

Interactive Video Reference Design — Readiness Checklist

Pressure-test an interactive-video subsystem before you build: architecture, the data contract, the LMS standards boundary, accessibility, and analytics. Companion to the reference-design article.

A. Architecture completeness

- All seven subsystems named: authoring, store/delivery, player+overlays, interaction store, xAPI emitter, LMS/LRS, analytics
- Playback and adaptive delivery taken from a library/CDN — not rebuilt in-house
- The standards boundary (your app vs learning system) is drawn explicitly on the diagram

B. Data contract & tracking

- Interaction store records watched segments and the intent behind each pause, not just raw events
- xAPI Video Profile verbs emitted: played, paused, seeked, initialized, completed, terminated
- Completion computed from played-segments vs the threshold — never the playhead at the end
- Statements debounced (seek storms) and batched so none are lost on tab close

C. LMS standards boundary

- Boundary standard chosen by sales model: LTI 1.3 (embedded), cmi5 (packaged), or own LRS (standalone)
- Grade passback path confirmed: LTI AGS line items or cmi5 passed/failed/completed
- Vendor SDK standards export (xAPI / cmi5 / LTI) verified BEFORE signing
- SCORM used only where a buyer's legacy LMS requires it

D. Accessibility & analytics

- Overlay controls keyboard-operable (WCAG 2.1 SC 2.1.1) and captions present (SC 1.2.2)
- Analytics reads the LRS for drop-off, re-watch, and per-question correctness
- Maintenance budgeted at 25-30% of build cost per year