

A matter of time

Based on a scientific understanding of natural human rhythms, chronoleadership can help create healthier, more sustainable and more productive workplaces

Writing Camilla Kring

ur work and school systems were built for the industrial age – an era defined by fixed schedules, standardized outputs, and clocking in and out. But that world no longer exists. Today, intangible assets such as knowledge, creativity and innovation account for 90% of the S&P 500's market value. Gartner estimates that there are over one billion knowledge workers globally – yet many still operate under rigid 9-to-5 frameworks that ignore natural human rhythms.

Chronobiology is the study of those biological rhythms – particularly the circadian rhythms that govern our sleep-wake cycles, energy levels and cognitive performance. They play a fundamental role in productivity, health and mental wellbeing. Everyone is genetically predisposed to a unique rhythm: some are morning people, others are evening people. Yet more than 80% of the world's population - in Europe, the United States and Asia – is forced to disrupt their sleep cycles early to meet work or school obligations. And when work schedules are not aligned with an individual's natural biological clock, it can lead to long-term health problems. When we need an alarm clock to wake us up in the morning, we are living out of sync with our internal biological clock – making us more vulnerable to infections, cancer, obesity, type 2 diabetes and cardiovascular disease.

Understanding your chronotype is key to optimizing your performance and wellbeing Chronoleadership is a leadership approach rooted in biological understanding. It emphasizes that aligning work structures and schedules with employees' circadian rhythms promotes health, engagement and high performance. Leaders who embrace chronoleadership recognize that time isn't one-size-fits-all. By building flexibility into daily routines, they unlock potential and foster sustainable productivity.

Understanding your circadian rhythm

The Earth has been rotating on its axis for approximately 4.6 billion years. One full rotation takes just under 24 hours – specifically, 23 hours, 56 minutes and four seconds. To adapt to this cycle of light and darkness, all living organisms – including humans, plants and animals – have evolved an internal timekeeping system known as the circadian rhythm.

The word circadian comes from the Latin *circa diem*, meaning "about a day." Our internal clock doesn't run with perfect precision – it follows a rhythm close to, but not exactly, 24 hours. This is why our biological clock needs daily calibration from external cues like sunlight.

In 2017, American chronobiologists Jeffrey C Hall, Michael Rosbash and Michael W Young were awarded the Nobel Prize in Medicine for their discovery of the molecular mechanisms controlling the human circadian rhythm. At the center of this system is the suprachiasmatic nucleus (SCN), a group of nerve cells located in the hypothalamus. This master clock governs the timing of our sleepwake cycles, hormone release, body temperature and cognitive function – essentially aligning our internal world with the external day.

These rhythms also define our chronotype – whether we're early birds, night owls, or somewhere in between. According to the 2017 Munich Chronotype Questionnaire, which analyzed data from over 185,000 participants, 29.3% of people are early chronotypes, 29.8% are intermediates, and 40.9% are late chronotypes.

Understanding your chronotype is key to optimizing your performance and wellbeing. Sleep timing – when you go to bed and wake up – plays a crucial role. Everyone has a personal sleep window: a biologically ideal time frame for rest, when the body is most prepared for sleep. Contrary to common belief, there is no universal best bedtime. The idea that everyone should sleep from 10pm to 6am ignores the biological diversity in human rhythms. You function, feel and sleep best when your schedule aligns with your internal clock – not a socially constructed norm.

It follows that we should think about designing work to better reflect our natural rhythms. Some simple principles apply.

For early chronotypes Morning people naturally wake early, even on weekends. Their peak performance is in the early hours, but social activities late in the day can be challenging. I recommend the following work design principles for early chronotypes.

- Tackle complex tasks early in the day
- Try early-morning deep work sessions without interruptions
- Stick to early bedtimes, even as early as 8:30pm

For late chronotypes Night owls are naturally wired to feel most alert later in the day and typically wake up later in the morning. Traditional 9-to-5 schedules often clash with their biological rhythms, leading to chronic sleep deprivation. Accordingly, the following work design ideas are recommended.

- Tackle complex or demanding tasks in the afternoon or evening
- Schedule deep work sessions later in the day when you're most focused

The case for chronoleadership

In the industrial era, around 80% of a company's value came from tangible assets – machines, buildings and physical labor. Work was standardized, measured by clock time and organized around uniform schedules. The dominant management model, Taylorism, aimed to optimize productivity through control, repetition and standardization. And it worked. There is no doubt that Taylorism created immense value during this time. For example, after implementing scientific management principles, the time it took to assemble a Ford Model T dropped from 12.5 hours to just 93 minutes.

But the world of work has fundamentally changed. Value lies in, and is created by, those crucial intangible assets – knowledge, creativity, networks and innovation. In this new reality, the rigid time structures of the past are no longer suitable. Knowledge work depends not on physical presence or uniform hours, but on focus, insight and timing – qualities that are deeply tied to our individual circadian rhythms.

Chronoleadership invites us to rethink external time structures so they accommodate the full range of chronotypes, not just early risers. Rather than forcing people into outdated rhythms, we can design flexible systems that support both human biology and organizational performance.

When we align work with our natural energy patterns, we not only foster wellbeing – we unlock

At the heart of chronoleadership lies one essential condition: trust a healthier, more innovative, and more sustainable future of work.

