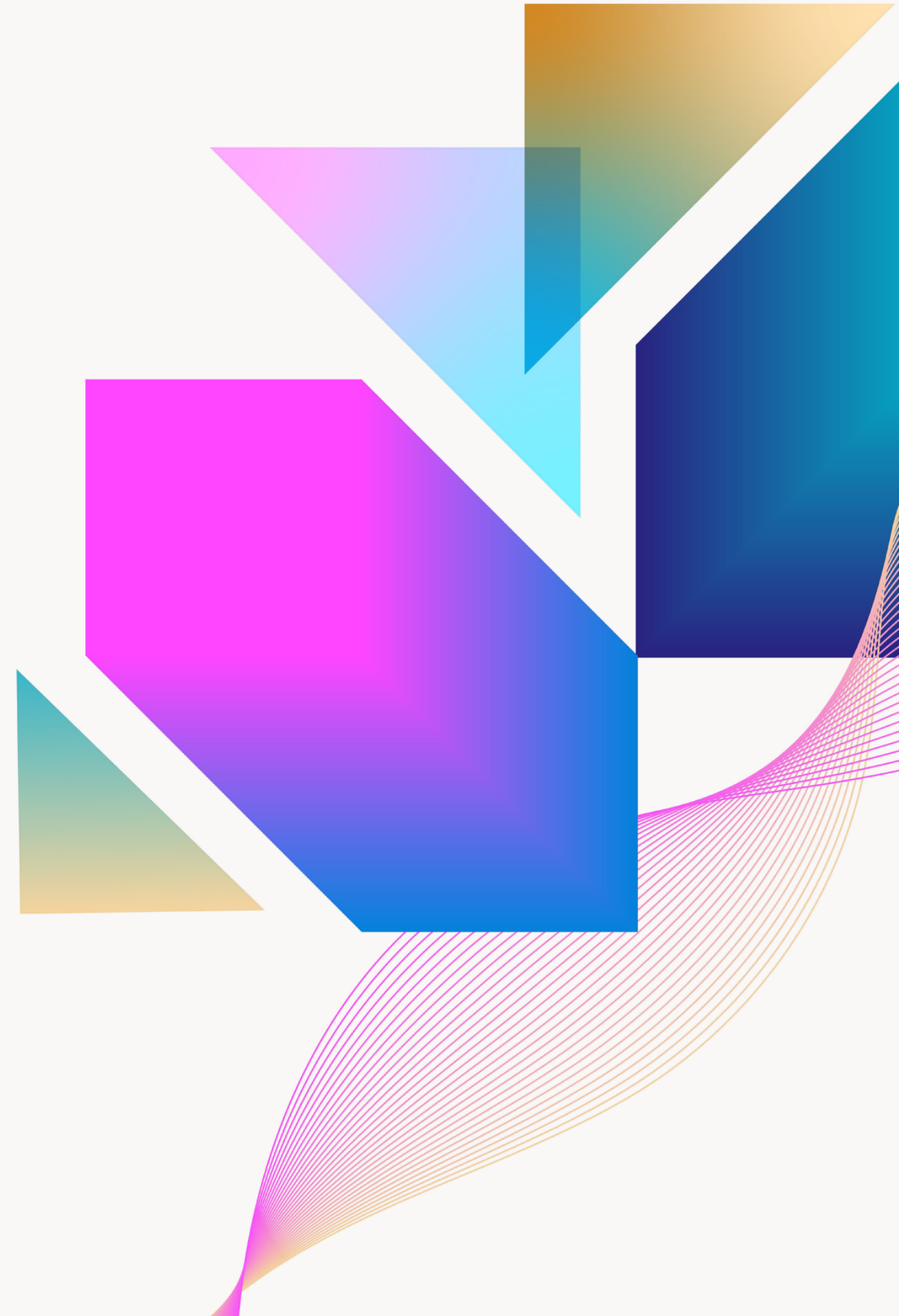




BRIDGING THE GAPS

DRIVING SEAMLESS COLLABORATION THROUGH
SOFTWARE INTEROPERABILITY

ANGEL OTIENO



WHY COLLABORATION MATTERS

- Distributed teams, compressed timelines
- Tool overload = friction
- Stakes are higher than ever

