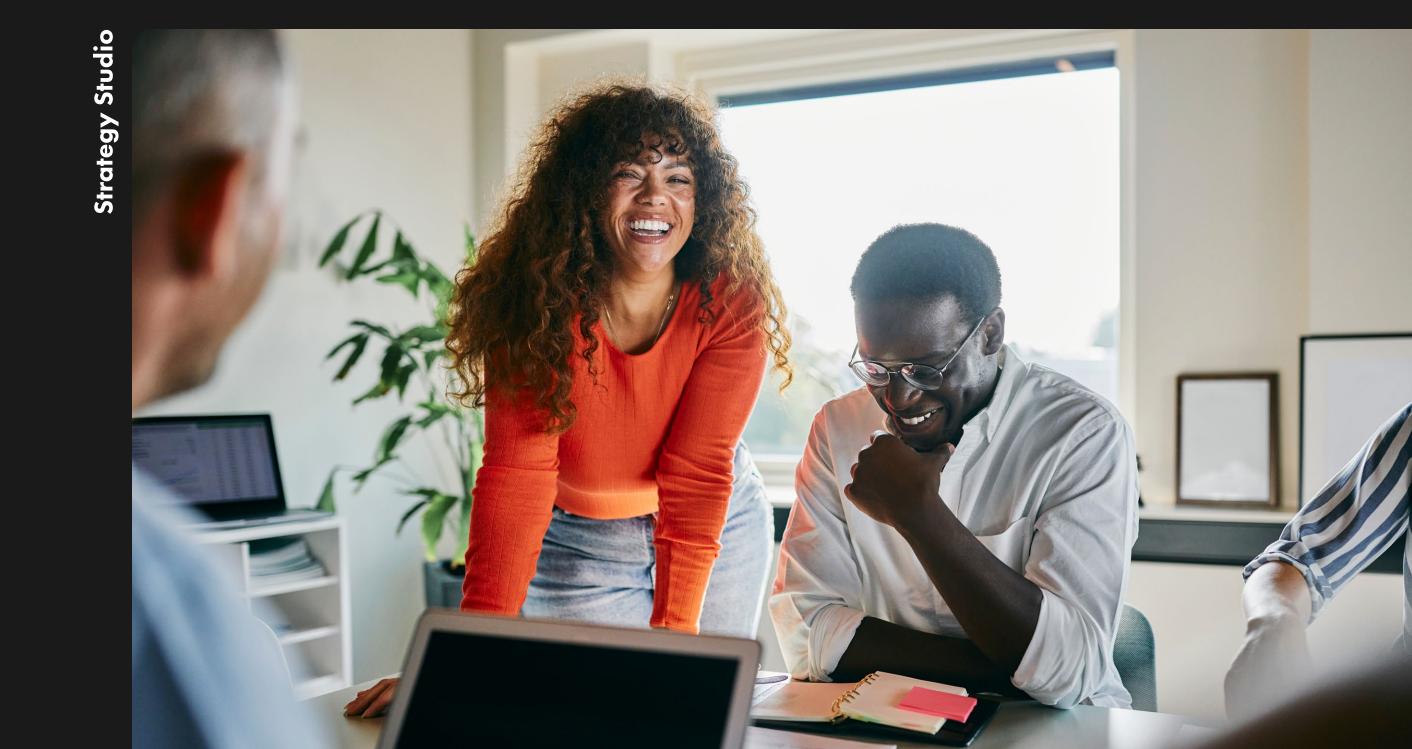
PRODUCTIVITY-AWARE HARMONIC DESIGN

A NEUROSCIENCE INFORMED FRAMEWORK





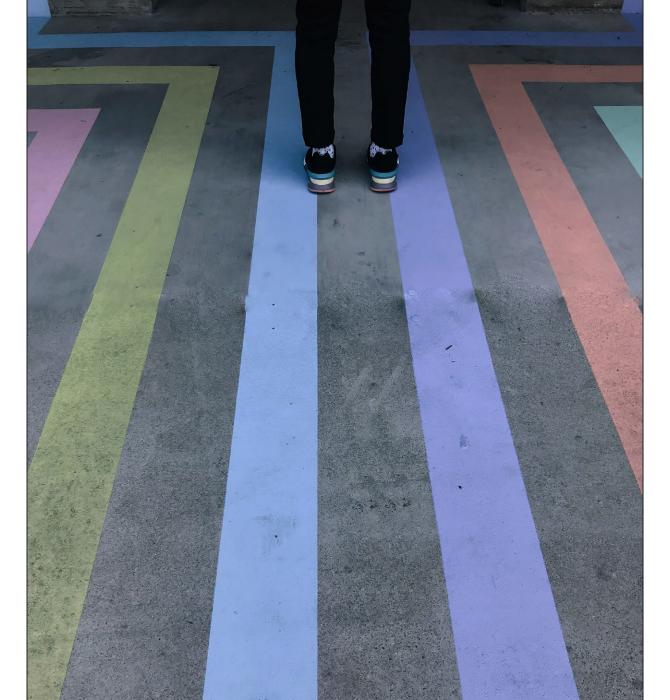
DESIGN THAT PERFORMS

As organizations adapt to evolving expectations, hybrid schedules, and rising wellbeing concerns, one truth has become clear: design must do more than look good. It must perform. Increasingly, clients are seeking environments that not only meet functional needs but also support how people feel, think, and thrive. The Harmonic PrinciplesTM, trademarked by IA in 2025, offer a science-informed framework for addressing today's most pressing workplace challenges.

Grounded in neuroscience and environmental psychology,
The Harmonic PrinciplesTM connect emotional wellbeing, cognitive
performance, and cultural alignment to measurable outcomes
like focus, engagement, retention, and productivity. Applied
strategically, these principles empower organizations
to use design as a lever for change, transforming friction
into flow and stress into satisfaction.

THE THREE DILEMAS

Across industries and organizations, we consistently hear that employees are grappling with three interconnected dilemmas:

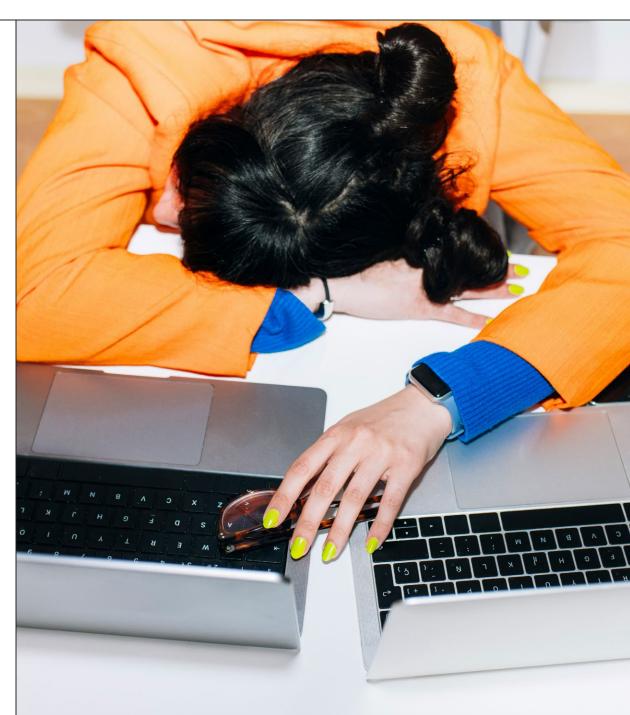




Burnout and fatigue, leading to dissatisfaction and diminished performance.

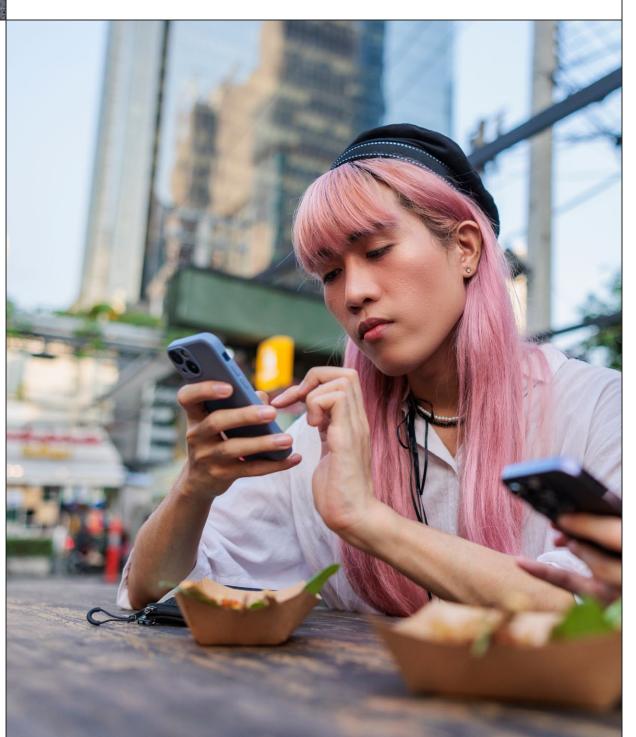
2

High stress levels that impact focus, decision-making, and wellbeing.



3

Disconnection from organizational purpose, reducing engagement and commitment.





Before exploring the Harmonic Principles, it's important to acknowledge one foundational strategy that supports them all: biophilic design.

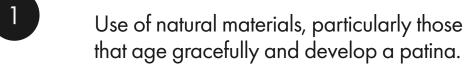
THE FOUNDATION

Grounded in neuroscience and environmental psychology, biophilic design leverages our innate connection to nature to reduce stress, sharpen focus, and elevate mood—key factors that directly influence productivity.

When thoughtfully integrated into an environment, biophilic elements such as natural light, greenery, and curvilinear forms can produce measurable gains in mental clarity and task performance. As a baseline design strategy, biophilia amplifies the impact of the Harmonics and ensures that productivity is supported from the ground up.

BIOPHILIC DESIGN

The following are illustrated in this example:



Less saturated, lighter surface colors.

Dynamic, circadian lighting.

Water feature.

Decorative elements help improve the room's overall acoustic comfort.

