

Neuroscience- Backed Event Design

Strategies to Engage & Inspire
Attendees



**What type of
meetings or
events is this
for?**



Hackathons

Conferences

Ask Me
Anything
(AMA's)

Product
Launches

Town Halls

Hybrid
Events

Company
Wide Events

Sales &
Marketing
Meetings

Networking

Meetups

Keynotes

Party

Graduations

Retreats

Expos /
Tradeshows

Awards &
Recognition
Galas

User Events

Health &
Wellbeing
Sessions

Gaming / E-
Sports

Private
Dinners

Career
Fairs

User Groups

Facilitated
Workshops

Summits

Trainings

Annual /
Quarterly
Meetings

Exhibitions

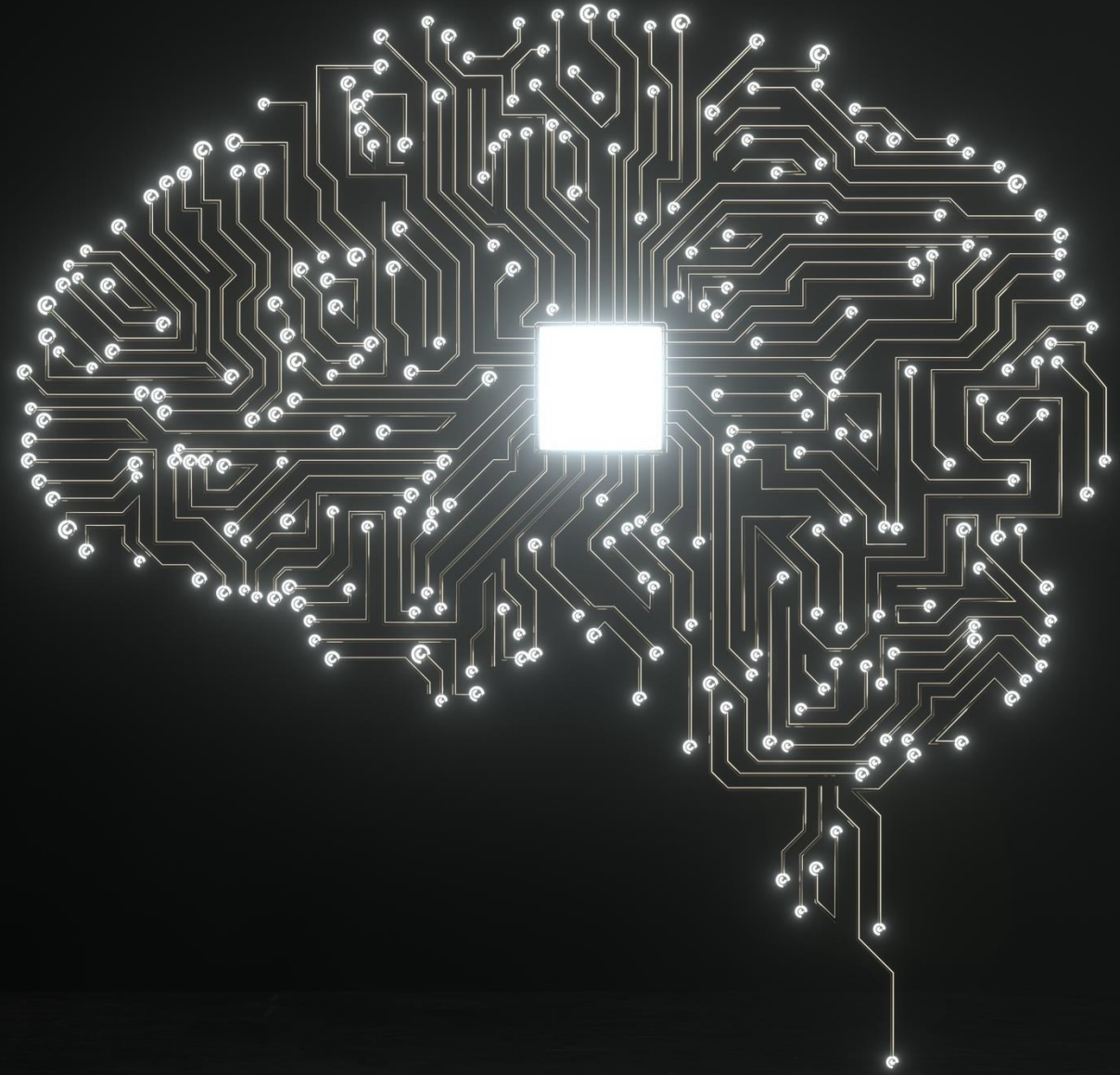
VIP
Experiences

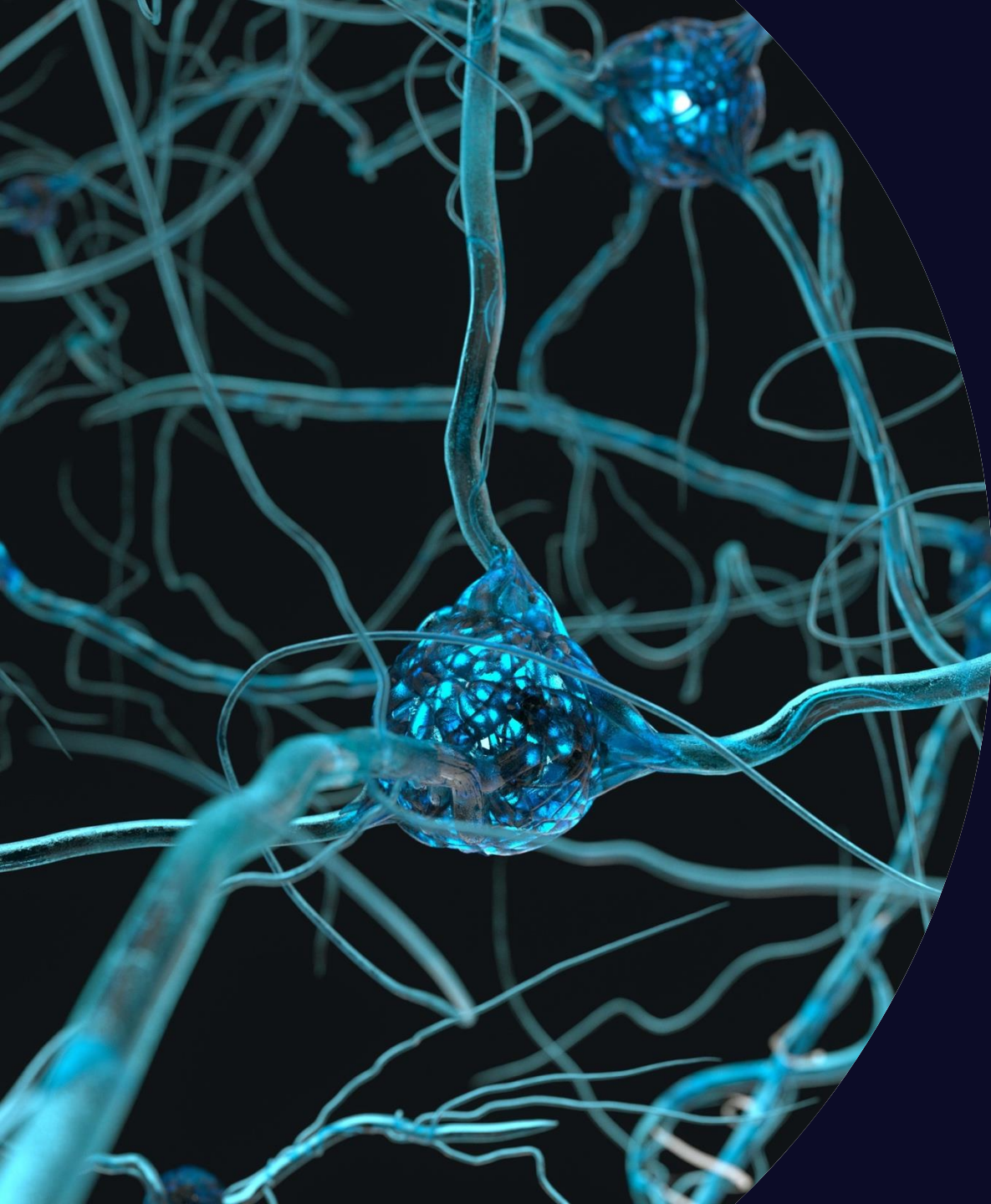


Who Are You Designing For?



Let's Talk About the Brain...





The brain is made of up neurons...

