-month pilot programme would mean being able to offer his 40-strong team extra rest days.

“We rushed it through the business,” says Roderick. “We joined the programme late, and knew it would be a challenge implementing it across five sites. But we wanted to be able to give our staff time off during the summer.”

Rather than offer workers a three-day weekend like most of the 61 companies on the scheme, Allcap employees would have one workday off every fortnight. “We’re a trading business – customers call up all the time for manufacturing and construction components,” says Roderick. “We were already on a slightly reduced headcount, so we couldn’t afford to give staff one day off every week.”

But even with this bespoke four-day week model, Roderick says his firm quickly ran into problems. “As opposed to 10 normal workdays, we found that employees would have nine extreme ones – once they got to their scheduled day off they were exhausted. Once we factored in holidays, sickness and caring responsibilities, we also struggled to find cover for an employee on their rest day.”

As a result, Allcap abandoned its trial two months early at its three main trade sites (its warehouse and manufacturing centres have the resources to cope with a four-day week).

Alongside staffing issues, Roderick says the nature of his industry has made the four-day week harder to implement. “If you’re in professional services, you often have project-based work that affords greater flexibility in meeting deadlines. Here, we have milling machines, a trade counter and around-the-clock deliveries – working from home is impossible, so you need a minimum number of staff on site, or you don’t have a business.”

Indeed, as Allcap found, a typical trade-off for a three-day weekend is a more intense four-day workweek. “Without having a fifth day to catch up on work, there’s generally more stress now during the week in order to have a longer weekend,” says Laura White, projects and research manager at London-based charity Waterwise.

And for businesses maintaining regular opening hours, a third day off for staff usually requires workers covering shifts – and subsequently increased workloads. “We found that when it was someone’s turn for their day off, the buck passed to a colleague, and they were left under pressure,” says Roderick. “Someone’s absence would come up to management, so we’d effectively have to just do daily tasks – our longer-term projects and strategic work went out the window.”

Where it can fall short

For some firms, particularly customer-facing businesses, creating enough slack in the schedule for a four-day week means extra hiring costs – making it prohibitive to move forward with a new model. Dunn says Citizens Advice in Gateshead invested in the equivalent of three additional full-time employees so 45 contact centre staff could join the trial. “We didn’t want a situation where someone would be excluded from the opportunity,” she adds.

These customer-facing firms often face greater challenges in maintaining four-day workweeks. “Some employees can work extended hours during the week to catch up in order to have that extra day off,” says Dunn. “But that’s not available to our contact centre team, who have clearly defined opening hours. Their work is heavily monitored with specific KPIs set by our funder that need to be delivered – currently, they can only make marginal gains.”

Likewise, the demands of the job mean these workers have less flexibility in their third day off, says Dunn. “The busiest days at the contact centre are usually Mondays and Fridays, meaning it’s not possible for them to take time off either side of the weekend. The knock-on effect is that it leaves only three days left for staff to take their extra day off.”

Conversely, Dunn says employees outside the contact centre, who can work flexibly, have surpassed targets. “In those areas of the business, employees have knocked it out the park, exceeding KPIs and income projections. We’re left with a picture that’s not evenly spread.”

Instead of adopting or rejecting the new set-up outright, Dunn has extended Citizens Advice’s four-day week trial to May. She says unless targets are met by the contact centre team, it’s unlikely the shorter workweek will be made permanent in any part of the business. “We have 220 employees: I can’t imagine that we’d allow a four-day for some and not for others. Rather than size, the difficulties with the four-day week come in a business's complexity – when you have different ways of operating and offer varied services.”

The longer-term outlook

Alongside Citizens Advice, Waterwise and Trio Media are also extending their trials. “Six months didn’t feel long enough to make a permanent decision,” says Daniels, of Trio. “We want to see how it feels over a full year, and to ensure productivity remains high.”

Some other businesses on the scheme chose to forego a fixed four-day week, and instead offer more flexibility generally.

In one case, Jo Burns-Russell, CEO of Northampton-based creative agency Amplitude, has made the four-day week optional: employees now work a flexible, reduced 35-hour week that can be split across four or five days. “After the trial, everyone wanted to do their shorter workweek differently,” she says. “Rather than prescribe a day off, it’s better to let people choose what works best for them. As an agile company with a team of 12, it works well.”

