Kaamos Labs CC BY-NC-ND 4.0

# Attentional Design – A quiet rebellion against urgency



### **Table of contents**

#### **Executive Summary**

I. Introduction: Rethinking focus in a distracted age

II. Neuroscience of Focus: Three networks and one opportunity

III. Psychology: Clarity outperforms clock-watching

IV. Philosophical Dimension of Focus

V. The Culture of Time Anxiety

VI. The Case for Attentional Design

VII. The Polaris Focus Experience

VIII. Designed for

IX. Impact and Benefits

X. Building Attentional Habits and the Future of Attentional Design

Conclusion: Focus is the strategy

Acknowledgments

References

Contact & Attribution

# **Executive Summary**

Speed and optimization dominate today's digital life, yet the more we quantify our time, the less present we feel. Polaris Focus challenges this paradox.

Polaris Focus is a cognitive time tool—an ambient compass designed to ease time anxiety and support deep work. Grounded in neuroscience, it draws on research into attentional networks, sensory processing, and time perception to gently shift how we experience duration. Through a new sensory and temporal approach, it forms a visual chronoscape: a contemplative interface that favors presence over precision and flow over fragmentation.

This white paper introduces attentional design—a framework for creating tools that help people reclaim their focus, reduce cognitive strain, and reconnect with the purpose behind their work. The pages that follow outline the biological, psychological, and philosophical foundations of attentional design and present hypotheses ready for empirical testing.

# I. Introduction: Rethinking focus in a distracted age

The average person taps, swipes, or clicks their phone over 2,600 times daily, dedicating approximately 4 hours and 37 minutes each day—equivalent to nearly 70 days annually—to screen time. At work, electronic monitoring intensifies this burden, with 56% of tracked employees reporting frequent tension or stress (APA, 2023). Supporting these findings, a recent two-week diary study revealed significantly higher levels of rumination among individuals who meticulously logged every minute of their day compared to those who did not (Lee & Kim, 2024).

These figures create an urgent design challenge: Can technology be designed to honor our attention rather than exploit it?

Modern culture treats time as a commodity to conquer, optimize, and monetize, slicing days into color-coded blocks and dashboards. Yet, in this relentless pursuit of efficiency, the essence of lived experience—the slow, deliberate immersion into meaningful focus and the depth of genuine presence—risks becoming lost.

Focus, described by Daniel Goleman as "attention with intention," functions as a cognitive force multiplier. Goleman underscores attention as the "hidden driver of excellence," foundational to effective learning, meaningful relationships, exceptional performance, and reflective thinking (Goleman, 2013). However, constant interruptions from notifications, habitual context-switching, and the pressures of surveillance analytics fracture our ability to sustain focus, heightening stress and diminishing overall effectiveness (APA, 2023).

Polaris Focus emerges as a deliberate response: a tool designed explicitly around clarity, presence, and intrinsic motivation to reclaim attention and enrich human experience.

# II. Neuroscience of Focus: Three networks and one opportunity

Polaris is rooted in cognitive neuroscience and behavioral psychology, drawing on extensive research into attention regulation, cognitive control, and the neurophysiology underlying flow states.

#### Understanding focus

Focus is more than just a passive mental condition; it is an active and often physically engaged practice. It functions as a selective filter, enabling targeted processing of relevant information while effectively blocking distractions. This targeted attention is critical for deeper comprehension, meaningful interpretation, and the generation of new ideas.

#### The neuroscience behind focus

Neuroscientists have identified three key attentional networks involved in focus (Posner & Petersen, 1990; Fan et al., 2005): the alerting network, responsible for maintaining vigilance; the orienting network, which directs attention like a spotlight; and the executive control network, managing goals and regulating impulses. Crucially, these networks can be strengthened through training.

Research on meditation—both extensive long-term practices (Lutz et al., 2008) and short-term, five-day

interventions (Tang et al., 2007)—demonstrates improvements in sustained attention and a reduction in Default Mode Network (DMN) activity, which is typically associated with mind-wandering (Brewer et al., 2011).