... 86 Billion of them

Parietal Lobe

Engagement

- Processes sensory input, helping attendees stay engaged with multisensory experiences.

Basil Ganglia

Engagement

- Associated with habit formation and reward processing, encouraging continued engagement

Hippocampus

Memory

- Responsible for forming and storing new memories
- Plays a critical role in spatial navigation and learning

Prefrontal Cortex

Memory

- Involved in working memory and decision-making
- Helps integrate new information with prior knowledge for better recall

Engagement

- Governs focus, attention and executive functions
- Engages when solving problems or participating in interactive activities

Nucleus Accumbens

Emotion

- Part of the brain's reward system, releases dopamine in response to positive experiences and novelty.

Amygdala

Emotion

- Activates during emotionally charged or impactful experiences



Why Neuroscience Belongs in Meetings & Events



Your **BRAIN** deserves
BETTER EVENTS





How Can We Engage the Brain During Events?

Six Cognitive Cornerstones

01

Attention

02

Memory Formation

03

Multisensory Activation

04

Psychological Safety

05

Social & Emotional
Bonds

06

Cognitive Load



Attention Systems

Use **NOVELTY** to
CAPTURE your
attendee's **FOCUS**

The Biology of Attention

Your brain lights up when something new appears



Why Attention Fades

Brain circuits tire after 10-15 minutes of nonstop input



Use **PATTERN**
INTERRUPTS to
RECAPTURE your
attendee's **ATTENTION**





Neuro-Event Design Tip

Conference Keynote:

At minute 7, drop in a 30-second live word-cloud poll to reset focus

Museum or Site Tour

Halfway through, unveil an unplanned “secret exhibit” room, announced by tour guide to jolt curiosity

Esports Tournament

Between matches, cue a 60-second crowd “cheer challenge” on the big screen



Memory Formation

Use **CUES** to
ANCHOR your
attendee's **MEMORIES**

The Biology of Memory

**Your brain stores and recalls
the moments that matter**



Why Memories Matter

Without strong retrieval cues, most insights vanish fast.





Neuro-Event Design Tip

Guide Tour

Give each guest a card to stamp at key stops. (e.g. five landmark exhibits)

Product Launch Expo Booth

Scan-to-unlock and AR overlay showcasing your product's top three features providing interactive reinforcement for long-term recall

Sales Kick-Off Meeting

Send a 5-question micro-quiz via email 24 hours post event. Top scorers earn a spotlight in the next all-hands newsletter