Instead of a fixed four-day approach, Abigail Marks, professor of the future of work at Newcastle University Business School, believes this model of shortened workweeks and flexibility could bring the biggest gains to the workforce. “Without reducing the intensity of workloads and tackling overworking more broadly, a mass scale four-day week risks intensifying already intense workloads,” she says. “A six-hour workday may be more effective than a four-day week among organisations that are able to do so.”

And although 100% of firms in the trial didn’t immediately move to implement the model, the general success of the four-day week trial points to more employers acknowledging that the traditional nine-to-five isn’t working, says Marks. “It’s another experiment in the post-pandemic world of work. It’s showing that people are realising that long hours culture isn’t healthy or sustainable.”

For now, while a four-day week may be an experiment worth keeping on a permanent basis for some companies, it may not be realistic for all.

Allcap's Roderick says if he could, he’d reintroduce the four-day week at his firm. Even over-stretched workers prized their extra day off. “Even though everyone could see what was happening and were always busy, they were still disappointed when we suspended our trial,” adds Roderick. “If we could recruit more staff without a massive increase to our wage bill, we’d do it tomorrow. We were just too short-staffed to make it work.”

Document 8

The Guardian

‘Constantly monitored’: the pushback against AI surveillance at work

Academics decry algorithmic monitoring of workers and call for stronger standards – but US unions have been slow to act

Steven Greenhouse

Sun 7 Jan 2024

From algorithms firing staff without human intervention to software keeping tabs on bathroom breaks, technologies including artificial intelligence are already upsetting workers and unsettling workplaces.

At call centers, AI systems record and grade how workers handle calls, often giving failing grades for not sticking to the script. Some corporate software spies on workers to see whether they ever write the word “union” in their emails.

As technologies grow ever more sophisticated in monitoring, surveilling and speeding up workers, many workplace experts say US businesses, labor unions and government are not doing nearly enough to protect workers from tech’s downsides.

“Workers are being constantly monitored, and AI-based monitoring tools can make mistakes that can translate into unfair pay cuts or firings,” said Virginia Doellgast, a professor of employment relations at Cornell. “Workers often don’t know what monitoring tools are being used, what data the tools are collecting or how that data is used to evaluate their performance.”

In Europe, unlike in the US and Canada, many unions have been pushing for years for protections against some of the more intrusive ways that AI tools track and manage workers. “This issue has yet to be put at the center of the radar for unions in North America,” said Valerio De Stefano, a labor law professor at York University in Toronto, who has written extensively on AI’s use in the workplace. “Unions in Europe are more aware of the uses of technologies from the surveillance standpoint. This is not something that unions in North America have focused on.”

At some German companies, labor experts say, workers have won protections that could become models for US and Canadian workers. At Deutsche Telekom, Germany’s largest telecommunications company, workers have won a prohibition against algorithms firing workers without any human involvement as well as a ban on using data collected by digital monitoring to discipline or dismiss individual workers.

“In Europe, workers have stronger rights to obtain information and participate in decision-making,” Doellgast said. “In the US, where there is a union present, workers have some information rights about AI and hopefully a voice in how it’s used. Where unions aren’t present, workers have no information rights, and all they see is the effects of the technologies on them.”

Mindful of the downsides of AI and algorithmic management, US labor unions are starting to push harder for protections. For instance, at some call centers, the Communications Workers of America union has won not only requirements that managers notify workers whenever recording their calls, but also guarantees that management will only record calls for training purposes to help improve employee performance – and not for evaluating or disciplining workers.

Dan Reynolds, the Communications Workers' assistant research director, said the union has long been concerned about how new technologies affect jobs. "AI is a new technology often used to speed up the work, deskill the work, make workplaces more stressful and make jobs more demanding," he said. "Our concern about AI isn't just its effect on the number of jobs, but how it will affect the quality of jobs."

"Our goal is not to stop new technologies," Reynolds continued, "but to make sure the gains of these new technologies are broadly and equitably shared."