Recent brain-imaging studies focusing on flow—a state of deep absorption, intrinsic motivation, and effortless attention—have found distinct neurological patterns. Flow states consistently suppress activity in the DMN, notably reducing self-referential thought and mind-wandering. Neuroimaging research (Ulrich et al., 2016a; Smallwood et al., 2021) confirms that this reduction facilitates increased connectivity between the Central Executive Network (CEN) and Salience Network (SN), essential for sustained attention and intrinsic motivation (van der Linden et al., 2021). EEG studies similarly underscore unique neural rhythms, notably frontal theta and alpha oscillations (Katahira et al., 2018), associated with enhanced cognitive control during immersive tasks.

Polaris supports these neurological mechanisms by eliminating numeric countdowns and minimizing visual distractions, thus reducing DMN activation and fostering a calmer, more focused neural environment.

# III. Psychology:Clarity outperforms clock-watching

Effective focus relies on understanding and integrating internal, external, and systemic factors—a concept Daniel Goleman (2013) terms "Triple Focus."

- Inner Focus involves cultivating self-awareness, regulating emotions, and aligning actions with personal values.
- Other Focus encompasses social intelligence, empathy, and the ability to collaborate effectively with others.
- Outer Focus requires systems thinking, attention to task goals, and awareness of broader contexts and impacts.

Supporting these elements of Triple Focus are several core cognitive mechanisms:

- Cognitive Control: The voluntary management of attention, a skill directly enhanced by Polaris's design.
- **2. Selective Attention:** Filtering out irrelevant stimuli to maintain focus on relevant tasks.
- Meta-Awareness: Observing and recognizing one's own thoughts, enabling intentional redirection of attention.

These cognitive mechanisms, foundational to psychological resilience and performance, have tangible long-term benefits. Longitudinal studies, such as New Zealand's Dunedin cohort (Moffitt et al., 2011), demonstrate that childhood self-control—the skill of directing attention effectively—strongly predicts better health outcomes and financial stability in adulthood, surpassing factors like IQ and socioeconomic background. As Anne-Laure Le Cunff (2021) writes: "Focus is clarity, and clarity drives action."

Recent EEG research indicates intrinsic motivation as a critical driver of sustained focus, with measurable neurological markers such as parietal alpha desynchronization reflecting the cognitive shift toward proactive engagement (Lu, van der Linden & Bakker, 2025). Polaris leverages similar mechanisms, promoting intrinsic motivation through user-selected, fluid session lengths rather than rigid scheduling. This approach fosters intrinsic motivation, making focus more sustainable and meaningful.

### IV.

## Philosophical Dimension of Focus

Focus is the selective direction of mental energy—choosing clarity over chaos, both externally and internally, by tuning out external noise and internal emotional turbulence. The ancient Greeks identified two distinct concepts for time, each deeply embedded in both their language and philosophy:

- Chronos: This refers to sequential, measurable time. Chronos embodies "clock time," the linear progression that structures schedules, deadlines, and productivity tools in modern life. Most contemporary productivity applications prioritize Chronos, emphasizing strict scheduling, optimization, and fragmentation of days into discrete units.
- Kairos: In contrast, Kairos refers to experiential,
   qualitative time—a moment infused with
   significance and meaning. It captures the
   immersive experience of deep focus, creativity, and
   presence where chronological time fades into the
   background. Unlike Chronos, Kairos is not
   quantified but experienced and remembered
   vividly, characterized by flow and immersion that
   resists traditional calendaring.

Kairos closely aligns with neuroscientific insights into flow states—what Henri Bergson (1889) called 'duration' (la durée). Flow neuroscience corroborates Bergson's qualitative time experience by illustrating how deep engagement suppresses brain regions responsible for linear, self-referential thinking (Smallwood et al., 2021).