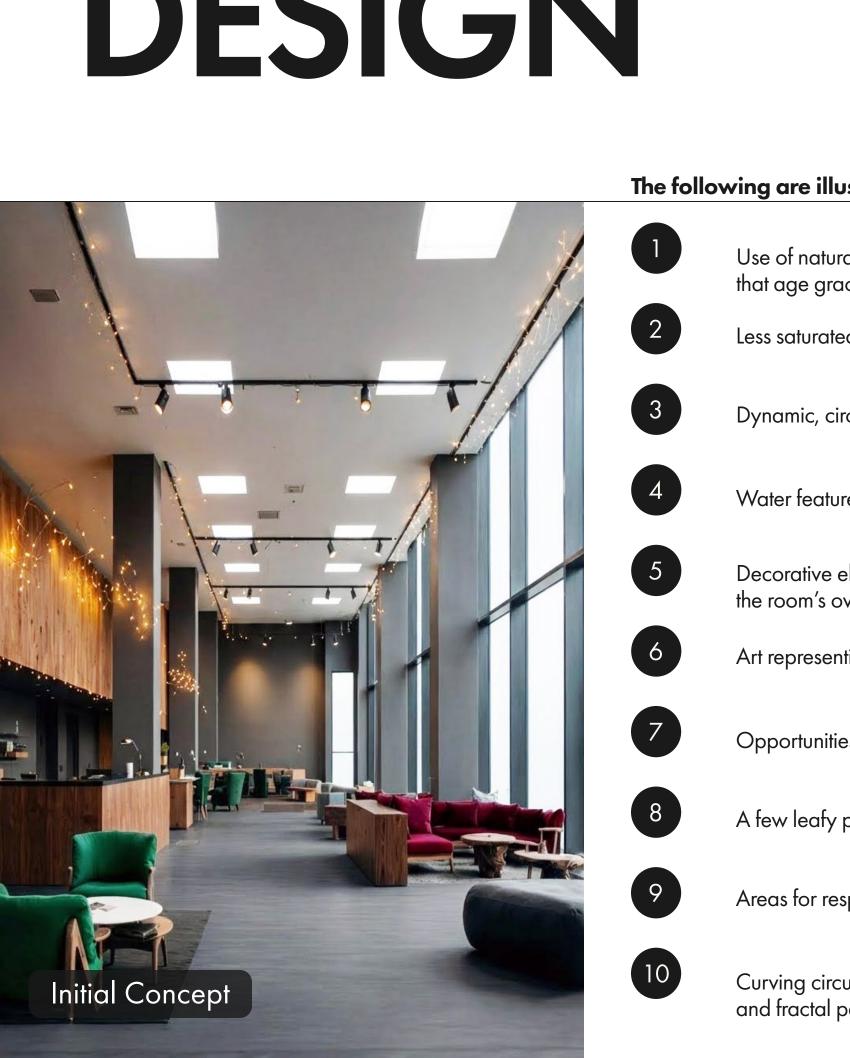
Art representing nature scenes.

Opportunities to stroll indoors or outdoors.

A few leafy plants.

Areas for respite and refuge.

Curving circulation routes and curvilinear and fractal patterns.







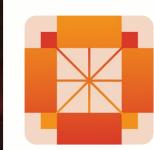
BIOPHILIC DESIGN

While biophilic design establishes a strong foundation for wellbeing and productivity, it is only the beginning. To address the deeper emotional, cognitive, and cultural challenges facing today's workforce, we must go further with our design and planning. This is where the Nine Harmonic Principles come in. **Building on the benefits of biophilia**, the Harmonics provide targeted, science-informed strategies that respond to real human dilemmas—rising stress, disconnection from purpose, and burnout.

THE HARMONIC PRINCIPLESTM

Applied intentionally, the Harmonics elevate the impact of biophilic design by aligning space with how people feel, focus, and connect. The following sections explore how these principles can be activated to turn today's challenges into measurable, resonant outcomes.

SPATIAL



POSITIVE AFFORDANCES

Design that intuitively promotes wellness, safety, and low stress levels via thoughtful views and circulation routes and by supporting pleasant sensory experiences and interactions with others

DESIGN FOR "ENCOURAGEMENT"



BESPOKE FLEXIBILITY

Spaces that empower individual and team analytical performance and where users can control work location and conditions, including, for instance, options to adjust territories.

DESIGN FOR "COMPETENCE"



EQUITABLE BEAUTY

Design where welcoming beauty resonates for all, through shared wonder, equity, and ethical sustainability.

DESIGN FOR "WELLBEING"

EXPERIENTIAL



SALIENT FEATURES

Carefully selected elements that intuitively guide attention and enhance constructive in-space experiences.

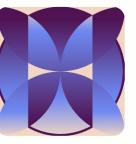
DESIGN FOR "SATISFACTION"



SENSORY RICHNESS

Varied sensory experiences that elevate users' moods.

DESIGN FOR "VIBRANCY"



SUSTAINABLE REVITALIZATION

Spaces and practices that nourish users for mental refreshment, for example absorbing contact with nature or people, hands on creative moments, physical exercise, or self reflection.

DESIGN FOR "REFLECTION"

RELATIONAL



COLLECTIVE GROWTH

Environments that sustain users professionally and psychologically to benefit the organization, team, and individual, in part via opportunities to connect and build relationships that allow for learning and development.

DESIGN FOR "FULFILLMENT"



ABSOLUTE INCLUSION

The holistic understanding of user diversity, personality, life experiences/training, and cultures guides decision making to generate options that boost bonds to others and to places.

DESIGN FOR "ATTACHMENT"



AUTHENTIC PURPOSE

Design that champions global, organizational, team, and individual needs to build shared passion and unity through meaningful space, activities, and experiences.

DESIGN FOR "MEANING"



HIGH STRESS LEVELS

44% OF U.S. EMPLOYEES REPORT FEELING OVERWHELMED BY EXCESSIVE WORKLOADS*

Today's work environments are often marked by constant stimulation, high demands, and limited recovery. As expectations rise and pace accelerates, many employees are left operating in a near-constant state of tension. This chronic stress doesn't just affect how people feel. It directly impairs concentration, creativity, decision-making, and long-term health. Even the most committed teams cannot sustain performance in environments that deplete more than they restore.

This first set of Harmonic Principles focuses on creating environments that reduce friction and promote ease, supporting users through intuitive layouts, calming sensory inputs, and emotionally intelligent spatial cues. When stress is addressed at the design level, people have more capacity to focus, connect, and perform with clarity and resilience.

POSITIVE AFFORDANCES

The following are illustrated in this example:



A variety of textures.

Glare is absent.

Space is fundamentally familiar.

5 Wayfinding signage is clear.

6 Relatively lighter colors.

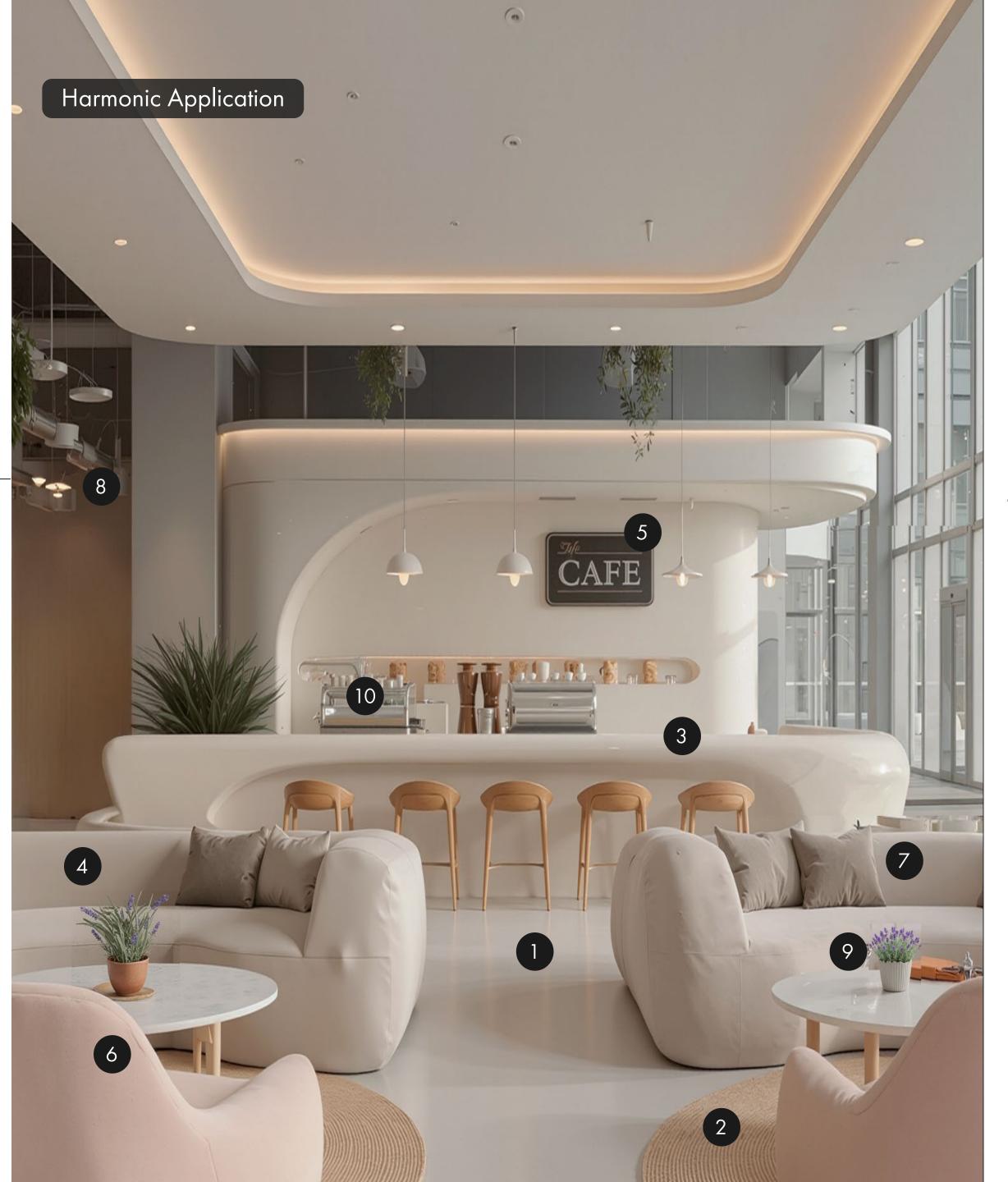
Support for desired social activities.