Germany has laws requiring companies to notify their works councils about AI and other new technologies that they're planning to adopt. Most German companies have work councils, which are worker-management committees that discuss everything from vacation schedules to the pace of work and the effects of AI.

To prevent AI-based performance data from being used against individual workers, the work councils at Deutsche Telekom got the company to agree that performance data can be gathered only for groups of at least five employees. The company has also agreed not to use AI to gather certain personal information about employees, such as their political opinions or sexual orientations.

Doellgast and De Stefano – who edited a recent academic journal about AI and work – say worker input about new technologies often reduces their invasiveness and other downsides for workers, while making the introduction of technologies smoother and more productive. Moreover, when workers have some say about new technologies, that often reduces employee resistance to those technologies.

De Stefano pointed to some problems with using AI to hire and discipline workers. "These machines are, in many cases, unreliable," he said. "They have certain discriminatory output, especially in hiring. These machines are basically benchmarked around a standard worker – normally white, prime-age, male workers. Anyone who doesn't correspond to that benchmark risks being misjudged by these algorithms."

The AFL-CIO, the main US labor federation, has created a technology institute to develop expertise and policies on AI and other technologies. That institute is planning training sessions to educate union leaders and strategists about new technologies.

"In sectors where performance monitoring and algorithmic management are present, you can have a lot of negative impact," said Amanda Ballantyne, director of the AFL-CIO's technology institute. "If you dive into a sector like Amazon, many workers wear wearables that track every movement their body makes, everywhere they go, how fast they complete tasks, how long they're off task, how long they take in the bathroom. It's [scientific management] on steroids."

Ballantyne said the communications workers union, the hotel workers union, Sag-Aftra and the Writers Guild have helped lead the way on new technologies. After their recent 148-day strike, the Writers Guild won protections that require studios to disclose whether any material given to writers was developed with the help of AI.

The US Chamber of Commerce says AI and analytics can have substantial benefits for workers and productivity, providing insights into worker performance and allowing for targeted coaching and training to improve performance.

AI surveillance, the chamber says, can also help prevent workplace violence by, for instance, monitoring abnormal behavior in the workplace. While many workers criticize the use of "wearable" monitors, the chamber says "smart sensors and wearable devices can help" protect them, by detecting potential accidents, ergonomic risks, toxic chemicals and imminent heat stress.

"While there are clear benefits" to AI, said Michael Richards, policy director of the chamber's technology engagement center, "we understand there are legitimate concerns surrounding the use of the technology."

Employers "recognize that engaging in an inclusive dialogue about using new technologies is critical to fostering a culture of trust with employees", he added.

Annette Bernhardt, director of the technology and work program at the UC Berkeley Labor Center, pointed to the home-care sector as an example where new technologies make workers' lives more stressful. Many home-care aides must meticulously follow instructions that apps send them, while reporting back each and every task they complete.

"We need strong labor standards around the use of these technologies," Bernhardt said. "We need to support unions as they bargain around these technologies. Most important, we need to assure that workers have a seat at the table on these technologies from the outset, not just when they're being implemented."

Bernhardt added: "When workers are at the table, it means better technology adoption for them and better results for employers."

Document 9

THE CONVERSATION

When AI plays favourites: How algorithmic bias shapes the hiring process

October 14th 2024

Mehnaz Rafi

A public interest group filed a U.S. federal complaint against artificial intelligence hiring tool, HireVue, in 2019 for deceptive hiring practices. The software, which has been adopted by hundreds of companies, favoured certain facial expressions, speaking styles and tones of voice, disproportionately disadvantaging minority candidates.

The Electronic Privacy Information Center argued HireVue's results were "biased, unprovable and not replicable." Though the company has since stopped using facial recognition, concerns remain about biases in other biometric data, such as speech patterns.

Similarly, Amazon stopped using its AI recruitment tool, as reported in 2018, after discovering it was biased against women. The algorithm, trained on male-dominated resumes submitted over 10 years, favoured male candidates by downgrading applications that included the word "women's" and penalizing graduates of women's colleges. Engineers tried to address these biases, but could not guarantee neutrality, leading to the project's cancellation.

