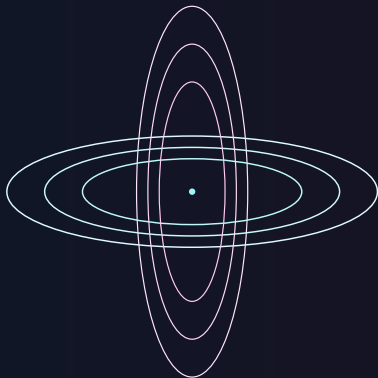


PRISM

A light-field workspace for decisions that need
shared spatial context



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Spatial work needs spatial context

DESIGN PREMISE

**Flat calls compress
spatial work into a
stream of rectangles.**

PRISM keeps people, evidence, and the object under discussion in one shared coordinate system.

01

shared scene

02

evidence layers

03

recorded decisions

01 / WHY NOW

Spatial work loses meaning when flattened



Collaboration breaks in three places

CONTEXT

01

The object and the conversation live in different places.

ATTENTION

02

Participants infer where others are looking.

MEMORY

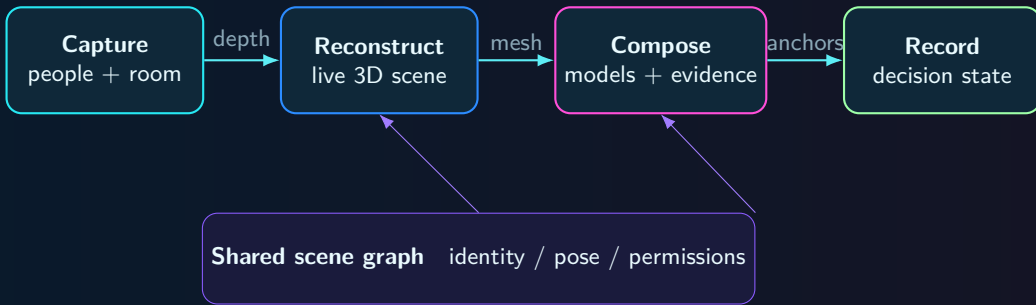
03

Decisions survive; their spatial rationale does not.

The consequence

Teams spend meeting time reconstructing context instead of testing the decision.

One scene aligns people, models, and evidence



One coordinate system makes every gesture, annotation, and decision refer to the same object state.

Perceptual stability governs fidelity

CONTROL OBJECTIVE

$$\mathcal{J} = \alpha E_{\text{pose}} + \beta E_{\text{time}} + \gamma E_{\text{depth}} + \lambda C_{\text{compute}}$$

- E_{pose} : viewpoint alignment error
- E_{time} : motion-to-photon delay
- E_{depth} : reconstruction inconsistency
- C_{compute} : render and network cost

Operating principle

Preserve stable eye contact and object registration before increasing visual detail.

Adaptive response

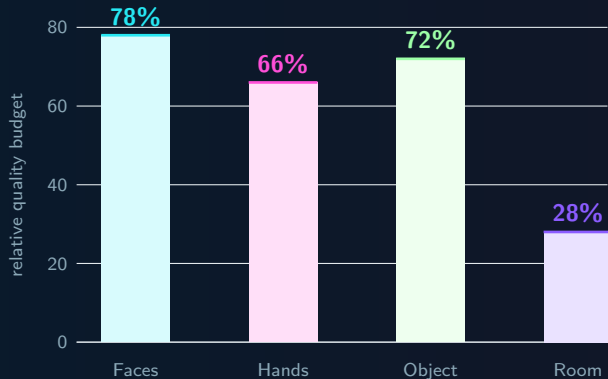
When bandwidth falls, PRISM reduces peripheral fidelity while protecting faces, hands, and the active object.

02 / PROOF

**The prototype protects
what the task needs most**



Spend quality where attention is highest



INTERPRETATION

The room can degrade gracefully without weakening the shared task.

Values show an illustrative allocation profile for design discussion; they are not product benchmarks.

Test behavior, not spectacle

Observe

Can participants point, compare, and take turns without translating the scene into words?

Stress

What breaks first when bandwidth, lighting, or tracking quality changes?

Recall

Can a new participant reconstruct the decision from the recorded spatial state?

Success means less time rebuilding context between sessions.

Pilot one consequential workflow

Lock a single
spatial artifact

Run one
cross-site decision



Instrument
attention + latency

Compare context
recovery time

Pilot boundary

Two rooms, one shared model, one repeatable decision, and a four-week learning cycle.

Validate shared spatial context

RECOMMENDATION

Fund a bounded pilot around one workflow where spatial rationale matters.

Do not test whether holograms feel futuristic. Test whether teams reach and recover decisions with less translation.

Approve now

Pilot team, two instrumented rooms, and access to one representative 3D model.

Gate expansion

Continue only if context recovery and task completion improve.

ONE SHARED SCENE

Questions?

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