8 Sound-scaping present.

Pleasant and relaxing scents (such as lavender, florals, lemon, and vanilla).

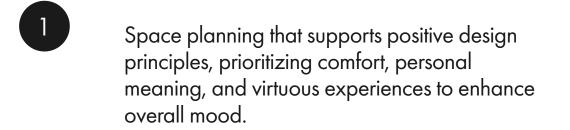
Positive non-verbal messages indicate users are valued.





EQUITABLE BEAUTY

The following are illustrated in this example:



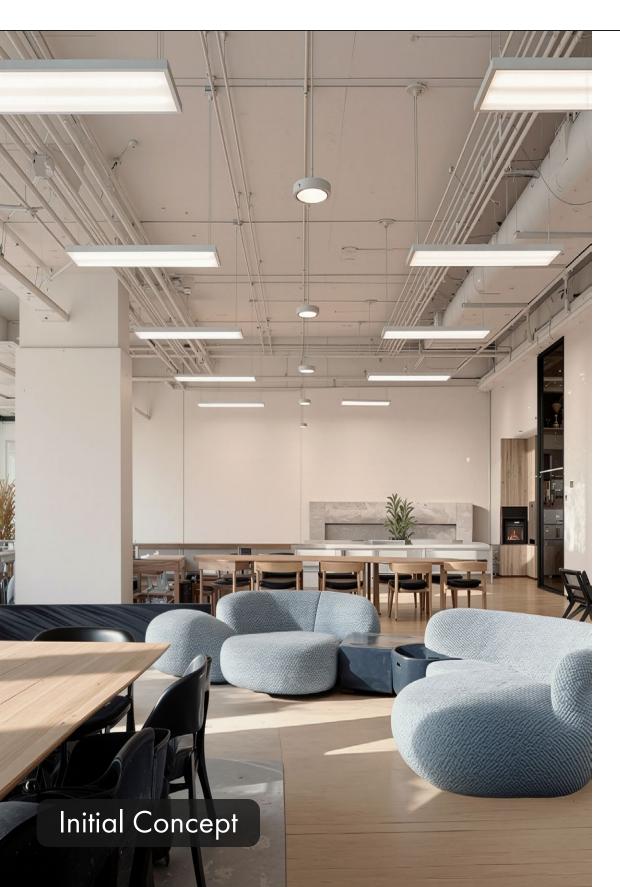
Inclusion of an awe-inspiring focal element, such as a piece of artwork or meaningful feature.

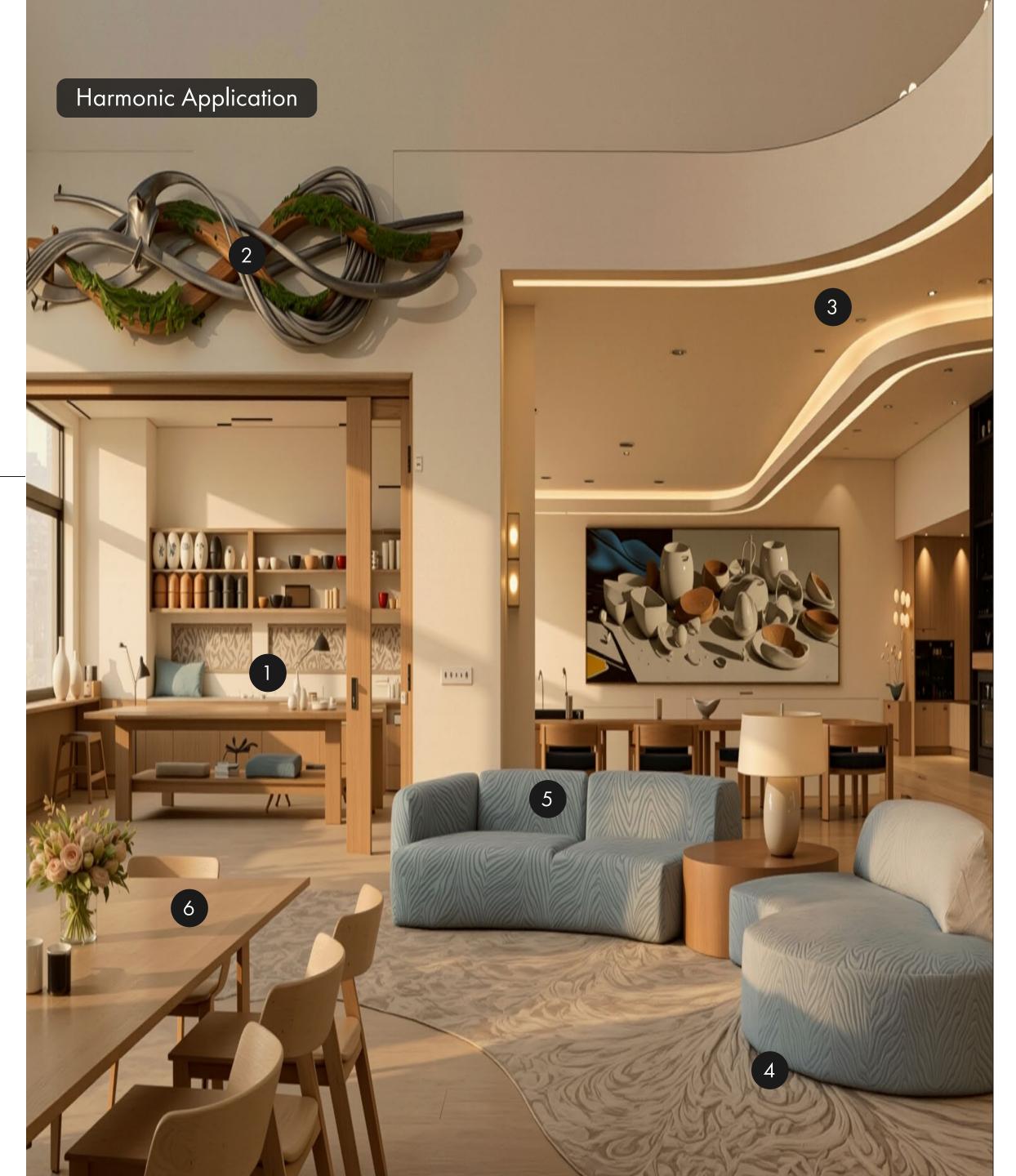
Warm, low-intensity lighting that differentiates the space from brighter surrounding areas.

Use of only a limited number of visual patterns (two to three), all sharing similar colors, shapes, or motifs for a cohesive aesthetic.

Opportunities for mental restoration through both biophilic (nature-based) and non-biophilic design elements.

A commitment to environmentally responsible, earth-friendly design strategies (3D printed furniture made from plant waste, for example).





LOW SENSE OF PURPOSE & ORGANIZATIONAL COMMITMENT

ONLY 15% OF FRONTLINE MANAGERS AND EMPLOYEES STATE THAT THEY ARE LIVING THEIR PURPOSE AT WORK.

A disconnect between employees and their organization's purpose can quietly erode performance, collaboration, and retention. When people struggle to see how their work contributes to something larger, or when the environment fails to reflect shared values, it becomes harder to sustain engagement over time.



DILEMMA #2

In the wake of significant cultural and workplace shifts, many individuals are reevaluating what matters to them professionally. They're seeking clarity, meaning, and a sense of belonging in the spaces where they spend much of their day. The Harmonic PrinciplesTM in this section focuses on reinforcing purpose, cultivating community, and creating opportunities for growth. Through intentional design, we can better align place with identity, both individual and organizational.

COLLECTIVE GROWTH

The following are illustrated in this example:



A few green leafy plants in place and smell of lavender.

Individual and group level personalization possible.

Warm surface colors.

5 Opportunities for casual interaction.

6 Cushioned seats.

All seats for any discussion have legs the same length.

8 Slightly more curving elements than straight.

Chance to take (graceful, polite) "eye contact breaks" during meetings.

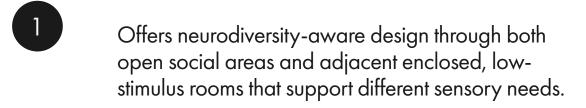
A range of space types to support multiple working, learning, and mentoring styles.

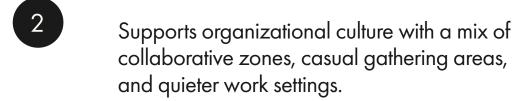




ABSOLUTE INCLUSION

The following are illustrated in this example:





Aligns with culture considerations (for example balancing communal seating with optional privacy).

Accommodates diverse personality types by providing highly social circular seating as well as secluded rooms and smaller individual areas.