These examples highlight a growing concern in recruitment and selection: while some companies are using AI to remove human bias from hiring, it can often reinforce and amplify existing inequalities. Given the rapid integration of AI into human resource management across many organizations, it's important to raise awareness about the complex ethical challenges it presents.

Ways AI can create bias

As companies increasingly rely on algorithms to make critical hiring decisions, it's crucial to be aware of the following ways AI can create bias in hiring:

1. Bias in training data. AI systems rely on large datasets — referred to as training data — to learn patterns and make decisions, but their accuracy and fairness are only as good as the data they are trained on. If this data contains historical hiring biases that favour specific demographics, the AI will adopt and reproduce those same biases. Amazon's AI tool, for example, was trained on resumes from a male-dominated industry, which led to gender bias.

2. Flawed data sampling. Flawed data sampling occurs when the dataset used to train an algorithm is not representative of the broader population it's meant to serve. In the context of hiring, this can happen if training data over-represents certain groups —typically white men — while under-representing marginalized candidates.

As a result, the AI may learn to favour the characteristics and experiences of the over-represented group while penalizing or overlooking those from underrepresented groups. For example, facial analysis technologies have shown to have higher error rates for racialized individuals, particularly racialized women, because they are underrepresented in the data used to train these systems.

3. Bias in feature selection. When designing AI systems, developers choose certain features, attributes or characteristics to be prioritized or weighed more heavily when the AI is making decisions. But these selected features can lead to unfair, biased outcomes and perpetuate pre-existing inequalities.

For example, AI might disproportionately value graduates from prestigious universities, which have historically been attended by people from privileged backgrounds. Or, it might prioritize work experiences that are more common among certain demographics.

This problem is compounded when the features selected are proxies for protected characteristics, such as zip code, which can be strongly related to race and socioeconomic status due to historical housing segregation.

4. Lack of transparency. Many AI systems function as "black boxes," meaning their decision-making processes are opaque. This lack of transparency makes it difficult for organizations to identify where bias might exist and how it affects hiring decisions.

Without insight into how an AI tool makes decisions, it's difficult to correct biased outcomes or ensure fairness. Both Amazon and HireVue faced this issue; users and developers struggled to understand how the systems assessed candidates and why certain groups were excluded.

5. Lack of human oversight. While AI plays an important role in many decision-making processes, it should augment, rather than replace, human judgment. Over-reliance on AI without adequate human oversight can lead to unchecked biases. This problem is exacerbated when hiring professionals trust AI more than their own judgment, believing in the technology's infallibility.

Overcoming algorithmic bias in hiring

To mitigate these issues, companies must adopt strategies that prioritize inclusivity and transparency in AI-driven hiring processes. Below are some key solutions for overcoming AI bias:

1. Diversify training data. One of the most effective ways to combat AI bias is to ensure training data is inclusive, diverse and representative of a wide range of candidates. This means including data from diverse racial, ethnic, gender, socioeconomic and educational backgrounds.

2. Conduct regular bias audits. Frequent and thorough audits of AI systems should be conducted to identify patterns of bias and discrimination. This includes examining the algorithm's outputs, decision-making processes and its impact on different demographic groups.

3. Implement fairness-aware algorithms. Use AI software that incorporates fairness constraints and is designed to consider and mitigate bias by balancing outcomes for underrepresented groups. This can include integrating fairness metrics such as equal opportunity, modifying training data to show less bias and adjusting model predictions based on fairness criteria to increase equity.

4. Increase transparency. Seek AI solutions that offer insight into their algorithms and decision-making processes to make it easier to identify and address potential biases. Additionally, make sure to disclose any use of AI in the hiring process to candidates to maintain transparency with your job applicants and other stakeholders.

5. Maintain human oversight. To maintain control over hiring algorithms, managers and leaders must actively review AI-driven decisions, especially when making final hiring choices. Emerging

research highlights the critical role of human oversight in safeguarding against the risks posed by AI applications. However, for this oversight to be effective and meaningful, leaders must ensure that ethical considerations are part of the hiring process and promote the responsible, inclusive and ethical use of AI.