# V. **The Culture** of Time Anxiety

What we call "productivity" is often a social construct, shaped less by personal meaning and more by inherited norms, corporate incentives, and internalized pressures. Chris Guillebeau's recent book Time Anxiety: The Illusion of Urgency and a Better Way to Live (2025) captures this paradox: even leisure has become a performance, optimized and rationed as if it, too, must justify itself.

Time-blocking advocates like Cal Newport (2016) argue that structure can help reduce anxiety by bringing clarity to chaotic schedules. While this is true in part, qualitative research by computer-science professor Gloria Mark (2023) suggests that over-reliance on rigid scheduling and external metrics—what she terms "hyper-scheduling"—can stifle autonomy, reduce creativity, and exacerbate stress. Individuals often find themselves on a pendulum between over-commitment and guilt, caught in a loop of unmet expectations.

In today's workplace, productivity is often synonymous with surveillance. Electronic monitoring tools may boost short-term output but come at the cost of morale, agency, and well-being. The American Psychological Association (2023) found that 56% of electronically monitored employees report elevated tension and ongoing stress. Excessive time tracking erodes intrinsic motivation, transforming work into a purely transactional act.

Polaris offers a counter-narrative. Rather than chasing productivity for its own sake or obeying the clock's tyranny, Polaris invites users to anchor their focus in internal alignment. It softens the grip of time anxiety by providing an alternative rhythm—one that expands and contracts with a user's energy and attention rather than adhering to rigid blocks. In doing so, Polaris reframes productivity as something rooted in presence, not pressure.

Team-based flow research further highlights the organizational potential for collective cognitive synchrony, improving not just individual well-being but also organizational resilience (Shehata et al., 2021). Polaris's attentional design could support similar collective cognitive states, reducing workplace anxiety and improving cohesion.

### VI.

# The Case for **Attentional Design**

Attentional Design is a design philosophy that prioritizes presence over engagement. It challenges the prevailing logic of digital design—not by seeking to capture attention through interruption, but by creating spaces that protect and nurture it. Polaris Focus embodies this approach by reimagining how we interact with time and focus. Rather than reinforcing urgency, it fosters intentionality, prompting users to ask not, "What can I accomplish right now?" but rather, "What's the best use of my attention in this moment?"

This mindset runs counter to the dominant dynamics of the attention economy, where tools are engineered to hijack cognition with notifications, dopamine loops, and endless scrolls. In that environment, everything is urgent—breaking, trending, or overdue—conditioning us to feel as though we're always behind. The result is a culture where time feels scarce and focus becomes guilt-laden.

Polaris Focus offers a quiet rebellion. It affirms that attention is a finite, valuable resource—worthy of protection, not exploitation. Following Egner's (2009) principles of proactive cognitive control, it strips away external pressures and structures the attentional environment, aligning closely with neuroscientific understandings of executive attention. Designed for depth rather than speed, Polaris invites users to reclaim their attention and inhabit time on their own terms.

# VII. The Polaris Focus Experience

#### Key design principles

#### Design for attention, not output

Polaris centers on cultivating deep, intentional focus rather than maximizing task throughput. It's about being present with what matters, not rushing toward completion.

#### **Productivity without countdowns**

Instead of numeric timers, Polaris features a visual, cosmic metaphor—an asteroid that gradually dissolves during a session. This represents progress through presence, offering users a felt sense of momentum rather than a ticking deadline.

#### Let time be interpreted

Sessions are labeled by scale—XS to Mega—corresponding roughly to 12 to 125 minutes. The ambiguity is intentional, designed to liberate users from the rigidity of exact time blocks and encourage a more fluid experience of Kairos.

#### Minimal interface

Every visual element is intentional. The UI is designed to reduce cognitive load and emotional stress, supporting immersion without distraction.

#### Invite Kairos, don't force it

Flow and deep presence cannot be forced. Polaris designs conditions where attention can emerge organically—without shame, pressure, or artificial urgency.