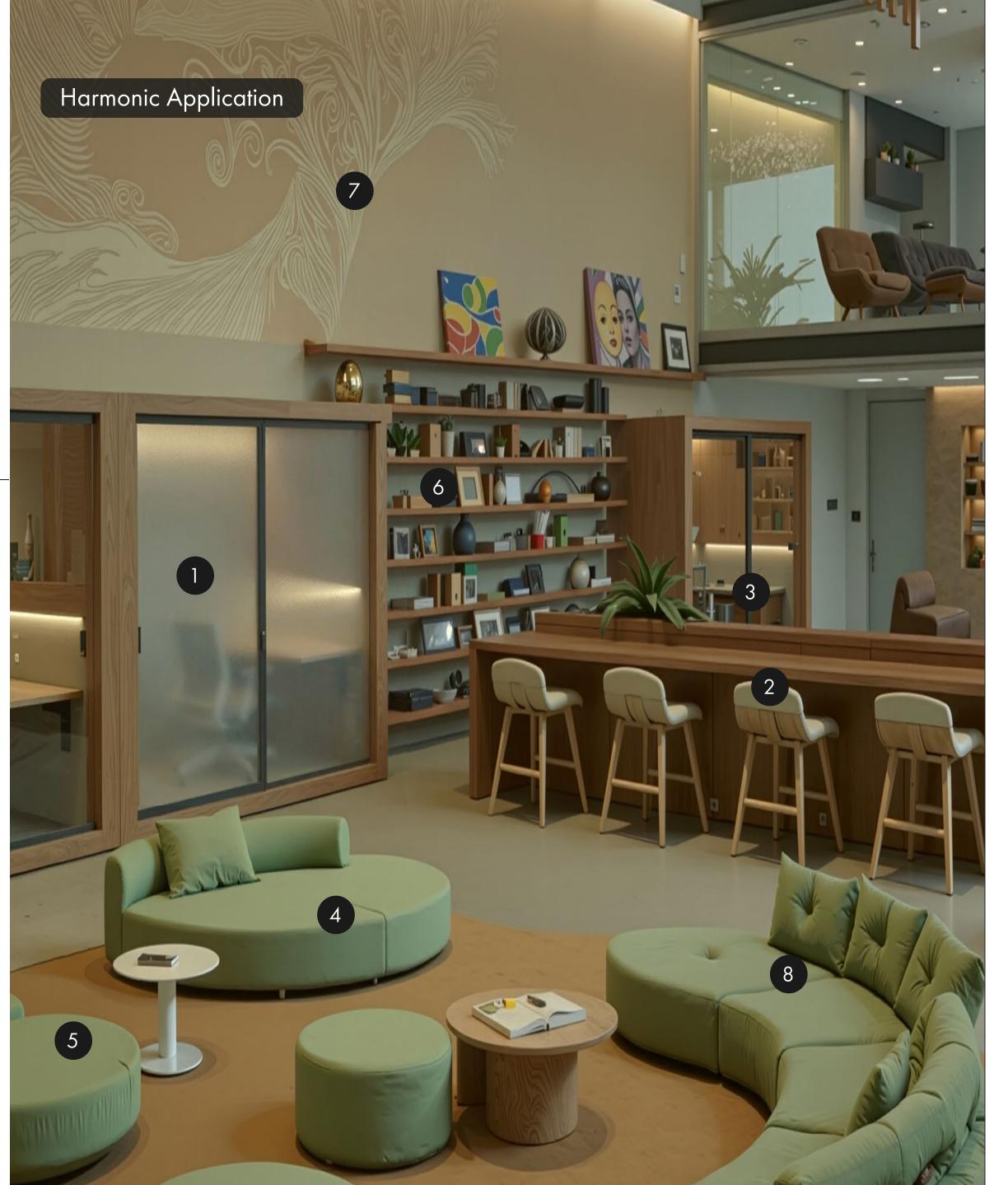
Provides comfort for different body shapes and sizes through varied seating forms, heights, and postures.

Creates meaningful and memorable experiences via distinctive art, biophilic elements, and expressive architectural features.

Sends positive nonverbal messages through soft shapes, natural finishes, inviting artwork, and a human-scaled layout.

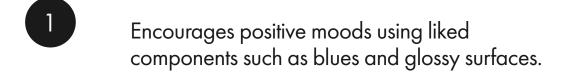
Allows personalization and customization with modular seating and shelving that can adapt.





AUTHENTIC PURPOSE

The following are illustrated in this example:



Positive nonverbal messages to users, indicating that they are respected and their contributions to organizational success recognized.

Present preferred conditions (generally or group specific).

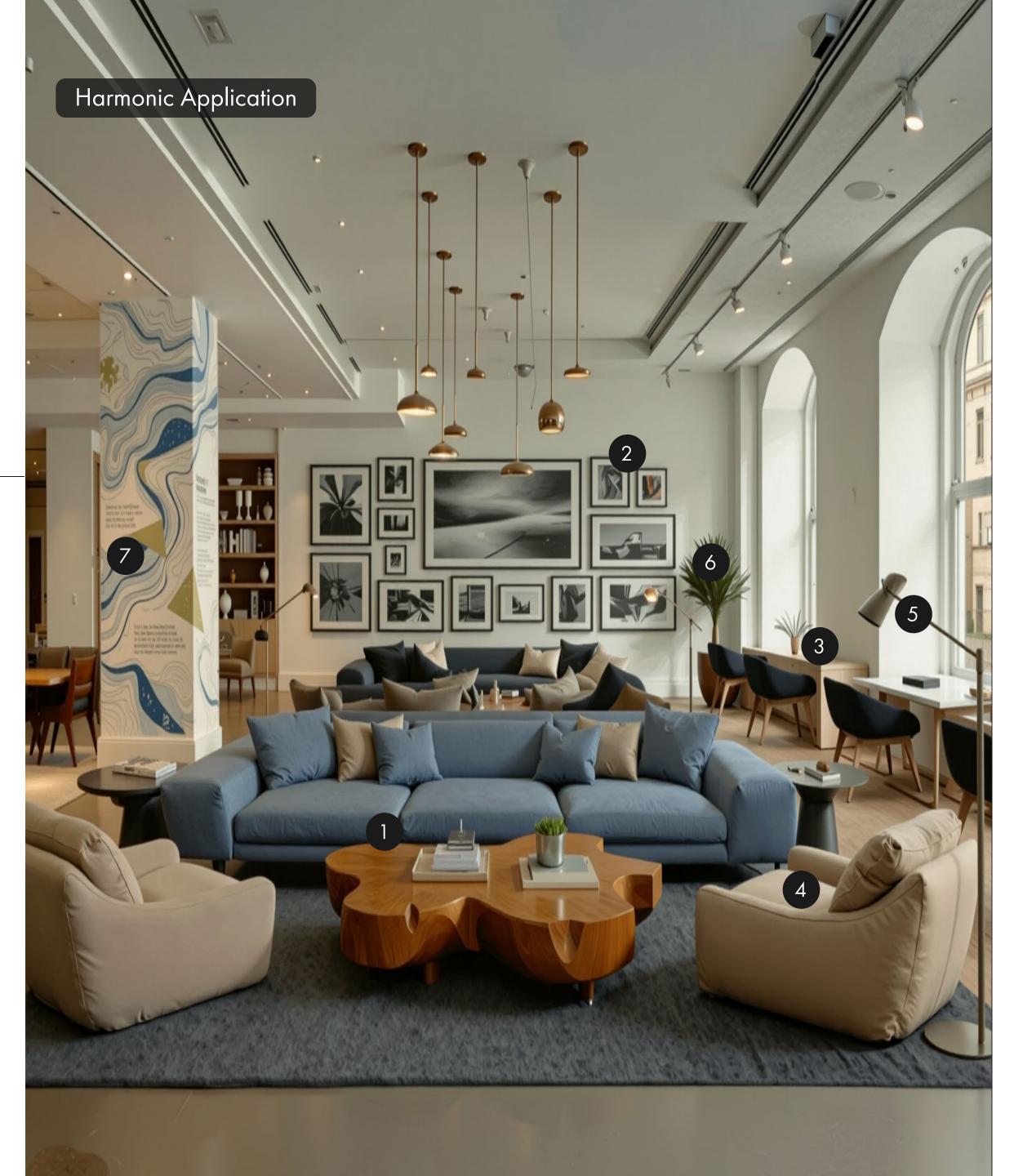
Form aligned with probable potential activities in the space.

Comfortable levels of environmental control.

A few green leafy plants.

Alignment with organizational mission/values.







66% REPORT FEELING BURNED OUT AT WORK

Burnout has become a persistent reality in many workplaces,

fueled by extended workloads, constant digital engagement, and environments that offer little room for recovery. While designed for operational efficiency, many office settings fall short in supporting the cognitive and emotional needs of those who use them.

DILEMMA #3

Addressing burnout through design means creating environments that balance focus with flexibility and productivity with restoration. The Harmonic PrinciplesTM in this section support that shift by emphasizing user autonomy, sensory variety, and opportunities for mental reset—elements that contribute to more sustainable performance over time.

Robinson, Bryan. "Job Burnout at 66% in 2025, New Study Shows." Forbes, Feb. 2025.

Harmonic Application

The following are illustrated in this example:



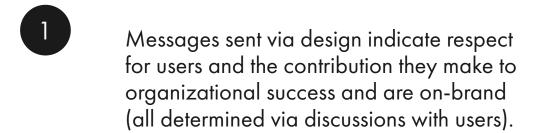
- Non-biophilic refreshment options in place, such as crafting.
- Lighting relatively cool and brighter than in other areas.
- Sightlines to colleagues/teammates.
- Audio distractions eliminated (potentially with white noise).
- Comfortable levels of environmental control.
- Team or conference rooms, particularly if activity-based working.
- Enough private space to provide ready access for the majority of people present.
- Conference/team rooms support the range of reasons people meet.
- Scents linked to better mental performance present, such as lemon.



