Cross-Platform Player Strategy Worksheet

Plan the OTT device matrix: what to share, what stays native, and what to maintain — one page.

1. Device targets to cover

- [ ] Web browser (Chrome, Edge, Firefox, Safari).
- [ ] iOS / iPadOS and Android phones & tablets.
- [ ] Apple TV (tvOS), Fire TV, Android TV / Google TV.
- [ ] Roku, Samsung (Tizen), LG (webOS); consoles if in scope.

2. Share-or-build, per layer

- [ ] Content & backend: SHARED — one CMAF/cbcs encode, manifests, license + catalogue APIs.
- [ ] Business logic: SHARED library — sign-in, rows, history, entitlement, analytics rules.
- [ ] Application interface: per input idiom (TV remote / touch / mouse) — ~3, not per device.
- [ ] Player engine: NATIVE adapter per platform — the only part genuinely rewritten.

3. Player engine per platform

- [ ] Web: Shaka / hls.js / dash.js on MSE + EME (browser-only).
- [ ] Apple (iOS + tvOS): AVPlayer + FairPlay (one Swift player).
- [ ] Android + Fire TV + Android TV: ExoPlayer (Media3) + Widevine.
- [ ] Roku: SceneGraph Video node (BrightScript). Tizen/webOS: AVPlay / webOS media.

4. Encode-once foundation (confirm)

- [ ] One CMAF (ISO/IEC 23000-19) package; no per-platform re-encode.
- [ ] cbcs Common Encryption (ISO/IEC 23001-7) — one encrypt, three DRMs.
- [ ] One HLS playlist + one DASH manifest over the same segments.
- [ ] Same keys issue Widevine, PlayReady, and FairPlay licenses.

5. Maintenance & certification

- [ ] OS-version matrix tracked per platform; minimum versions set.
- [ ] App-store re-certification cycles calendared (each store).
- [ ] DRM / security migrations watched (e.g. Samsung PlayReady 2026).
- [ ] Real-device lab of TVs & sticks; shared-core regression suite.

6. Team & QoE ownership

- [ ] Skills: web (JS), Apple (Swift), Android (Kotlin), Roku (BrightScript), HTML-TV (JS).
- [ ] One owner for the shared playback contract / descriptor.
- [ ] QoE instrumentation consistent across every client.
- [ ] Maintenance staffed as a standing line item, not a one-off.

Companion to: 'The Player on Every Screen: A Unified Strategy'
www.forasoft.com/learn/ott/articles-ott/player-on-every-screen-unified-strategy



GO DEEPER · THE 7-VOLUME HANDBOOK

Fora Soft Video Engineering Handbook

Seven volumes, 9,000+ pages: encoding, streaming, audio and AI for video products — from the pixel to production.

By Nikolay Sapunov, CEO at Fora Soft · Kindle & paperback on Amazon

Browse the handbook on Amazon →

This worksheet plans which layers to share across web, mobile and TV, and where the player stays native. Our seven-volume handbook covers the stack behind a player on every screen; start with Volume 3 for players, ABR, DRM and QoE, then Volume 2 for HLS, DASH and CMAF, and Volume 1 for encoding one ladder for all devices.

WHAT YOU WILL FIND INSIDE

- Player architecture and stall recovery (Vol. 3)
- CMAF with HLS and DASH (Vol. 2)
- Multi-DRM: Widevine, PlayReady, FairPlay (Vol. 3)
- One encoding ladder for all devices (Vol. 1)

THE FULL HANDBOOK · 7 VOLUMES · 9,000+ PAGES · ALL ON AMAZON

Vol. 1 · Video Encoding — pixels and color to H.264, HEVC, AV1, quality metrics and AI
Vol. 2 · Video Streaming I — network transport, contribution and ingest, HLS, MPEG-DASH, CMAF
Vol. 3 · Video Streaming II — ABR, CDNs, players, WebRTC, DRM and the economics of delivery
Vol. 4 · Audio for Video I — PCM, codecs, loudness, accessibility, real-time voice processing
Vol. 5 · Audio for Video II — jitter buffers, lip sync, Atmos, quality metrics, neural codecs
Vol. 6 · AI for Video I — models and inference, computer vision, speech, search, generative video
Vol. 7 · AI for Video II — real-time pipelines, agents, serving, cost, compliance, verticals

Shipping one OTT app to web, iOS, Android, Roku and smart TVs?

We will draw your device matrix, share the backend and business logic, and build a native player adapter per platform. 250+ video products shipped since 2005.

Book a 30-min call → **WhatsApp →** **Email us →**