Bias in hiring algorithms raises serious ethical concerns and demands greater attention toward the mindful, responsible and inclusive use of AI. Understanding and addressing the ethical considerations and biases of AI-driven hiring is essential to ensuring fairer hiring outcomes and preventing technology from reinforcing systemic bias.

Document 10

FINANCIAL TIMES

Tomorrow's pensioners face up to working — and saving — for longer

Despite opposition, governments are forcing through changes to make pension systems sustainable

Moira O'Neill

SEP 23 2024

Earlier this month, China became the latest country to announce plans to raise its state retirement age — following on from a similar controversial move made by France last year. In fact, recent OECD analysis indicates that normal retirement ages are now set to be increased in three-fifths of OECD countries.

Any changes in pension provision are, typically, deeply unpopular. But, without them, ageing populations combined with the paucity of private savings to adequately provide for life in retirement threaten disaster for the public finances of many big economies.

Jon Greer, head of retirement policy at wealth manager Quilter, says: "Governments around the globe are wrestling with the monumental task of making their pension systems sustainable for the long haul."

Approaches to solving this problem vary widely, he notes. A common strategy, however, is a combination of tougher state policy — by raising the state pension age or reducing the generosity of benefits — and legislation to boost private pension provisions.

In the case of China, a decline in population will leave it short of workers. So, for the first time since 1978, China will, from January, begin to raise retirement ages that had been relatively low by advanced economy standards. For men, the age will rise from 60 to 63; for female blue-collar workers, it will rise from 50 to 55; and for female white-collar workers, it will rise from 55 to 58 years old. These changes, to be phased in over 15 years, have sparked indignation among younger people.

Like many other countries, China's pension system is made up of three pillars: the state pension; voluntary employee pension plans from employers; and private voluntary pension schemes.

Pushing through rises in state pension age can be tough, though. Last year, President Macron of France forced through a phased rise from 62 to 64 with a requirement that the retiree had worked for at least 43 years to gain full entitlement. His policy was not well received: it led to widespread demonstrations and strikes — disrupting rubbish collections, trains and flight schedules and electricity production.

Others have met similar resistance. Mike Ambery, retirement savings director at UK pensions and insurance group Standard Life, points out: "France isn't the only country that has seen protests

on the issue . . . A proposed move of retirement age for New Zealand's state pension from 65 to 67 met with heavy resistance politically and the policy has stalled."

The UK devotes a smaller percentage of its GDP to state pensions and pensioner benefits than most other advanced economies — and its state pension is low compared with many. So occupational and personal pensions are an important source of pensioner income in the country.

Britain's standard state pension pays £11,502 a year to everyone aged at least 66 who has 35 years' worth of National Insurance contributions. However, the state pension age is set to increase from 66 to 67 between 2026 and 2028, and then to 68 between 2044 and 2046.

Could this be accelerated? The UK state pension will cost the Treasury £138bn in the current financial year — a figure that is expected to keep on rising. A review in 2017 therefore suggested that the state pension age rise to 68 should be brought by forward seven years to 2037-2039.

Then, earlier this year, the International Longevity Centre said longer life expectancy and a smaller workforce would mean the UK state pension age may have to rise to 71 by 2050, while a paper published by the London School of Economics argued that state pension age should be increased to 68 "as soon as possible".

That will leave new UK chancellor Rachel Reeves with some tough decisions to make during this parliament. But the government may also be looking to other models for inspiration.

Some countries have taken the leap to fully means test their state pension. For example, Australia has no universal state pension, as such. Instead, the Australian "Age Pension" is a state benefit that is available to those aged 67 and over who have limited income and assets. However, Australia also has compulsory "superannuation" workplace pension schemes, with minimum employer contributions that will rise from 11.5 to 12 per cent from next July. These have enabled a higher standard of living in retirement.

Few countries have so much employer-funded provision. Ambery says: "We're still a way off this level of contribution in the UK and attempts to means test our state pension would prove unpopular."

Canada and Denmark instead offer a universal state pension which is then increased for poorer people with limited means. Many countries are also looking to encourage longer working lives or greater flexibility, given how much life expectancy has increased across the world.