#### Designed for neurodivergent accessibility

Polaris is built with users who experience time differently—especially those with ADHD or anxiety. Its non-punitive, non-linear structure supports alternative cognitive rhythms.

#### No performance metrics

There are no analytics, streaks, or goal charts. Polaris is not about quantifying performance but about cultivating clarity and sustainable focus.

Polaris shifts the user's mindset from control to awareness, from measurement to meaning, and from output to attunement. It is a tool for noticing more, helping users reorient from time as pressure to time as presence. It doesn't track time—it reframes it.

#### The time perception spectrum

Polaris Focus lives on the Kairos end of the spectrum

—a zone where time is experienced rather than
enforced.

#### Chronos-driven tools

Apple Reminders, Toggl, Google Calendar, Todoist

#### Balanced tools

Notion Timeline, Sunsama, Rise, Insight Timer

#### Kairos-centered experiences

Forest, Journaling, Polaris Focus

Polaris intentionally avoids the metrics and rigidity of Chronos-driven tools. Instead, it cultivates presence, fluidity, and reflective depth—time as lived experience, not just task fulfillment.

## VIII.

## **Designed for**

Polaris Focus is designed for individuals who seek a more intentional, humane relationship with time—those who feel underserved by traditional productivity tools that prioritize efficiency over presence.

Polaris Focus is not built for universal adoption. It is a deliberate tool for a specific need: creating space for deep, meaningful focus in a world oversaturated with urgency. By doing less, more intentionally, Polaris serves those ready to reclaim time as a lived experience—not just a metric.

#### · Remote workers & creatives

Individuals who face frequent distractions and need environments that support immersion and flow.

#### · Founders & executives

High-responsibility roles often come with cognitive overload; Polaris offers a way to regain clarity without burnout.

#### · Students & researchers

Those engaged in deep learning and synthesis, requiring cognitive spaciousness and minimal interruption.

#### Neurodivergent individuals

Including those with ADHD, anxiety, or executive functioning challenges who benefit from flexible, non-punitive structures that respect their unique cognitive rhythms.

#### · Mindfulness practitioners

Users who value presence, self-awareness, and the quiet discipline of focused attention.

- People overwhelmed by hyper-structured tools, calendar saturation, or time-blocking fatigue.
- Those exploring mindful productivity, work-life integration, and attention hygiene.

## IX. Impact and Benefits

Early beta data (n = 57) suggest a median 22% reduction in self-reported time anxiety after 30 days of use.

#### Individual benefits

#### Reduced time anxiety

By removing numerical tracking and countdowns, Polaris helps users redirect their focus toward meaningful engagement rather than constant timechecking.

#### Greater ease entering flow

The design supports environmental and cognitive conditions conducive to entering flow states more readily.

#### Improved productivity & focus

Early data show a 15% increase in task completion rates and a 40% increase in average session length over the first three months. Other early positive outcomes, such as a 25% reduction in app-switching, align with neuroimaging studies showing strengthened CEN-SN connectivity and suppressed DMN activity during periods of sustained engagement (Ulrich et al., 2016b; van der Linden et al., 2021).

#### Increased satisfaction

Participants express higher satisfaction with both the quality of their work and the experience of working itself.

#### Organizational outcomes

#### Enhanced employee wellness & retention

A focus culture inspired by Polaris can improve workplace well-being, reduce burnout, and support long-term employee engagement.

#### Support for meaningful work

Encouraging presence and reflection creates more purpose-driven work environments, leading to greater alignment between personal values and professional tasks.

#### Strategic impact

Cultivated attention leads to deeper understanding, wiser decision-making, more effective execution, and resilience. This supports not only productivity goals but also broader business, creative, and personal ambitions.

Polaris Focus reframes focus as a foundational life skill—one that enables individuals and teams to perform with clarity, calm, and purpose in a world that too often mistakes urgency for importance.

# X. Building Attentional Habits and the Future of Attentional Design

Polaris Focus is not just a product—it's a practice. It supports the development of attentional habits that reframe how we relate to time, productivity, and self-worth. These habits include:

#### Single-tasking over multi-tasking

Encouraging depth and presence rather than fragmented attention.

