

Museum and Visitor Experience Display Design Checklist

10 customer questions to de-risk displays for exhibits, galleries, interpretation spaces, and public interaction

How to use the checklist

For each question, capture the application context, the display requirement, the acceptance evidence, and any residual risk. Escalate any unknown response where the display affects safety, uptime, operator decision-making, regulatory evidence, or customer experience. Escalate any unknown response where the display affects visitor safety, accessibility, paid attraction uptime, or protected artefact environments.

#	Customer design question	Why this matters	Evidence to request / acceptance criteria	Status / notes
1	What visitor experience should the display create, and how will success be measured?	Display choices should follow interpretive goals, dwell time, learning outcomes, and throughput.	Experience brief; audience personas; content storyboard; success metrics and acceptance criteria.	OK / Gap / N/A
2	Who will use it, including children, wheelchair users, multilingual visitors, and assisted-access users?	Public exhibits must work for diverse heights, abilities, languages, and attention spans.	Accessibility review; mounting-height study; font/icon rules; language/content plan; usability walk-through.	OK / Gap / N/A
3	What ambient light, reflections, and conservation constraints affect readability?	Galleries can combine controlled lighting, glass cases, projections, and artefact-protection constraints.	Lighting plan; glare/reflection review; luminance target; optical bonding/anti-reflective coating decision.	OK / Gap / N/A
4	What level of public-touch durability, hygiene, and abuse resistance is required?	Visitor systems face repeated touch, impacts, spills, and accidental misuse.	Cover-glass specification; IP/IK target; cleaning protocol; edge sealing; vandal-resistance assumptions.	OK / Gap / N/A
5	How will content be updated, scheduled, monitored, and recovered if it fails?	Museum teams need maintainable content workflows rather than hidden engineering dependencies.	CMS/media-player plan; remote monitoring; restart behaviour; staff operating guide; content backup process.	OK / Gap / N/A
6	What acoustic, thermal, and ventilation constraints exist in the exhibit furniture?	Enclosed plinths, showcases, and quiet galleries can make heat and noise problematic.	Thermal plan; fanless requirement; ventilation path; noise limit; access panel design.	OK / Gap / N/A
7	Does the installation need transparent, curved, stretched, circular, or bespoke display geometry?	Unusual display formats can add impact but require early mechanical and content planning.	Format rationale; pixel map/content template; mechanical drawing; prototype viewing assessment.	OK / Gap / N/A
8	How will cables, mounting, safety, and public access be controlled?	Public installations require safe cable routing, tamper resistance, and clean integration.	Mounting calculation; cable containment; PAT/electrical safety plan; tamper-resistant fixings.	OK / Gap / N/A
9	What uptime and support expectations apply during opening hours or exhibitions?	Exhibit downtime damages visitor experience and creates avoidable staff intervention.	Spares plan; SLA/support approach; daily start-up/shutdown procedure; fault reporting method.	OK / Gap / N/A
10	What acceptance test will confirm the display is ready before launch?	Installations should be validated under real lighting, real content, and expected visitor flow.	Site acceptance test; content playback test; accessibility check; staff training sign-off; snag list closure.	OK / Gap / N/A

Recommended review outputs

- Display subsystem requirements specification: optical, mechanical, electrical, environmental, touch, software-interface, mounting, and lifecycle requirements.
- Risk and application traceability: each display-related risk or customer-experience issue linked to a design control and verification method.
- Evidence pack: drawings, interface specifications, environmental assumptions, test reports, supplier declarations, support/lifecycle plan, and controlled change documentation.

Reference prompts for the project team

- Confirm all customer, site, and regulatory requirements before final specification or quotation.
- Define testable acceptance criteria for every requirement that affects readability, touch operation, reliability, safety, or maintainability.
- Record any assumptions on duty cycle, lighting, environmental exposure, mounting, electrical interfaces, content, and long-term availability.
- Review the final display selection jointly with mechanical, electrical, software, operations, service, and commercial stakeholders.

Use this checklist for control-room, field, kiosk, monitoring, inspection, and process-interface displays in oil, gas, and energy applications. This is a practical customer-discovery guide. Its is not a substitute for project-specific engineering, safety, legal, or compliance assessment, in conjunction with discussion with CDS engineers and/or technical sales team.

For more information or to discuss your project and requirements please contact our technical sales team.