Agenda

01 Collaboration Challenges

02 What Is Software Interoperability?

03 Tools & Workflows

04 Lessons

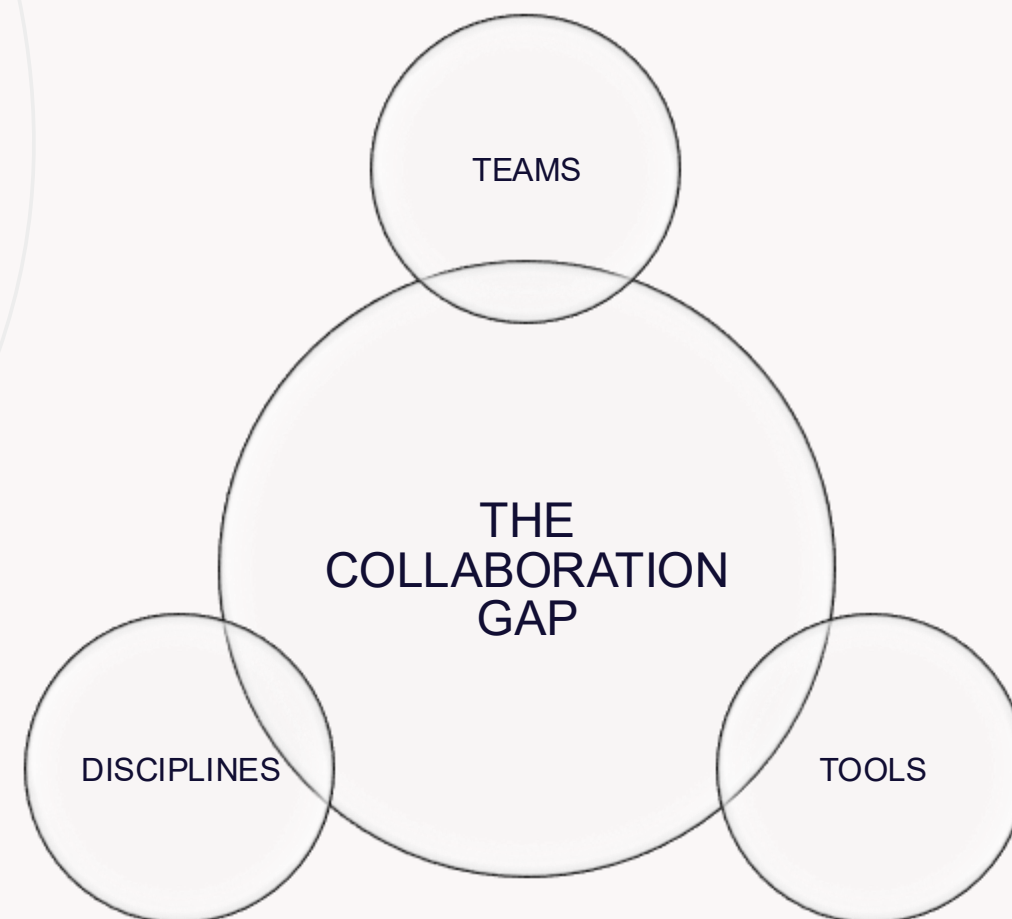
05 Open Conversation



01. THE COLLABORATION GAP

- **When Collaboration Stalls**

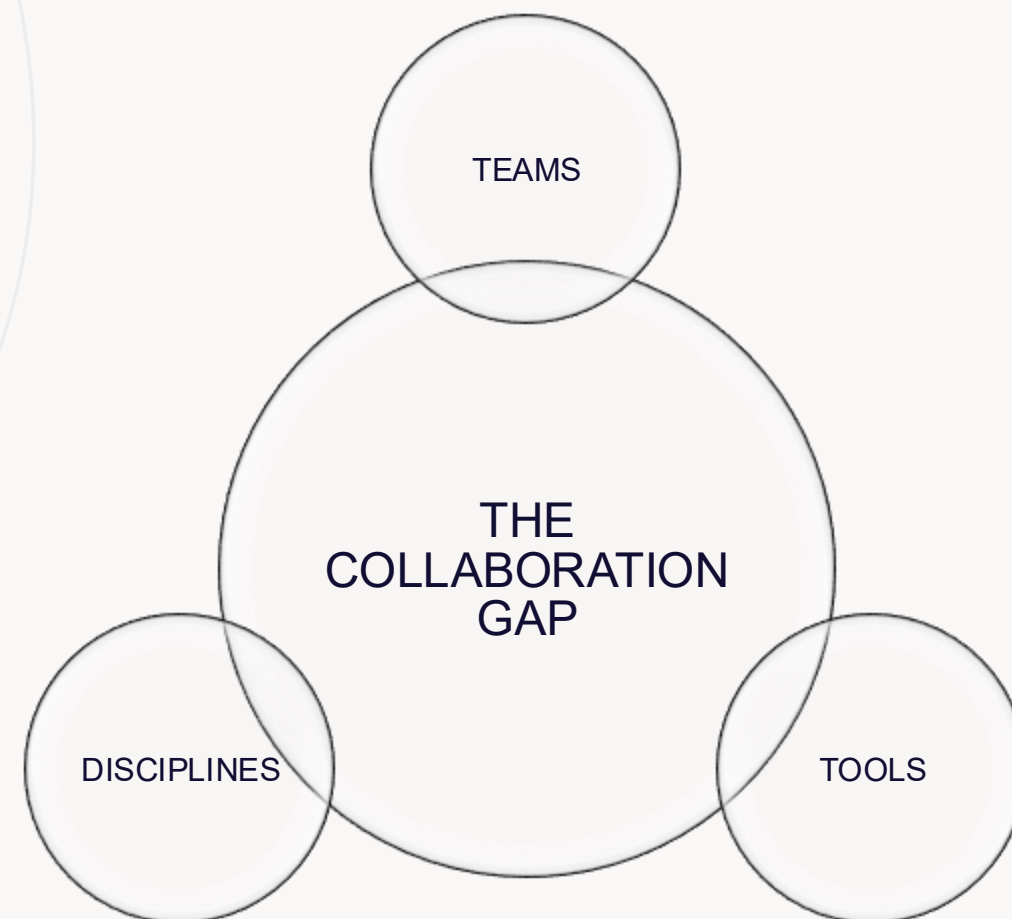