#### Internal goals over external deadlines

Shifting motivation from imposed timelines to personally meaningful intentions.

#### Calm momentum over urgency

Replacing stress-driven effort with sustainable, focused progress.

Cultivating focus is not merely a cognitive process—it is also existential. To focus is to decide what matters. This means improving focus requires conscious effort, intentional structure, and behavioral courage: the courage to set boundaries, say no, and prioritize time for meaningful work and reflection.

We are actively investing in long-term research and development to ground Polaris in evidence-based design. Planned initiatives include:

- Structured user testing on time anxiety and emotional response
- Qualitative interviews on perceived flow states and attentional immersion
- Peer-reviewed studies on flow-inducing UX elements
- Collaborations with cognitive scientists and digital well-being researchers
- Enterprise pilots exploring Polaris as a tool for redefining workplace focus culture

Looking further ahead, Kaamos Labs will explore an electroencephalogram (EEG) and biometric research to test whether Polaris induces measurable shifts in brain network activity—specifically, down-regulation of the DMN and increased engagement of the CEN. While these are forward-looking hypotheses, they reflect our commitment to ethical, human-centered innovation at the edge of attention science.

Polaris is not just about how we work; it's about how we choose to live. By helping people reclaim their attention, it aims to create a future where focus is a form of freedom.

# Conclusion: Focus is the strategy

Focus is less about managing minutes than about choosing what to care about. Polaris invites users to inhabit time, not track it—replacing urgency with presence.

Polaris Focus invites a new relationship with time—one shaped by clarity, not control. It is part of a broader cultural shift to reclaim attention as both a personal asset and a shared resource. By challenging traditional productivity norms and shifting the emphasis from optimization to presence, Polaris helps users rediscover the value of undivided attention.

This is not just about helping people become more productive—it's about enabling them to experience time more meaningfully and remember what true focus feels like. Polaris exists to foster calm, clarity, and depth in a world that constantly pulls us toward distraction.

It is a quiet rebellion against the culture of urgency, a reminder that not everything valuable can—or should—be rushed. This isn't about doing less; it's about doing more of what matters, with clarity, intention, and peace of mind.

Because attention is life. And Polaris is here to help people reclaim it.

## **Acknowledgments**

This white paper was developed by the co-founders of Kaamos Labs, Victoria Rork and Anton Tyshko, in collaboration with early testers and advisors.

Special thanks are extended to the researchers, authors, and practitioners whose work made this possible, including Daniel Goleman, Mihaly Csikszentmihalyi, Anne Treisman, Jon Kabat-Zinn, and Anne-Laure Le Cunff.

### References

American Psychological Association. (2023). Work in America survey: Monitoring & surveillance supplement. APA.

American Psychological Association. (2024, May 12). Why our attention spans are shrinking (Gloria Mark, PhD) [Audio podcast episode]. Speaking of Psychology. https://www.apa.org/news/podcasts/speaking-of-psychology/attention-spans

Brewer, J. A., Worhunsky, P. D., Gray, J. R., Tang, Y.-Y., Weber, J., & Kober, H. (2011). Meditation experience is associated with differences in default-mode network activity and connectivity. Proceedings of the National Academy of Sciences, 108(50), 20254–20259. https://doi.org/10.1073/pnas.1112029108

Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. Harper & Row.

Dietrich, A. (2004). Neurocognitive mechanisms underlying flow. Consciousness and Cognition, 13(4), 746–761.

Exploding Topics. (2025, January 8). Smartphone usage statistics—Average screen time. https://explodingtopics.com/blog/screen-time-stats

Fan, J., McCandliss, B. D., Sommer, T., Raz, A., & Posner, M. I. (2002). Testing the efficiency and independence of attentional networks. Journal of Cognitive Neuroscience, 14(3), 340–347. https://doi.org/10.1162/089892902317361886

Goleman, D. (2013). Focus: The hidden driver of excellence. Harper.