Implementing chronoleadership in the workplace

At the heart of chronoleadership lies one essential condition: trust. When people are given more autonomy to work in alignment with their circadian rhythm, it requires a culture where leaders trust employees to manage their time – and where employees trust that their unique working patterns will be respected.

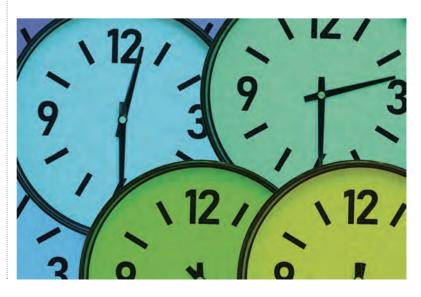
As Frances Frei and Anne Morriss have argued, trust is built through a balance of authenticity, empathy and logic – a model known as the trust triangle. In the context of chronoleadership, this means fostering a workplace where people can show up as themselves, where wellbeing is genuinely prioritized, and where decisions about flexibility are based on science and fairness.

There are three key steps to build this kind of culture – which demands that leaders uncover and challenge unconscious assumptions, starting with one of the most pervasive.

Recognize early riser bias

In many traditional workplaces, employees who begin their day early are often perceived as more committed, productive or reliable. This early riser bias is deeply ingrained and can lead to unfair advantages for morning chronotypes, simply because they're visible during standard working hours.

However, this perception ignores the simple truth that people have different biological clocks. Late chronotypes, for example, may perform at



their absolute best in the afternoon or evening, when their energy and focus naturally peak.

To start shifting this mindset, ask yourself: do I automatically associate early starters with higher performance? Do I view those who prefer working later as less motivated or disciplined?

Chronoleadership invites leaders to look beyond appearances and focus on actual outcomes. True inclusivity means recognizing the full spectrum of chronotypes and supporting each person in working when they're most effective.

2 Strengthen collaboration across rhythms Supporting individual chronotypes isn't just good for employees – it's good for teams. When leaders actively accommodate diverse rhythms, collaboration improves and productivity rises.

Mapping your team's natural energy patterns allows you to design workflows that work with people's biology rather than against it. Consider two key strategies.

- Maximize individual productivity by aligning meetings and tasks with each person's peak focus hours
- Enhance team collaboration by scheduling shared work during overlapping high-energy periods

By embracing asynchronous work and allowing flexibility, you create an environment where all team members can perform at their best.

Build a chronoinclusive culture
A chronoinclusive workplace acknowledges and celebrates the diversity of human rhythms. When employees are allowed to work in alignment with their internal clocks, they experience better health, stronger focus, and more sustained energy.

Circadian alignment affects nearly every aspect of life – from physical and mental health to emotional wellbeing, cognitive function and relationships. As a leader, your awareness of chronobiology can help shape a culture where wellbeing and performance go hand in hand.

Chronoinclusivity isn't just about flexibility in hours – it's about building a system that enables individuals and teams to find and follow their optimal circadian rhythms. When people work in sync with their internal clocks, they perform better. And when teams align their rhythms, they gain the momentum needed for long-term success.

The future of work and chronoleadership

For thousands of years, people have tried to measure time in harmony with nature. The rhythms of the sun and the moon are universal constants. But the rhythm of the nine-to-five

THE BRIEFING



Biased towards early risers

The standard 9-to-5 working routine that emerged during the industrial era may be ill-suited to most people's natural circadian rhythms. A major study found that just 29% are early chronotypes – that is, morning people – yet the social constructs found in most workplaces favor early risers.

Chronoleadership means redesigning work

Chronoleadership involves redesigning working practices to better reflect different people's varied circadian rhythms. That can reduce their risks of negative health outcomes – and, critically, it allows people to work when they're naturally at peak levels of productivity and performance.

When employees are allowed to work in alignment with their internal clocks, they experience better health, stronger focus, and more sustained energy workday is not. It's a social construct shaped over centuries by church bells, factory bells and school bells; devices designed to synchronize people with the needs of different social and industrial systems.

This external 'clock architecture' defined how societies functioned. Over time, we internalized these signals as the natural rhythm of life – an invisible framework that shaped when we should wake, work, eat and rest. But this system was never designed to support human biological diversity. It was designed to control and coordinate work.

Today, we face a new imperative: to redesign our time architecture for the knowledge age. Instead of imposing uniform schedules from the outside, we must begin to listen to the internal clocks each of us is born with – our circadian rhythms – and allow people to find and follow their individual patterns of energy and focus.

While we cannot change our biological rhythms, we can change the social structures around time. Replacing rigid, one-size-fits-all schedules with flexible frameworks that support different chronotypes will reduce social jet lag, increase wellbeing, and unlock higher and more sustainable performance.

People are not equally productive at the same time of day. In a knowledge-based society, respecting our circadian diversity is not a luxury – it is a strategic necessity. When individuals and teams work in harmony with their biological rhythms, they don't just perform better – they feel better, collaborate more effectively, and contribute with greater clarity and purpose.

As organizations begin to apply the insights of chronobiology, they move closer to building work cultures that are not only more productive, but also more humane, healthy and sustainable.

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