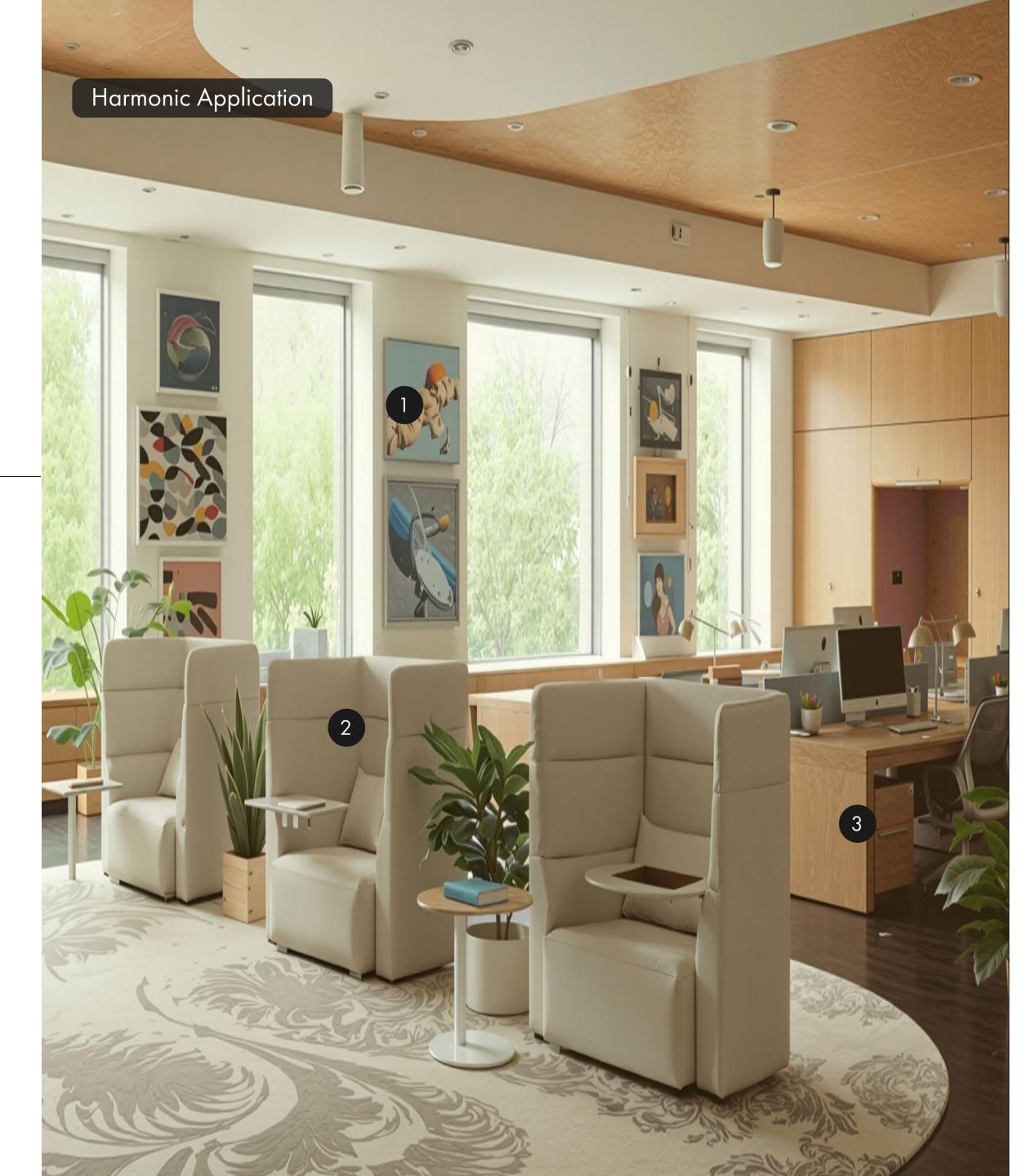
HARMONIC PRINCIPLE FOR BURNOUT & DISCONTENT

SALIENT FEATURES





- Users can tailor their experience of a place, physical or digital, to reflect their self-concept and what they value most.
- User perceptions are carefully considered, and end users are closely engaged throughout the design process (for example, when determining storage needs or selecting material preferences such as wood versus metal desks).

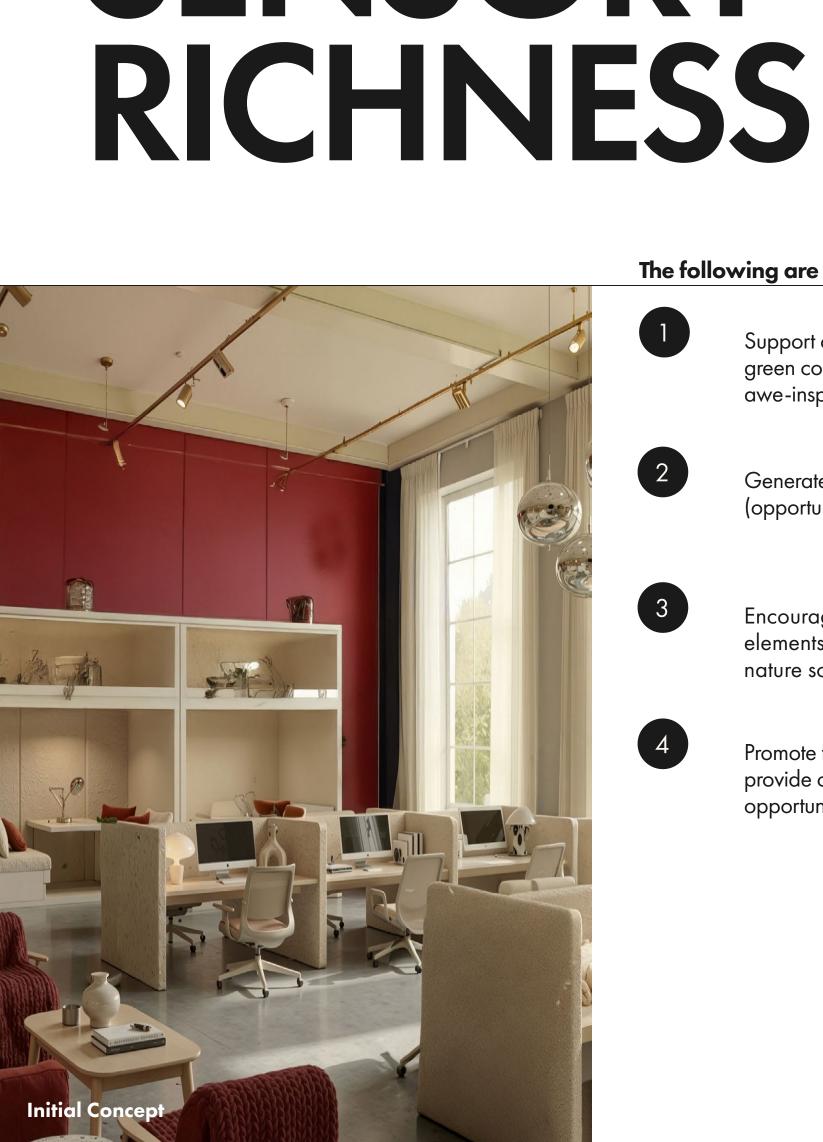


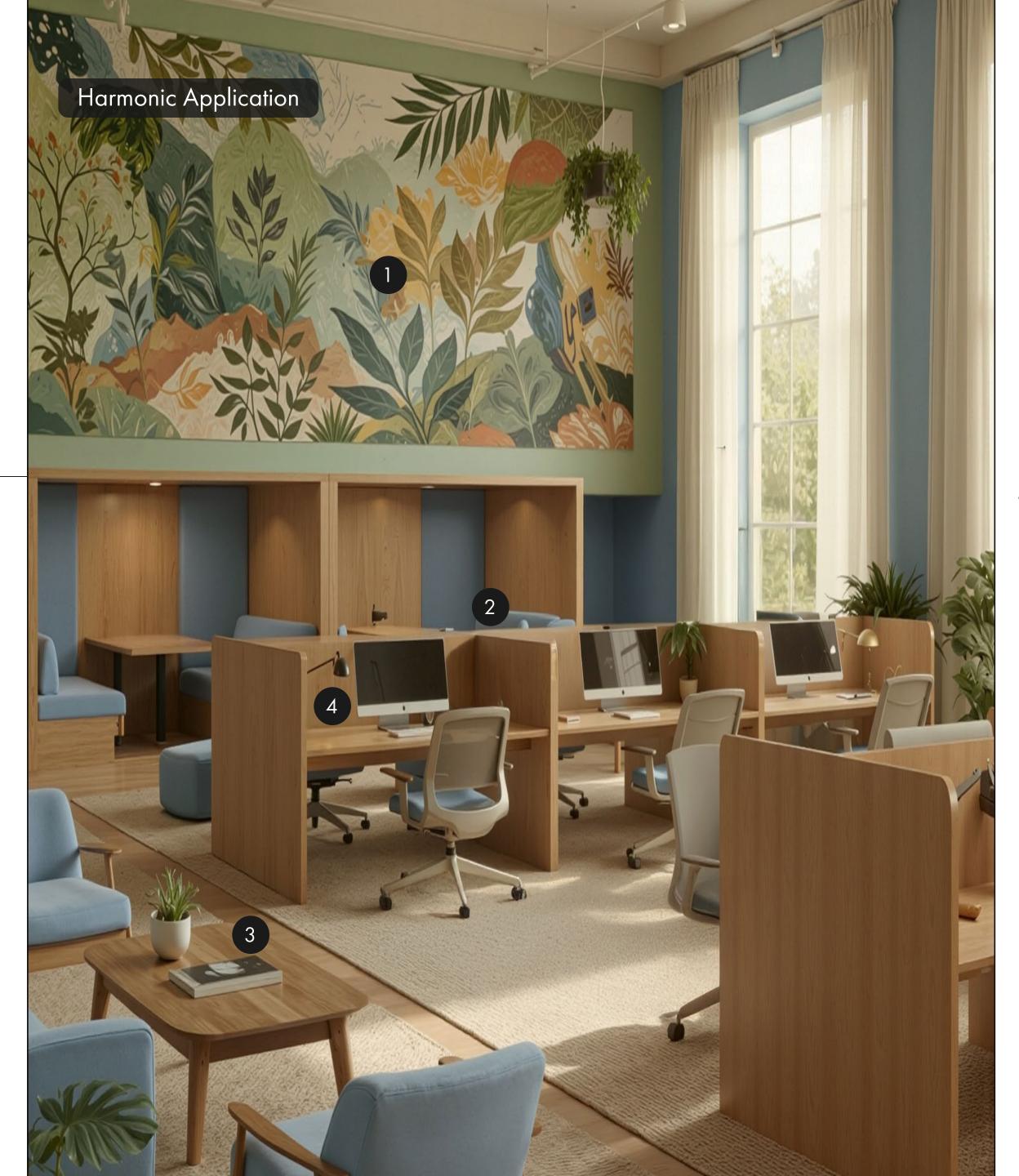


SENSORY

The following are illustrated in this example:

- Support creative performance (use of blue and green colors, natural light, art, cushioned seats, awe-inspiring).
- Generate a positive social atmosphere (opportunities for casual interaction among users).
- Encourage positive moods using liked elements (warmer light, glossy surfaces, nature soundscapes).
- Promote flow states (support concentration, provide comfortable levels of environmental control, opportunities for mental reset present).