Germany, for example, offers partial pensions for people continuing to work part-time after retirement age. Other countries offer an early retirement age for reduced pensions, and a normal retirement age for full benefits.

In nations striving for more generous state pensions, the solution often lies in significantly ramping up funding. Greer at Quilter says: "Unlike the UK, which leans heavily on employer and individual contributions to private pensions, many countries achieve this through much higher taxation across all income groups."

In the UK, the current approach still leaves six in 10 people feeling they are not saving enough and a third feeling anxious, according to insurer Royal London's latest research.

Sarah Pennells, consumer finance specialist at pensions and insurance group Royal London, advises such individuals to stay on top of their financial planning for old age, rather than leaving things blindly to fate or the state. "Reviewing how much you've saved helps you stay in control,"

she says. “Even if you don’t intend to retire, establishing a date when you can financially manage your expenses without needing to work can serve as a significant motivator.”

Document 11

The Economist

The trouble with MAGA's manufacturing dream

Donald Trump underestimates the difficulty of producing in America—and how his own policies will make it harder

Apr 28th 2025

In the late 1940s, as the industrial capacity of Europe and Japan lay in tatters, America accounted for over half of global manufacturing output, with much of the world heavily reliant on its wares. Last year it accounted for little over a tenth, and imported $1.2trn more in merchandise than it exported—to the displeasure of its president.

By placing America's enormous market behind a wall of tariffs, Donald Trump hopes to force companies to relocate production there, making it once again a manufacturing powerhouse. Various businesses, from Eli Lilly, a pharma giant, to Schneider Electric, a maker of electrical equipment, have recently announced plans to oblige Mr Trump. On April 28th IBM piled in, saying it would invest in making mainframe and quantum computers in America. Yet others, from PepsiCo, a pedlar of beverages and snacks, to Diageo, a booze business, have warned that tariffs will squeeze their profits. Mr Trump underestimates how difficult it will be for firms to shift their factories to America—and fails to appreciate the various ways in which his policies are likely to backfire.

Start with the labour supply. The average pay for a production worker in America is more than twice the level in China and nearly six times that in Vietnam. Yet those wages are still not attracting enough Americans into manufacturing. In the Census Bureau's most recent survey of factories, a fifth said that an insufficient supply of labour was contributing to their inability to operate at full capacity.

Foreign bosses hoping to manufacture in America lament the paucity of skilled workers such as welders, electricians and machinery operators. This month C.C. Wei, boss of TSMC, a Taiwanese chipmaker, said its effort to produce chips in Arizona was "being constrained by the labour shortage" in the state.

Anyone counting on automation to solve the problem risks being disappointed. Howard Lutnick, Mr Trump's commerce secretary, recently insisted that "the army of millions and millions of human beings screwing in little, little screws to make iPhones" would soon come back to America, where the work could be automated.

Yet a robotic overhaul of American manufacturing may still be a long way off. In 2023 there were just 295 industrial robots for every 10,000 manufacturing workers in the country, according to the International Federation of Robotics, an industry association. Although that was up from 255 in 2020, it was dwarfed by China's 470 and South Korea's 1,012 (see chart 1). Contrary to Mr Lutnick's claim, Apple is now said to be planning to assemble America-bound iPhones in India.