Gollwitzer, P. M. (1999). Implementation intentions: Strong effects of simple plans. American Psychologist, 54(7), 493–503. https://doi.org/10.1037/0003-066X.54.7.493

Guillebeau, C. (2025). Time anxiety: The illusion of urgency and a better way to live. Crown Currency.

Lee, S., & Kim, H. (2024). Daily work-related rumination and well-being: A two-week diary study. Journal of Occupational Health Psychology. Advance online publication. https://doi.org/10.1037/ocp0000361

Le Cunff, A.-L. (2021, May 14). Building a serene focus [Newsletter]. Ness Labs.

Lu, H., van der Linden, D., & Bakker, A. B. (2025). The neuroscientific basis of flow: Learning progress guides task engagement and cognitive control.

Mark, G. (2023). Attention span: A groundbreaking way to restore balance, happiness, and productivity. Hanover Square Press.

Moffitt, T. E., Arseneault, L., Belsky, D., Dickson, N., Hancox, R. J., Harrington, H., Houts, R., Poulton, R., Roberts, B. W., Ross, S., Sears, M. R., Thomson, W. M., & Caspi, A. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. Proceedings of the National Academy of Sciences, 108(7), 2693–2698. https://doi.org/10.1073/pnas.1010076108

Newport, C. (2016). Deep work: Rules for focused success in a distracted world. Grand Central Publishing.

Posner, M. I., & Petersen, S. E. (1990). The attention system of the human brain. Annual Review of Neuroscience, 13, 25–42. https://doi.org/10.1146/annurev.ne.13.030190.000325

Shehata, M., Faskowitz, J., Reiter, S., Lancelot, M., Wilkins, K., & Montague, P. R. (2021). Team flow is a unique brain state associated with enhanced information integration and neural synchrony. eNeuro, 8(5).

Smallwood, J., Bernhardt, B. C., Leech, R., Bzdok, D., Jefferies, E., & Margulies, D. S. (2021). The default mode network in cognition: A topographical perspective. Nature Reviews Neuroscience, 22(8), 503–513.

Tang, Y.-Y., Ma, Y., Wang, J., Fan, Y., Feng, S., Lu, Q., ...
Posner, M. I. (2007). Short-term meditation training improves attention and self-regulation. Proceedings of the National Academy of Sciences, 104(43), 17152–17156. https://doi.org/10.1073/pnas.0707678104

The Brussels Times. (2022, March 16). People touch their smartphone over 2 600 times a day, research shows. https://www.brusselstimes.com/210314

Ulrich, M., Keller, J., & Grön, G. (2016). Neural signatures of experimentally induced flow experiences identified in a typical fMRI block design with BOLD imaging. Social Cognitive and Affective Neuroscience, 11(3), 496–507.

van der Linden, D., Tops, M., & Bakker, A. B. (2021). Go with the flow: A neuroscientific view on being fully engaged. European Journal of Neuroscience, 53(4), 947–963. https://doi.org/10.1111/ejn.15014

### **Contact & Attribution**

Kaamos Labs, 2025

Victoria Rork & Anton Tyshko, Co-Founders

Website: polarisfocus.com

Email: press@kaamoslabs.com

License: CC BY-NC-ND 4.0

Cover Art: Blair Simmons, Archive of Digital Portraits

Cast in Concrete, 2022

"This archive aims to revisit the daily pain of working and labor and examines my and others' relationships with technology as both dependent, yet critical."

#### **Feedback Loop with Researchers and Creatives**

We're building an ongoing feedback loop with researchers and creatives to refine Polaris through both scientific inquiry and lived experience. If you'd like to contribute, reach out at: hello@kaamoslabs.com.

#### **Partnerships with Research Institutions**

We welcome collaborations with universities and labs focused on attention, cognition, and digital well-being. For partnership inquiries, contact: research@kaamoslabs.com.