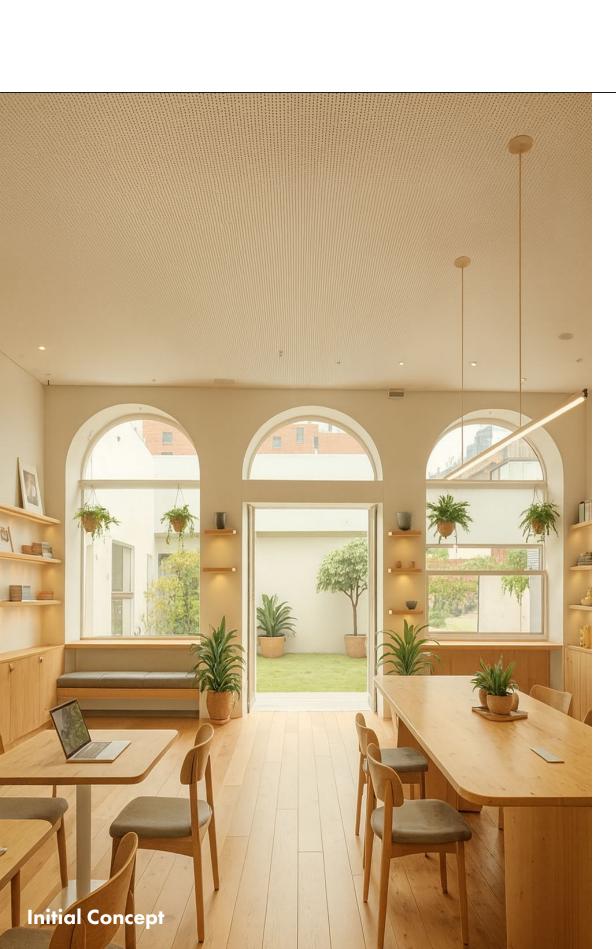


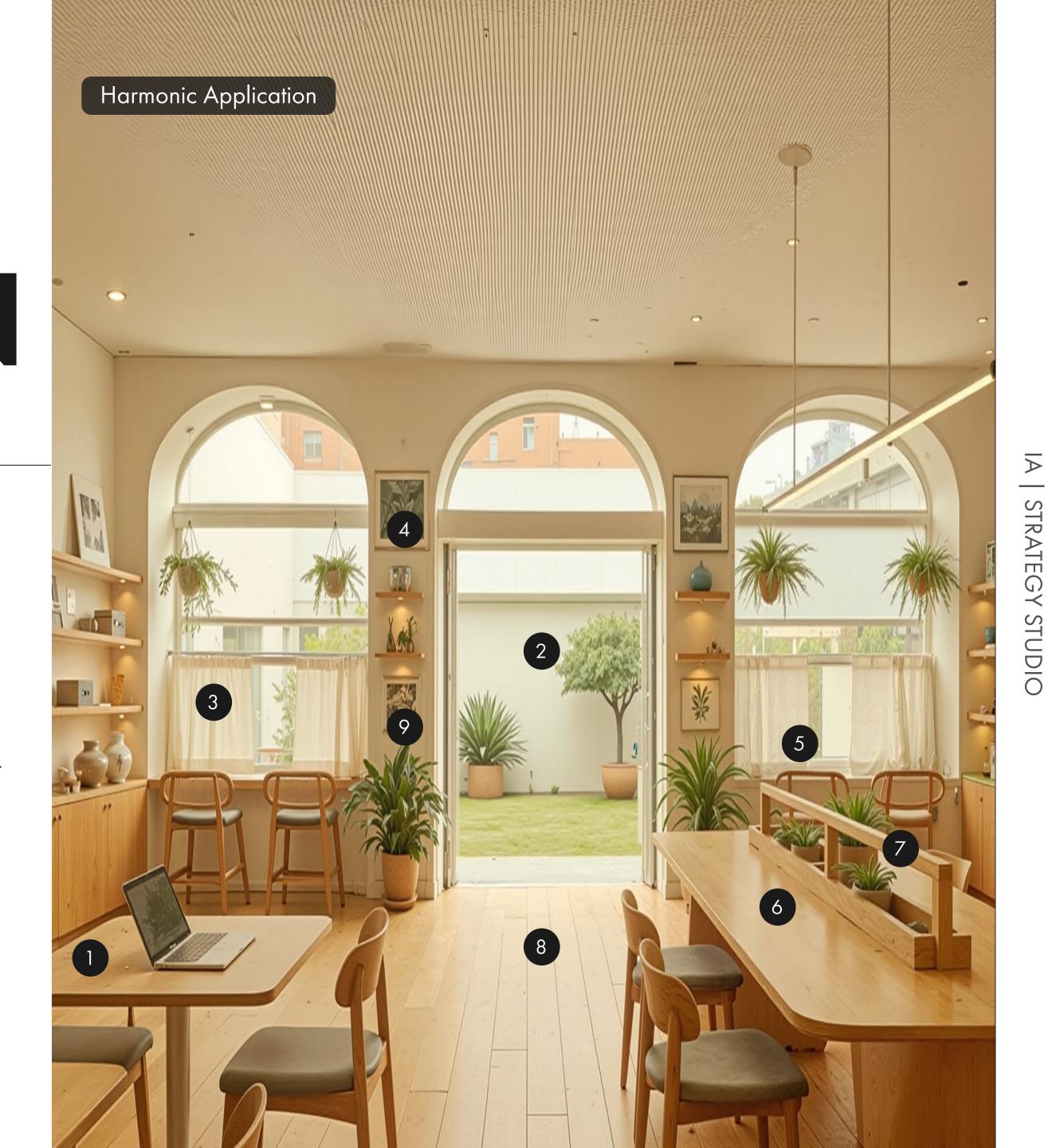


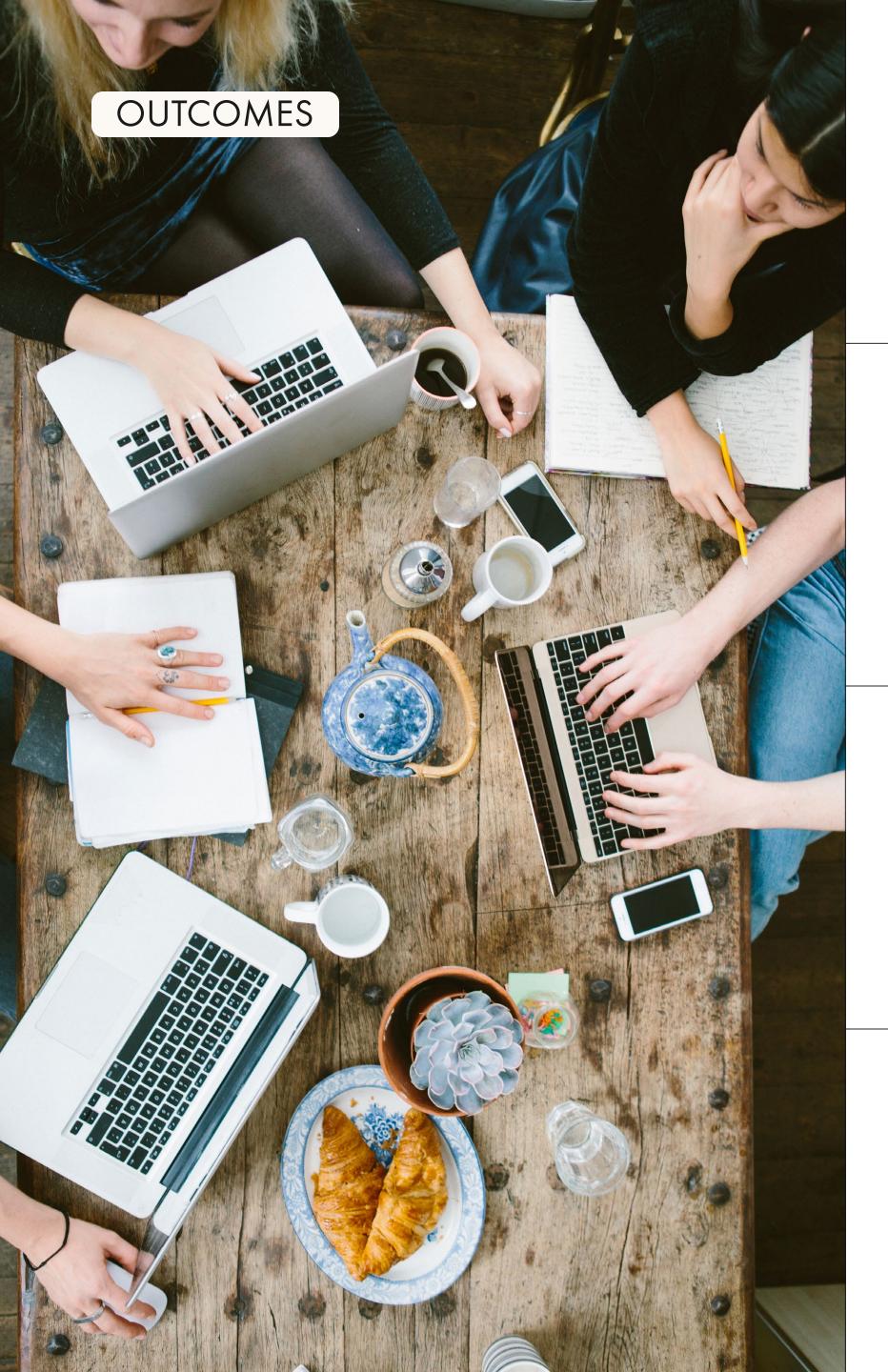
The following are illustrated in this example:



- Opportunities for mental reset.
- Comfortable levels of environmental control.
- Positive nonverbal messages sent, identified via discussions with users.
- Positive social atmosphere, one that builds community.
- Environment seems safe and secure to users.
- Minimal exposure to potential mental-distress triggers.
- Long-term perspective/concern about design, wellbeing, etc.
- Nature views, natural materials, a few green leafy plants in place. Nature art present.