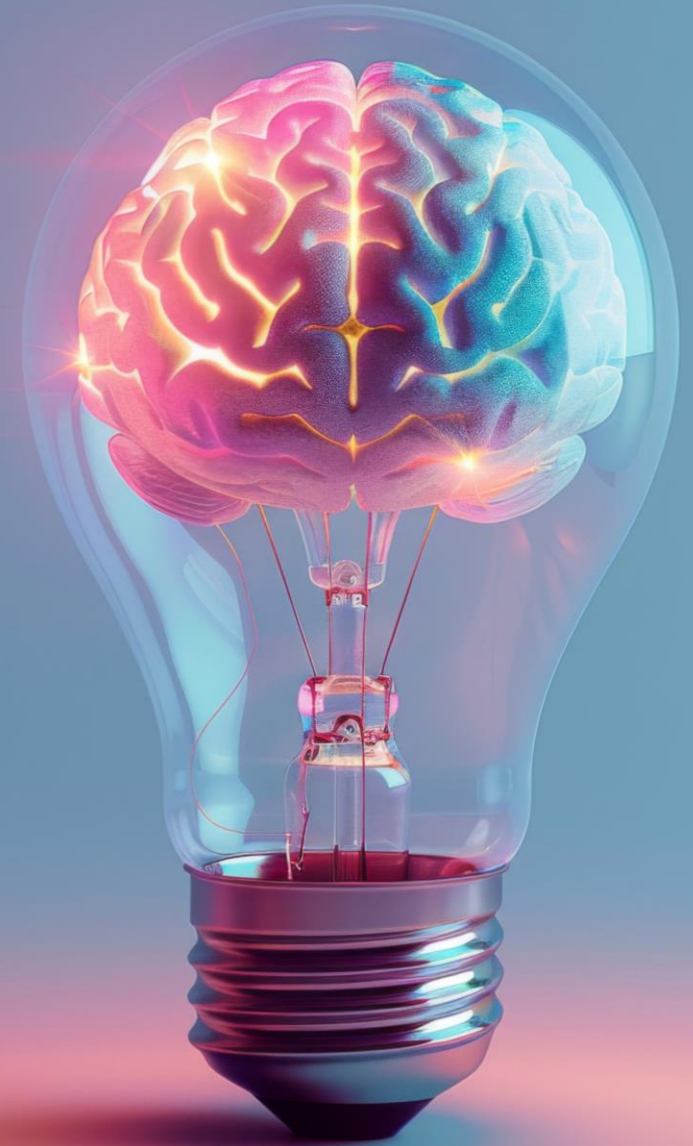


Multisensory Activation

Use **SENSES** to
AMPLIFY your
attendee's
EXPERIENCE

The Neuroscience of Senses

When you combine two or more senses, memories stick



Why Multisensory Works

Pairing senses deepens emotional impact and retention







Neuro-Event Design Tip

Gala Dinner

Diffuse a signature event fragrance during the welcome toast, paired with a matching ambient piano piece

Workshop

Move part of your session outdoors! Do small group sessions or brainstorming outside

Health & Well-Being Session

Guide a 60-second breathing exercise with a lavender mist spritz and soft chime to anchor calm and focus



Time to Recharge!

Pause.

Breathe.

Reset Your Focus.





Psychological Safety

Use **SAFETY** to
UNLOCK your
attendee's **CURIOSITY**

The Chemistry of Safety

Feeling safe unlocks your
brain's creative power



Why Safety Matters

**Fear stalls learning;
Safety unlocks exploration**





Neuro-Event Design Tip

Facilitated Workshop

Start with an anonymous digital whiteboard where everyone posts one “wild idea” – no names attached

Team Retreat

Co-create a “Safety Charter” on large poster paper, letting every participant write a rule they value.

Gamers’ Charity Event

Introduce a station where players deliberately try silly challenges (e.g. one-handed controllers) to win prizes while celebrating mistakes

A photograph of two hikers on a rocky mountain trail. One hiker, wearing a yellow jacket and a white helmet, is reaching out to assist another hiker who is wearing a red jacket and a red beanie. They are both carrying backpacks. The background shows a cloudy sky and rugged mountain terrain.

Social & Emotional Bonds

Use **CONNECTION** to
FOSTER your
attendee's **TRUST**

The Brain's Social Circuits

We bond by mirroring and sharing emotions and experiences



Why Bonds Matter

**Shared emotion drives
engagement and lasting
collaboration**





Neuro-Event Design Tip

Executive Round Table

Begin with a “Show & Tell” of an object that represents why each leader attends, fostering empathy

Networking Reception

Use color-coded lanyards matching attendee interests to spark instant connections

User-Group Meeting

Host a live “Collaborative Canvas” where each attendee paints part of a shared mural



Manage Cognitive Load

Use **CHUNKING** to
PRESERVE your
attendee's **ENERGY**

Limits of Working Memory

Our focus has a built-in timer that needs breaks.



Why Load Matters

Too much information without breaks leads to overload.





Neuro-Event Design Tip

Town Hall

Break presentation into 8-minute segments, followed by 2-minute “stand & stretch” video

Product Demo Roadshow

After two demo stations, pause for a one-question group reflection (What surprise you the most?) before moving on.

Leadership Hackathon

Schedule three 45-minute sprints, each capped with a 5-minute “desk-off” break where teams share one quick insight