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- Different tools are used in each part of the process
- Different Disciplines need to use different tools



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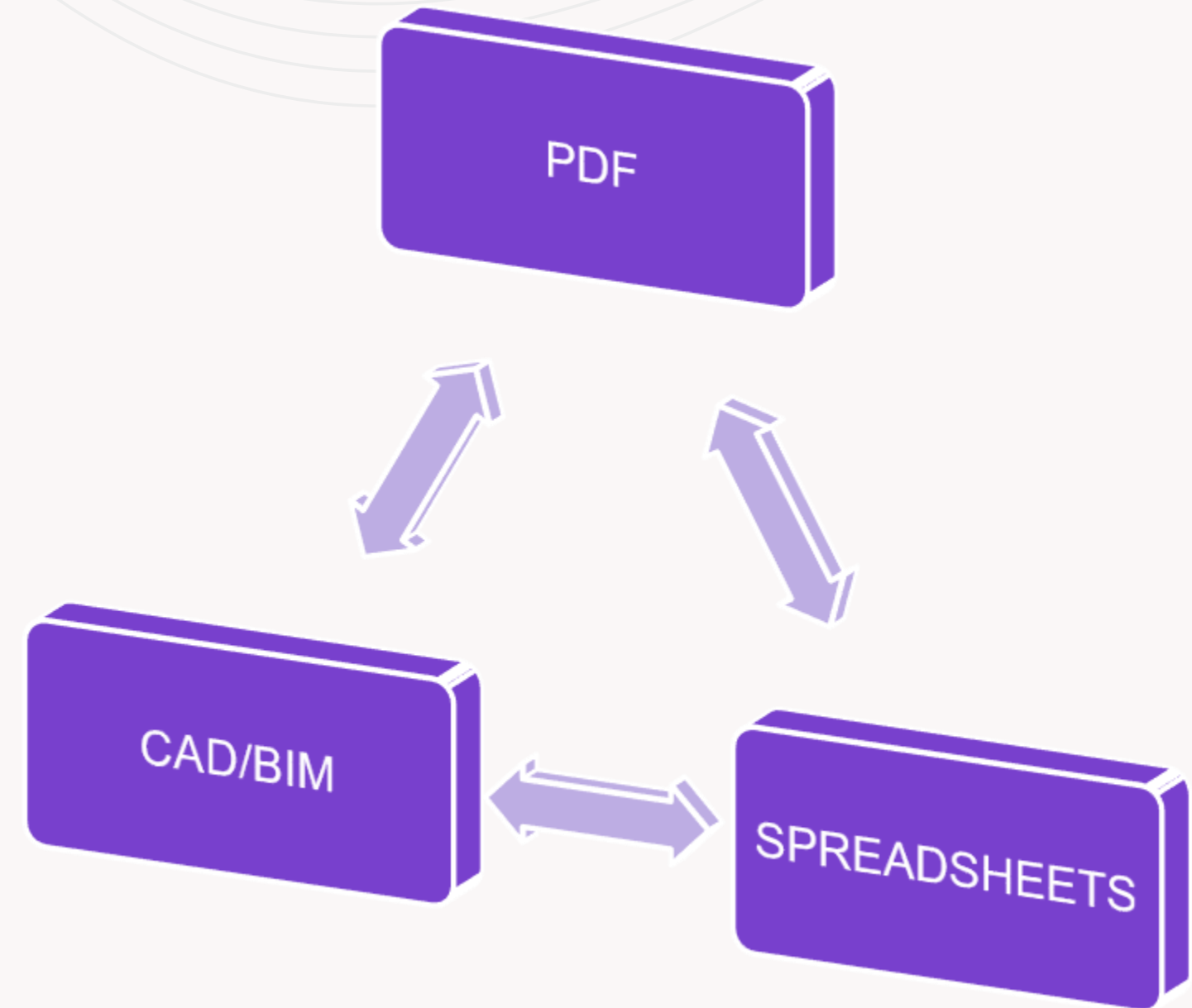
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02. WHAT IS SOFTWARE INTEROPERABILITY?