BIOPHILIC DESIGN

Applied universally, biophilic design can increase productivity by approximately 0.7% to 2%.

POSITIVE AFFORDANCES & EQUITABLE BEAUTY

Positive Affordances and Equitable Beauty can drive gains of up to 0.5% to 1% when used to address stress-related challenges.

COLLECTIVE GROWTH & ABSOLUTE INCLUSION

Collective Growth and Absolute Inclusion support connection, purpose, and cultural alignment, contributing to productivity increases of up to 0.7% to 1.5%.

BESPOKE FLEXIBILITY, SALIENT FEATURES,& SENSORY RICHNESS

Bespoke Flexibility, Salient Features, and Sensory Richness address burnout, focus, and creative performance, with gains of up to 0.5% to 2%...

OUTCOMES

QUANTIFYING GOOD DESIGN

(per 100 employees, conservative, research-based estimate)

ABSENTEEISM



0.4-1.5%

\$60K-\$225K cost avoided annually

(Based on National US average unplanned absence rate of 3.4% and a 1.28 coverage factor)

TURNOVER



-1.3%

\$105K cost avoided annually

(Assumes 90% turnover cost per SHRM direct/indirect costs & 13.5% avg voluntary turnover rate)

PERFORMANCE



+2-10%

\$700K-\$3.5M potential gained annually

(Based on a \$10M annual revenue benchmark
/ \$100K per FTE)

JOB SATISFACTION



+1.3%

\$40K cost avoided annually

(Assumes ~34% of annual salary is lost in productivity by avg of 17% actively disengaged workers per Gallup)

TOTAL ANNUAL BENEFIT

\$800 K-\$3.8M

A 2 percent improvement may appear modest at first glance, but at scale it represents a meaningful gain. For an organization of 100 employees, even small percentage shifts translate into hundreds of thousands of dollars in retained value and measurable increases in productivity, engagement, and operational efficiency.



OUTCOMES

It's important to note that performance improvements are closely tied to the starting conditions of a workplace—the greater the gap between where you begin and where you're headed, the more dramatic the potential impact. For example, a transition from a poorly designed environment to one designed with intention can yield more noticeable gains than refining a space that's already performing well.

Additionally, while multiple Harmonics can be applied together to address layered challenges, their impact on performance tends to level off over time. The greatest gains come from aligning the right principles to the most pressing needs, resulting in a potential productivity increase of up to approximately 4% when optimally applied.

CASE STUDY

IA'S SEATTLE STUDIO: A FUTURE READY WORKPLACE POWERED BY HARMONIC PRINCIPLESTM

Organizations everywhere are grappling with a common challenge: rebuilding the social fabric of work. When IA's Seattle studio set out to create a new workplace, they viewed it as an opportunity to draw a line in the sand and intentionally shape a new era for their people. After several years of industry fluctuations, the team recognized the need to pause, reflect, and understand how their existing environment was supporting or failing their workforce.

Designing workplaces for the humans who use them is no longer optional; it is a strategic imperative. Research consistently shows that environments that support genuine interpersonal connection, psychological safety, and shared purpose directly enhance organizational culture and performance. Employees who feel meaningfully connected to their organization are more resilient, more productive, and more likely to stay. In a landscape defined by hybrid work and constant change, creating spaces that foster both human connection and organizational belonging has become essential to building high-performing, future-ready companies.

Guided by the Harmonic Principles, our new Seattle workplace is designed to bring people together through shared experiences. In an increasingly VUCA world, these elements help reinforce employees' connection to the organization and to one another.

SPATIAL HARMONY



POSITIVE AFFORDANCES Reducing Stress & Strengthening Spatial Confidence

Clear destinations, open sightlines, and wellness zones remove friction and cognitive strain. These features reduce stress, elevate physical comfort, and support users' sense of competence and control.



BESPOKE FLEXIBILITY Empowering User Agency

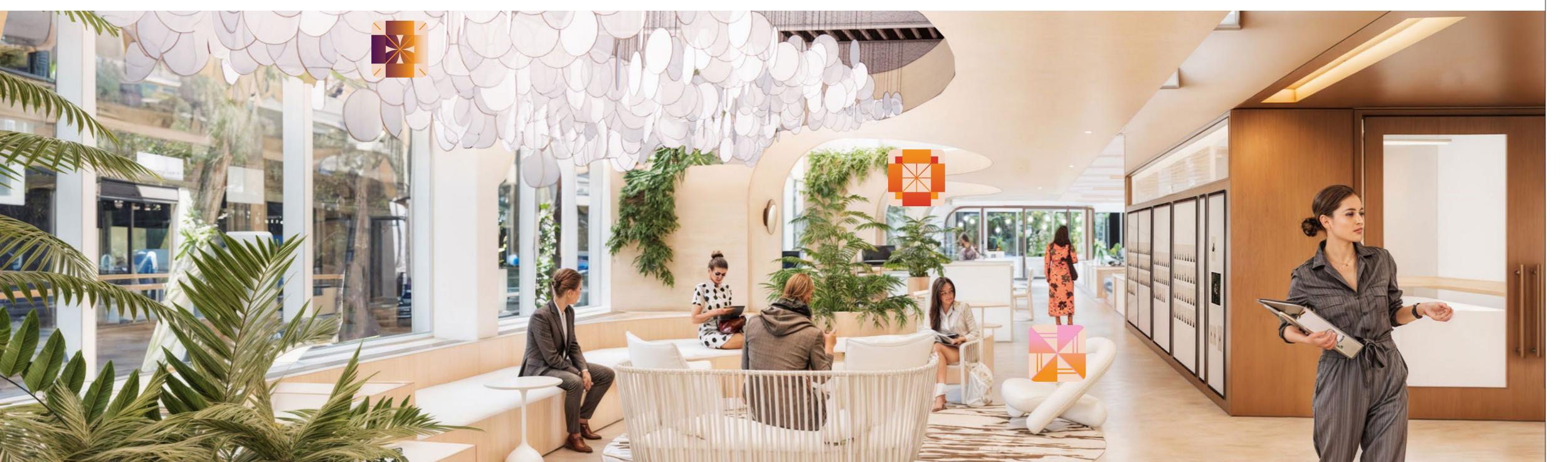
Choice is central to belonging. Workstations, café zones, and touchdown spaces offer multiple modalities for collaboration and focus. Engaging users in how workstations are assigned and experienced strengthens territoriality, memory formation, and emotional ownership of the space.



EQUITABLE BEAUTY

Fostering Joy, Inclusivity, & Shared Pride

Drawing from sustainable materials, cultural influences, and local narratives, the studio creates beauty that is accessible and inclusive. Light-filled spaces and curated artwork evoke delight, strengthening community and belonging.



EXPERIENTIAL HARMONY



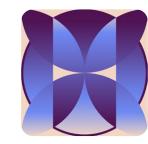
SENSORY RICHNESS Enabling Creativity, Focus, & Emotional Tone

A multi-sensory palette of textures, lighting, biophilia, scent, and acoustic diversity empowers people to choose the level of stimulation they need. This flexibility supports both creative exploration and focused productivity, enhancing workplace satisfaction while reinforcing autonomy.



SUSTAINABLE REVITALIZATION Supporting Mental Health & Restoration

Post-pandemic work rhythms demand more intentional recovery. Quiet lounges, retreat zones, and micro-restorative spaces allow users to reset and protect mental wellbeing. These moments of respite are essential in preventing burnout and sustaining long-term engagement.



SALIENT FEATURES Creating Emotional & Cognitive Connection

Framed views, sculptural ceiling gestures, and intuitive wayfinding guide users effortlessly. These elements make the environment not only easy to navigate but deeply memorable, supporting place attachment and enabling users to succeed in their work with confidence and clarity.





COLLECTIVE GROWTH Rebuilding Social Atmosphere & Mentorship

Collaboration zones, lounges, and spaces offering flexible privacy are designed to spark cross-functional interaction, support professional development, and restore social cohesion lost during remote years. The result is a workplace where relationships can thrive again.



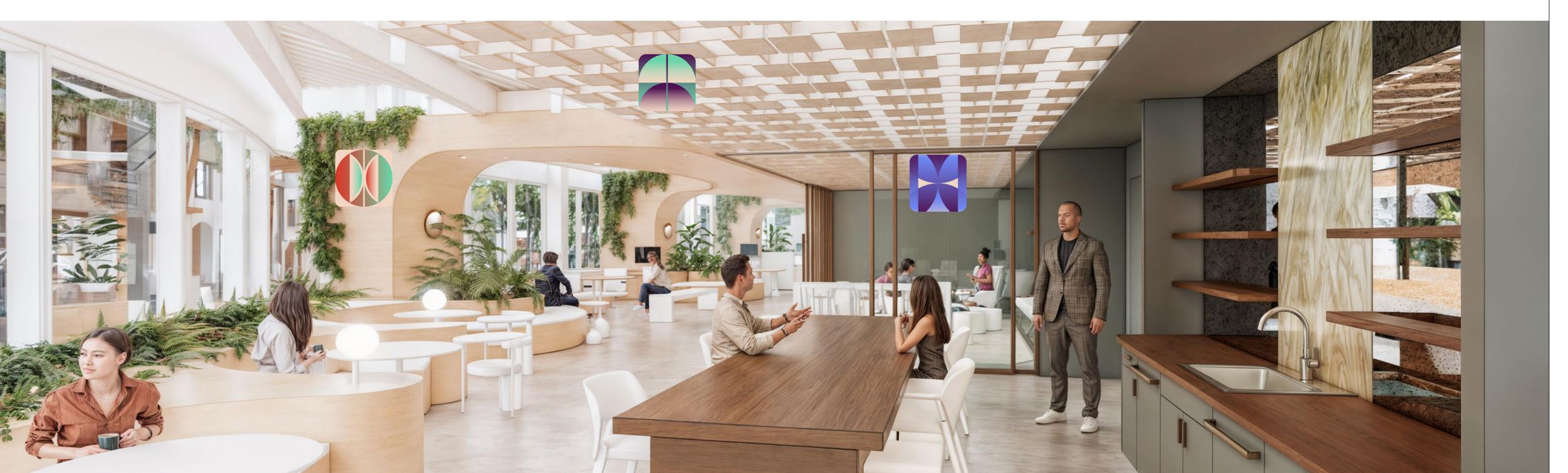
ABSOLUTE INCLUSION Creating a Space Where Everyone Belongs

The Design Studio's embraces diverse sensory, cultural, and cognitive needs. Micro zones, assistive technologies, and intuitive wayfinding ensure that every user can access, navigate, and form meaningful attachments to the space.