Use **TECHNOLOGY** to
ENHANCE your
attendee's
EXPERIENCE

Types of Tech

Polling

Chatbots

Live Q&A

Social Walls

Event Apps

Gamification

AI Matchmaking

Live Feeds

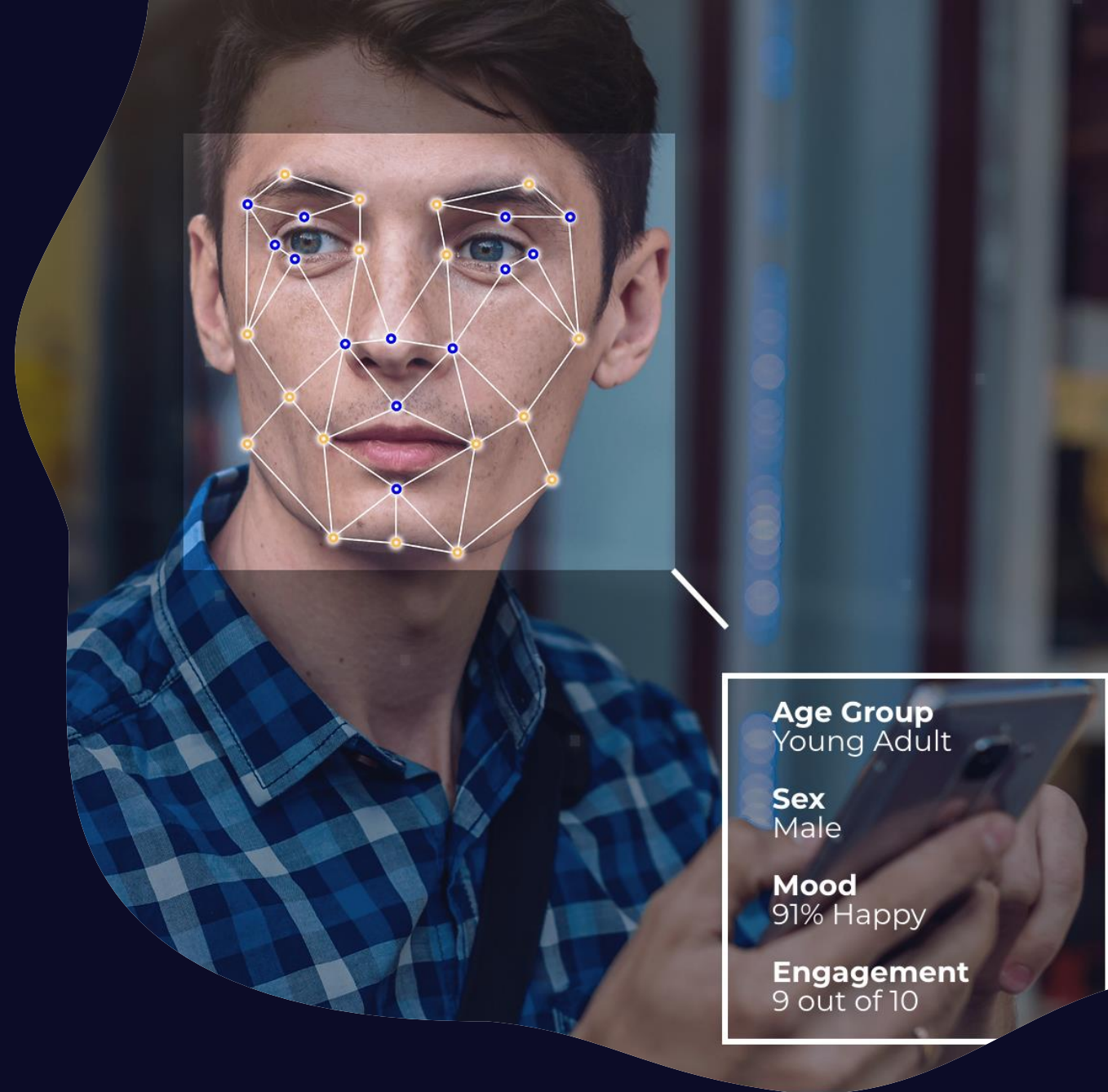
Live Translation / Closed Captioning



Sentiment Analysis

Use AI-driven tools to gauge emotional reactions.

Perform A/B tests to examine the effectiveness of different activations and content to see what works and why.



PROJECTION MAPPING

Turn any space into a Canvas for Storytelling



AR / VR

Product Launches: Showcase 3D models attendees can explore

Virtual Tours: Let attendees “walk through” an upcoming event destination or venue.

Interactive Storytelling: Allow attendees to explore a brand’s history or journey in a virtual environment.

Inclusivity Tip: Provide clear instructions for first-time users and consider alternative formats for those who may experience VR discomfort.



AI

Use AI to plan more engaging events.

Prompt for design



Your Brain-Friendly Action Plan

1. Insert one pattern interrupt in your next agenda
2. Pair a key idea with a retrieval cue
3. Co-create a psychological-safety rule with your team



Your **BRAIN** deserves
BETTER EVENTS

... and so do your
ATTENDEES





Questions? Want to Connect?



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