Different Tools, Unified Workflow

- Enables tools/teams to exchange and interpret data
- Preserves design intent across disciplines
- Reduces manual rework and miscommunication



WHY IT MATTERS

Faster, Clearer, Smarter Projects

- Reduces RFIs and rework
- Speeds up decision cycles
- Preserves accountability across disciplines



INTEGRATION VS. INTEROPERABILITY

Diverse Tools, Unified Strategy

Connection vs. Coordination

Integration links systems at a technical layer

- APIs
- Database connections
- Automatic syncing

Interoperability is about workflow. it helps people use outputs between tools

INTEGRATION VS. INTEROPERABILITY

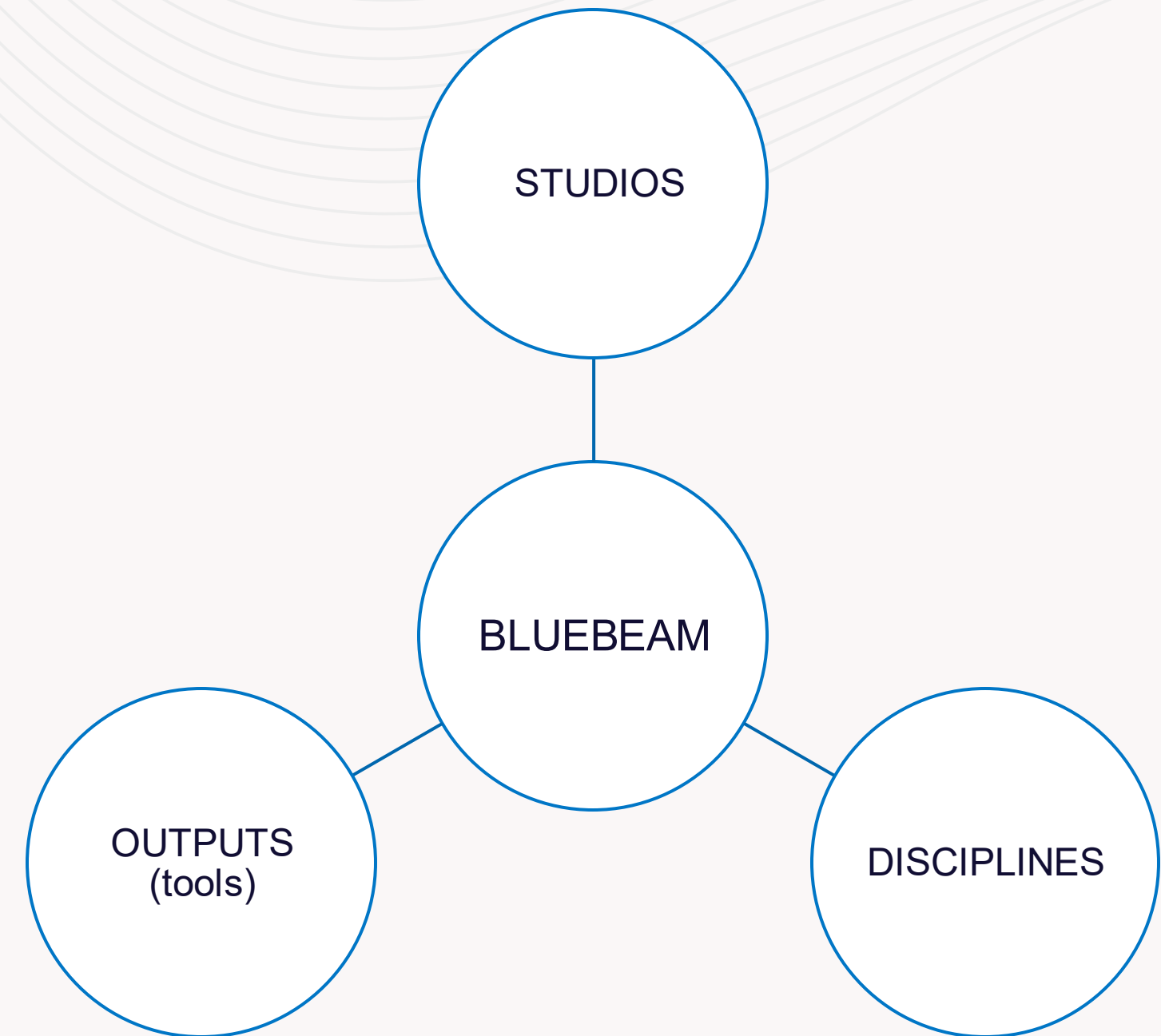
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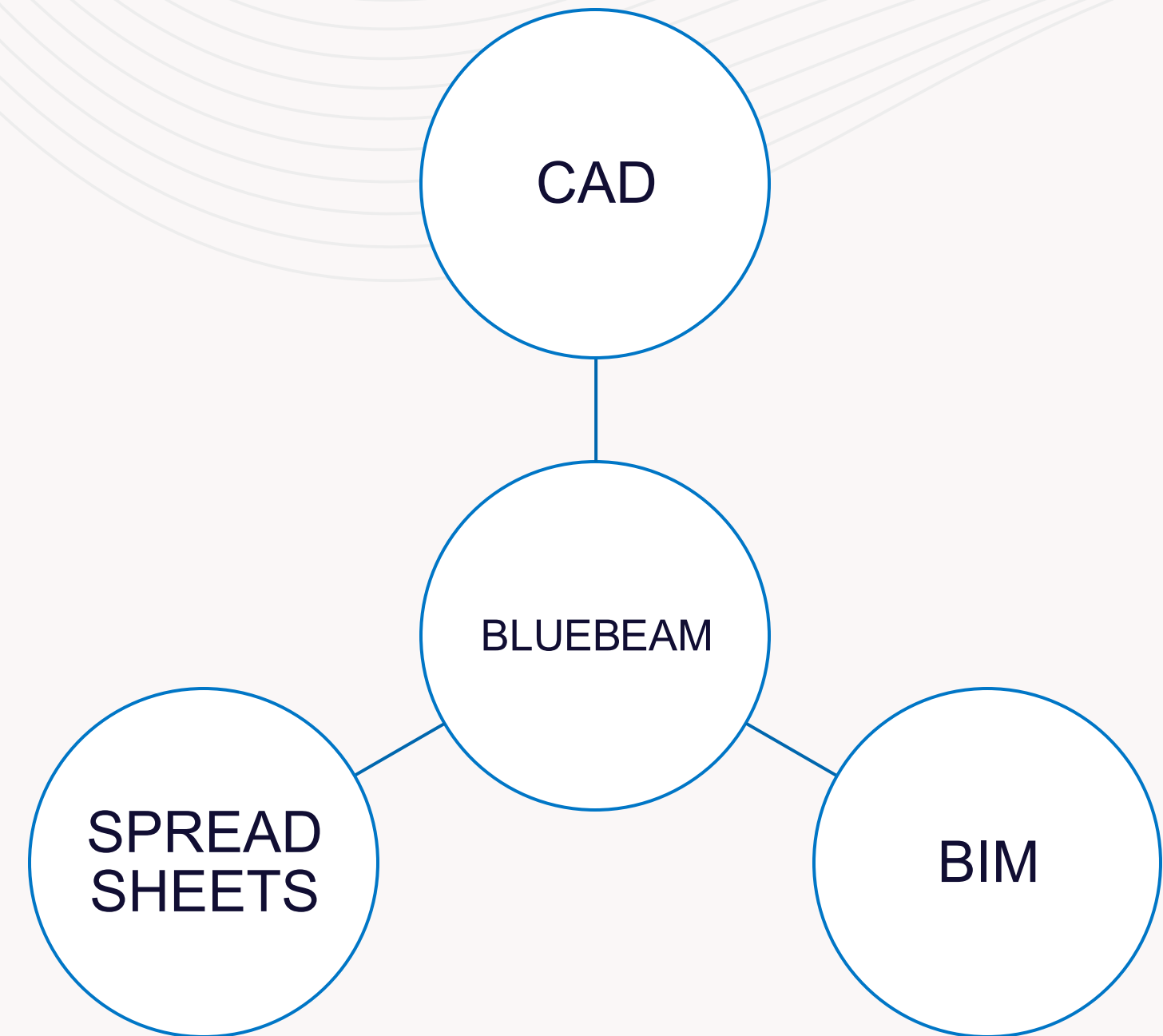