AUTHENTIC PURPOSE Embedding Culture Into Every Moment

The design translates the organization's mission, values, and identity into a tangible, lived experience. Through intentional material choices, purposeful spatial organization, and curated storytelling woven throughout the environment, the design communicates authenticity and meaning at every turn.



THE DATA

The post-occupancy Harmonic Assessment shows a strong overall improvement across all measures, with the total average score rising from 3.3 to 4.1. The most significant gains occurred in Identification with Place, Place Attachment, Workplace Satisfaction, and Wellbeing, indicating that the new environment meaningfully strengthened emotional connection, comfort, and daily experience.

Harmonic Assessment Survey Results



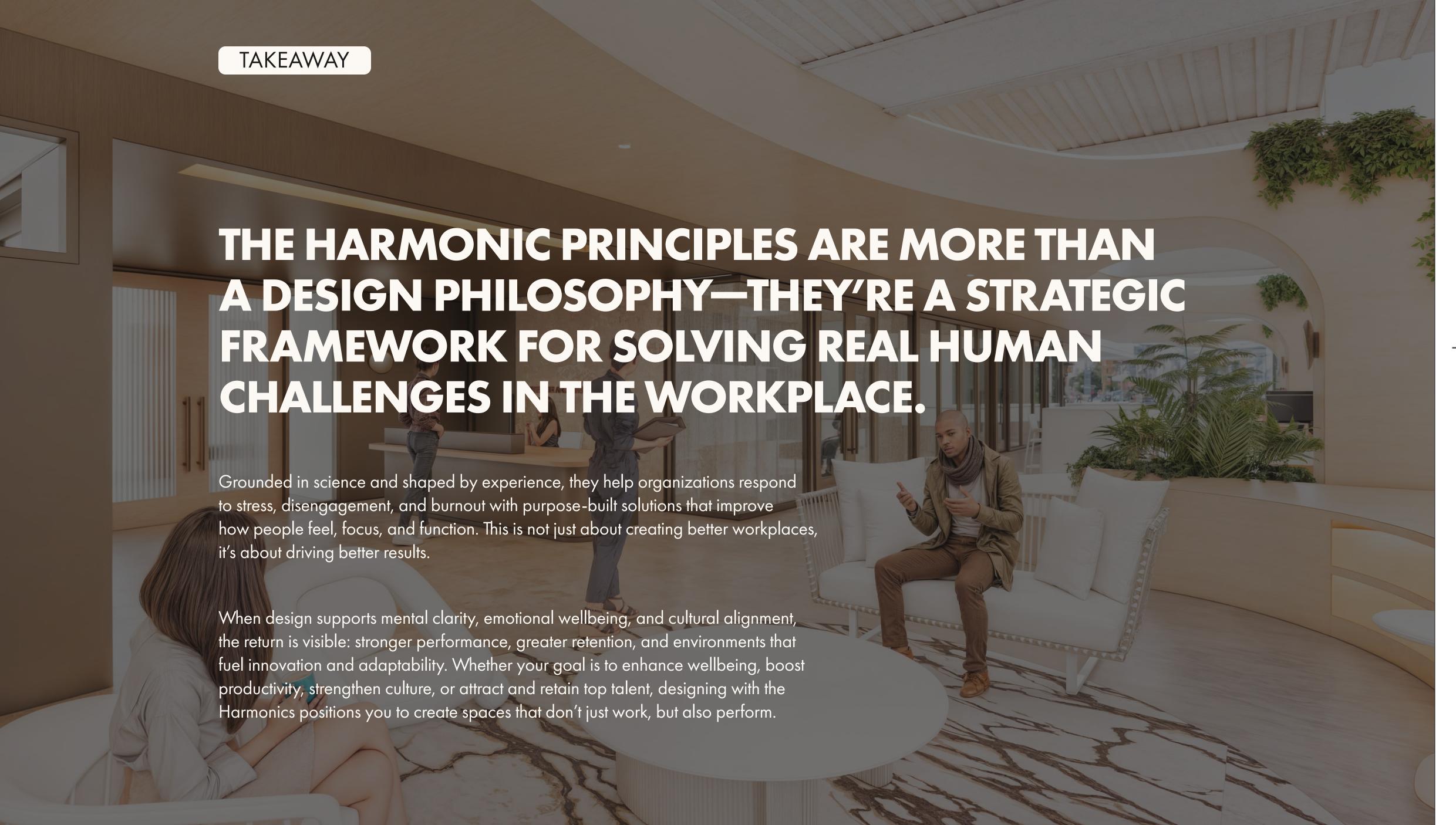
Primary Measure	Avg Score (Pre)	Avg Score (Post)	Score Differential
Stress Levels	4.2	4.3	0.07
Analytical Performance	3.4	3.8	0.43
Wellbeing	3.1	4.6	1.41
Identification with Place	1.9	4.6	2.69
Workplace Satisfaction	3.0	4.6	1.58
Social Atmosphere	3.0	4.4	1.40
Creativity	3.2	4.0	0.82
Burnout	3.8	4.1	0.33
Organizational Commitment	4.0	4.4	0.39
Job Satisfaction	3.9	4.4	0.47
Resilience	3.5	3.8	0.36
Place Attachment	2.9	4.8	1.90
Engagement	3.2	3.8	0.66
Total	3.3	4.1	0.85



Note: More area covered indicates stronger performance

Larger, more extended points demonstrate positive change across all categories.





STRATEGY LEADERSHIP



VALERIE JARDON

MANAGING DIRECTOR | STRATEGY

Valerie is the Managing Director of Strategy and a specialist in strategic foresight. She brings extensive experience in creating spaces that balance design, business objectives, and human wellbeing. Combining deep design expertise with a strategic business approach, she delivers impactful, sustainable environments.

Contact Valerie vjardon@interiorarchitects.com



RICHARD LOTT
STRATEGY DIRECTOR

A recognized and trusted expert in leading clients through difficult change with 20+ years working in the UK, Europe, Middle East and US focused on architecture, workplace strategy, placemaking, and future of work.



HOLLY JEFFERS
DIRECTOR OF ANALYTICS

Holly translates complex data into actionable insights. She conducts large-scale data collection and analysis, including surveys, forecasting, and project health assessments to support strategic planning and client initiatives.



TRACIE LEAR
SENIOR STRATEGIST

Tracie has 15 years of experience in change management and implementing data-driven solutions across domestic and international organizations, from startups to Fortune 500 companies. She holds a degree in Industrial-Organizational Psychology and is a certified LEAN Green Belt and change management practitioner.



ANNALISA PAO INTERMEDIATE STRATEGIST

Annalisa Pao is a designer and anthropologist driven by a passion for understanding how relationships between people, objects, and environments shape society and culture.



DR. SALLY AUGUSTIN
DESIGN SCIENTIST

Sally is a practicing environmental and design psychologist with extensive experience applying science-based insights to inform the design of spaces, objects, and services that support desired cognitive, emotional, and physical experiences.

ADDITIONAL READING

Appel-Meulenbroek, Rianne, and Vitalija Danivska. A Handbook of Theories on Designing Alignment Between People and the Office Environment. Routledge, 2021.

Appel-Meulenbroek, Rianne, and Vitalija Danivska, eds. A Handbook of Management Theories and Models for Office Environments and Services. Routledge, 2022.

Augustin, Sally. Place Advantage: Applied Psychology for Interior Architecture. John Wiley & Sons, 2009.

Augustin, Sally. Designology. Turner Publishing Company, 2019.

Augustin, Sally, and Nigel Oseland, eds. The Science of People and Office Design: Planning for Thinking, Discussing and Achieving. Routledge, 2024.

Ayoko, Oluremi, and Neal Ashkanasy, eds. Organizational Behaviour and the Physical Environment. Routledge, 2020.

Candido, Christhina, Iva Durakovic, and Samin Marzban, eds. Routledge Handbook of High-Performance Workplaces. Routledge, 2024.

Kellert, Stephen R., Judith Heerwagen, and Martin Mador, eds. Biophilic Design: The Theory, Science and Practice of Bringing Buildings to Life. John Wiley & Sons, 2008.

Ryan, Catie, Bill Browning, and Dakota Walker. The Economics of Biophilia: Why Designing with Nature in Mind Makes Financial Sense. 2nd ed., Terrapin Bright Green, 2023.

Newsham, Guy, Jennifer Veitch, Yanfeng Zhang, and Anca Galasiu. "Effects of the Physical Environment on Occupant Outcomes in Office Buildings." Intelligent Buildings International, vol. 14, no. 1, 2022, pp. 3–22.

Magsamen, Susan, and Ivy Ross. Your Brain on Art: How the Arts Transform Us. Random House, 2023.

Gallup. State of the Global Workplace. Gallup, 2020; 2025.

SHRM and Kronos. Workforce Institute Research Reports. 2025.

APQC. Workplace Productivity and Performance Benchmarks. APQC, 2024.

Paycor. HR and Workforce Trends Reports. Paycor, n.d.

U.S. Small Business Administration. Workforce and Productivity Data. SBA, n.d.

Wharton School, University of Pennsylvania. Organizational Behavior and Workplace Research. Wharton, n.d.

PRODUCTIVITY-AWARE HARMONIC DESIGN