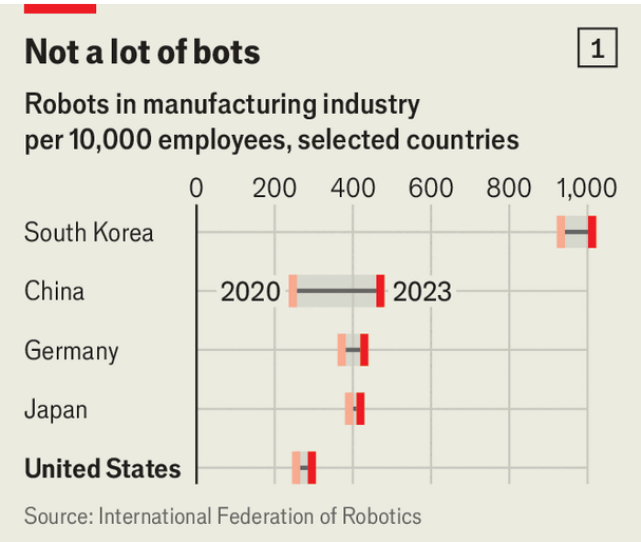


Chart: The Economist

The difficulty of building factories is a second barrier to manufacturing in America. Annualised spending on factory construction has doubled, adjusting for inflation, over the past four years, spurred on by subsidies offered by the previous administration to makers of chips and various green technologies. Many of the resulting projects, however, have been mired in delays or shelved altogether. Solvay, a European chemicals firm, has paused construction of a plant in Arizona intended to make electronics-grade hydrogen peroxide for semiconductors. Pallidus, an American manufacturer of chip components, has axed plans to build a factory in South Carolina.

That reflects the troubled state of construction in America. According to a 2023 paper by Austan Goolsbee and Chad Syverson of the University of Chicago's Booth School of Business, productivity in the sector, measured as output per worker, has fallen by two-fifths from its peak in the 1960s (see chart 2). The authors blame excessive regulation, NIMBYism and a lack of incentives to deliver projects on time, among other things. Labour shortages have also buffeted the construction sector in recent years.

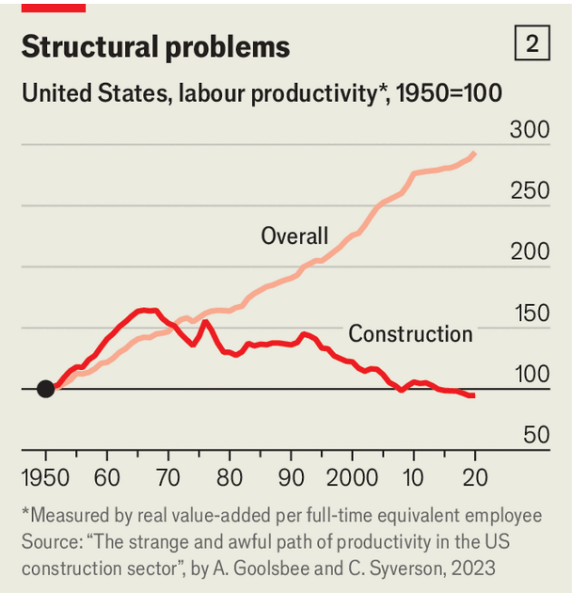


Chart: The Economist

In the meantime, America's existing factories are ageing. Over half of the roughly 50,000 manufacturing facilities across the country are more than three decades old; the average plant was built some 50 years ago.

America's inability to build has also resulted in ageing and overextended infrastructure—a third barrier to manufacturing in the country. Much of the electricity grid was constructed in the 1960s and 70s and is at or near the end of its useful life, a factor behind increasingly frequent power outages. Meanwhile, factories seeking a new connection to the grid face years of delay. Transport infrastructure is no better; one in three bridges in America needs to be replaced or repaired, according to a study last year by the American Road & Transportation Builders Association, an industry group. It is a far cry from the slick transport networks that grease supply chains in East Asia.

Spanners in the works

Instead of fixing these problems, Mr Trump looks likely to make manufacturing in America an even trickier proposition. His efforts to clamp down on immigration and deport those who have made their way into the country illegally risk worsening labour shortages both in factories and on construction sites. His tariffs are raising the cost of everything from the steel needed to build manufacturing facilities to the machinery that fills them. They are also making it more expensive to import raw materials and parts; almost a third of the intermediate inputs used in American manufacturing are imported.

Then there is the uncertainty created by Mr Trump's tariff flip-flopping. Many bosses say they are still waiting for clarity on what duties will be imposed on which countries before they make any changes to their production footprints.

Although factory jobs in America have dwindled, the country has continued to play a central role in global supply chains, including by developing world-leading intellectual property in areas from semiconductors to pharmaceuticals. Nearly $1trn-worth of research and development takes place in America each year, more than in any other country. By jeopardising America's trade ties, Mr Trump puts all that at risk. Instead of yearning for a return to the past, the president should let America get on with designing the future. ■