03. TOOLS AND WORKFLOWS

One Platform, Many Inputs

- Acts as a PDF workspace for all disciplines
- Accepts outputs from Revit, AutoCAD, Excel, and more
- Supports teams at every skill level



Standardized Markup Tools

Speak the Same Markup Language

- Builds consistent Tool Chests across studios
- Color coding by discipline
- Layered legends and reusable symbols

> Plumbing

> Architect Review

> Contractor Review

> Engineer Review

> General Measurements

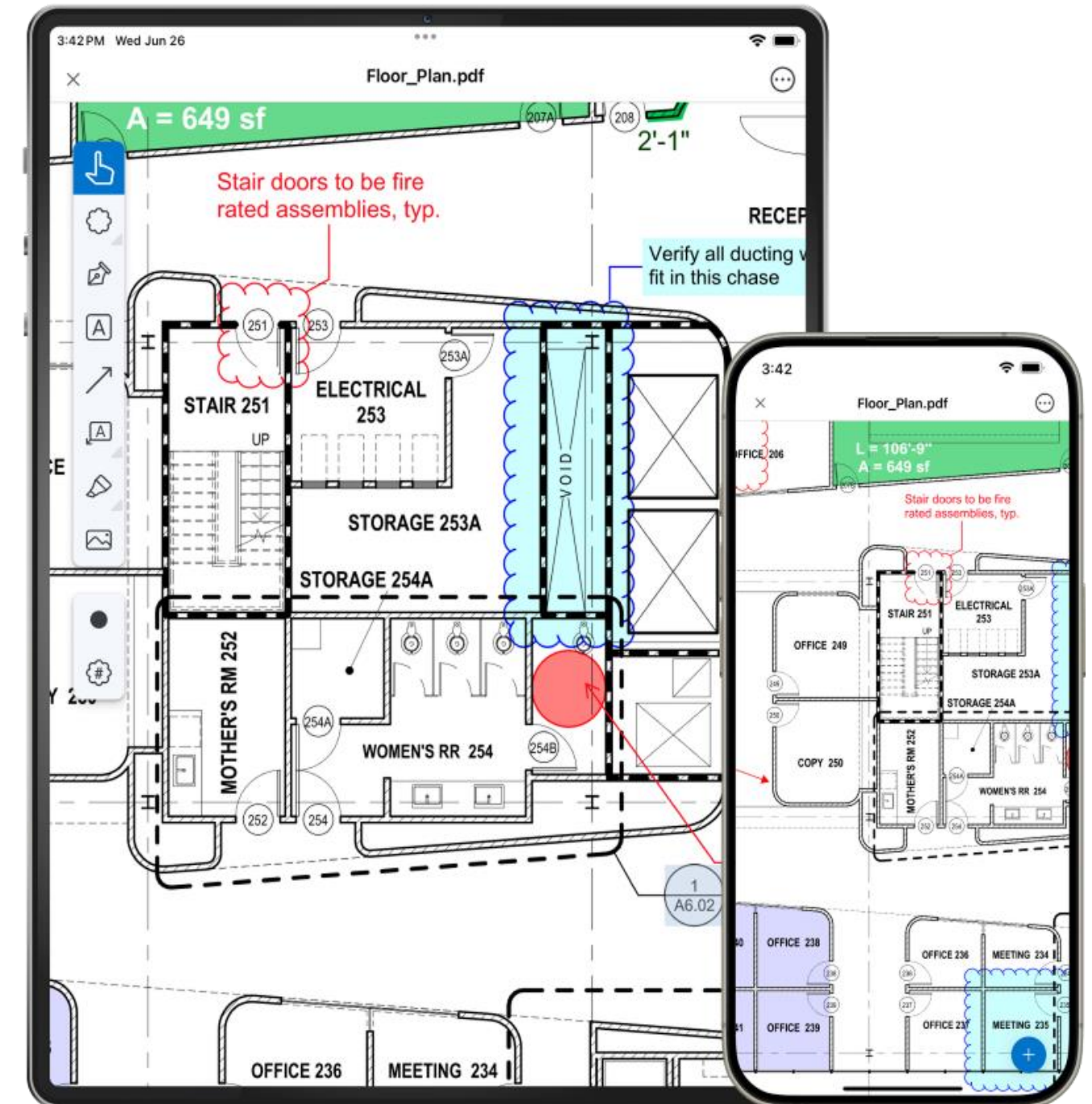
> Design Symbols

	Subject	Comment	Label
<div></div>	Section Detail	1	
<div></div>	Elevation		

Studio Sessions for Collaboration

Live and Async Reviews

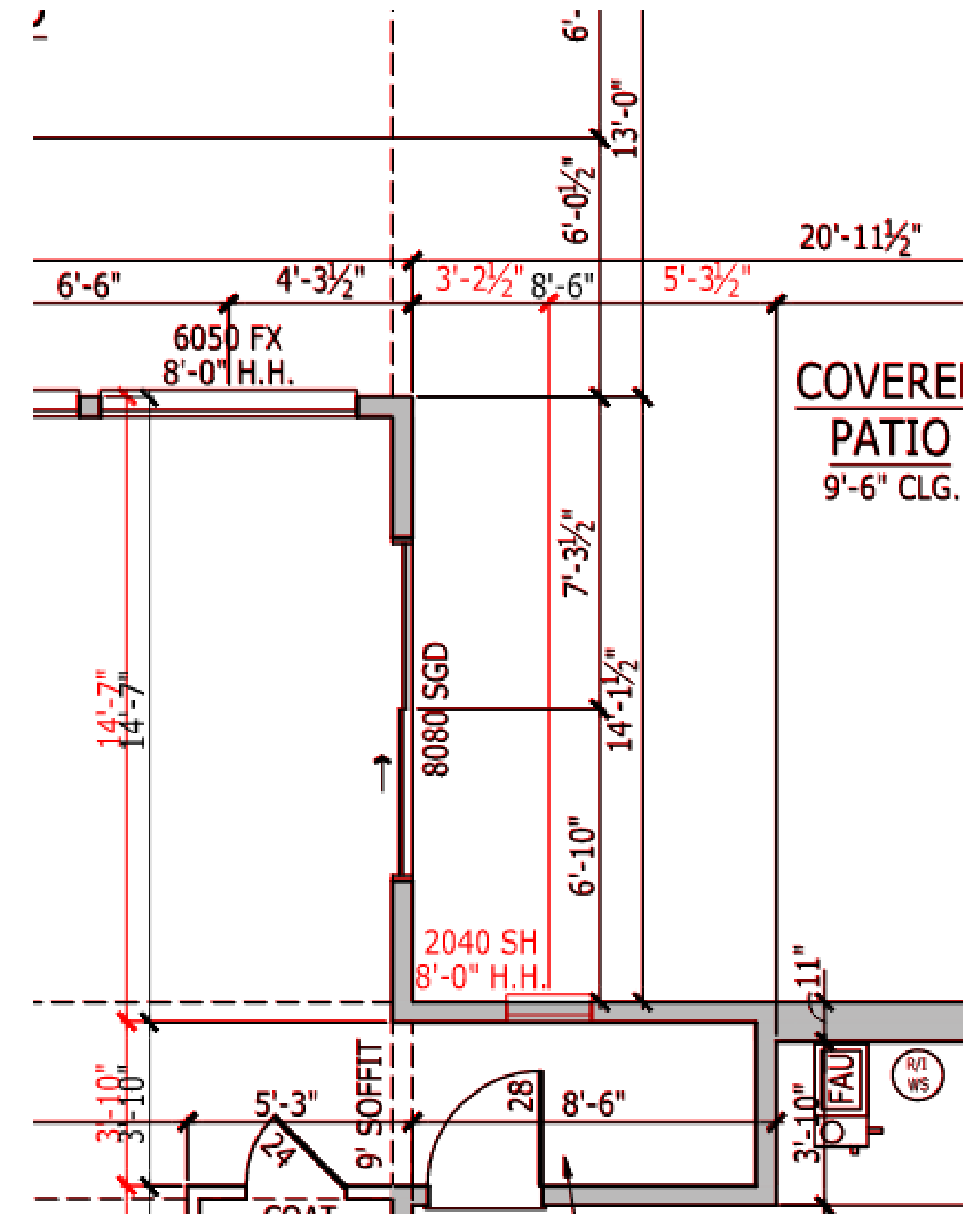
- Supports live team markups for fast collaboration
- Enables asynchronous feedback across time zones
- Tracks every note with a timestamp and author



Overlay & Document Comparison

Catch the Differences Before They Cost You

- Automatically compares plan sets
- Uses color overlays to flag changes
- Improves coordination between disciplines



Batch Slip Sheeting

Keep Markups, Swap Sheets

- Replaces old drawings with new ones
- Preserves annotations and stamps
- Keeps sets current across revisions



The Workflow Loop

- Most AEC workflows rely on multiple tools and teams
- Reviews often live outside the platforms where design happens
- Bluebeam brings review and coordination into one shared space



Version Control That Works

Everyone's on the Same Page

- Markups stay attached to sheets, not emails
- Studio tracks revisions, timestamps, authors
- Teams collaborate confidently from one source



Feedback Moves Faster

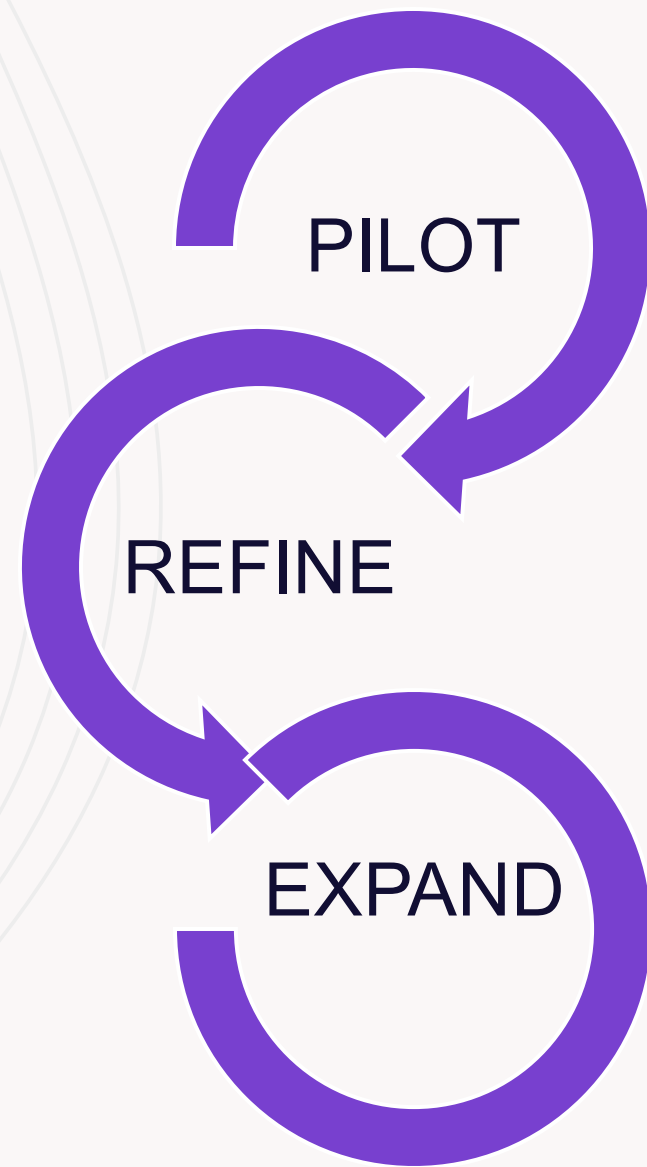
Markup Cycles Shrink

- Feedback flows directly into design
- Markups surface live or overnight with no delay
- Decisions happen quickly and visibly



04. Lessons We Apply

Small Wins Lead to Big Change



Start with pilot teams to test adoption

Build markup standards before scaling

Reinforce new workflows through habit, not enforcement

Optimize Workflow

Where You Can Start, Tomorrow

1. Audit your tools and workflows
2. Define two critical use cases (markup, QA/C coordination, etc.)
3. Build standardized Tool Chests
4. Launch a pilot Studio Session
5. Train → Review → Refine

THANK YOU