Transportation Display Design Checklist

10 customer questions to de-risk passenger information, driver HMI, ticketing, and transit displays

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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 provides safety, timetable, wayfinding, fare, emergency, or operational information.

#	Customer design question	Why this matters	Evidence to request / acceptance criteria	Status / notes
1	**What transport information must be displayed, and what are the consequences of delay or error?**	Passenger, driver, and operations displays can affect safety, flow, and customer trust.	Information taxonomy; real-time update requirement; failure-message plan; risk assessment.	OK / Gap / N/A
2	**Where will the display operate: vehicle, platform, concourse, roadside, or outdoor shelter?**	Location drives brightness, vandal resistance, ingress protection, vibration, and mounting.	Site/vehicle survey; IP/IK target; vibration profile; mounting and cable route; weather exposure review.	OK / Gap / N/A
3	**What readability is required at distance, motion, glare, and night conditions?**	Passengers may read quickly while moving, from varied angles, and under changing light.	Viewing-distance rules; font-size target; brightness/dimming spec; sunlight/glare and night tests.	OK / Gap / N/A
4	**Is touch input required for ticketing, kiosks, staff use, or passenger interaction?**	Public touchpoints must work reliably and resist misuse, contamination, and vandalism.	Touch technology choice; accessibility/reach review; cover-glass spec; wet/glove/false-touch testing.	OK / Gap / N/A
5	**What network, content, and data interfaces feed the display?**	Transport displays are often part of live information systems, not standalone screens.	API/interface map; latency target; offline fallback; security requirements; remote monitoring plan.	OK / Gap / N/A
6	**What mechanical and safety constraints apply in public or moving environments?**	Displays must remain safely mounted and serviceable despite crowding or vehicle movement.	Bracket/load calculation; tamper-resistant fixings; cable containment; fire/electrical safety review.	OK / Gap / N/A
7	**What uptime, maintainability, and spare-unit strategy is required?**	Transport systems require fast fault recovery and minimal passenger disruption.	SLA target; module swap plan; remote diagnostics; spares stock; maintenance instructions.	OK / Gap / N/A
8	**How will the display survive cleaning, weather, graffiti, and accidental impact?**	Public transport environments create high wear and contamination.	Cleaning protocol; cover/coating specification; IP/IK evidence; anti-graffiti or replaceable protective layer decision.	OK / Gap / N/A
9	**What accessibility and regulatory requirements must be met?**	Wayfinding and passenger information must be inclusive and often subject to public-service obligations.	Accessibility checklist; language/icon rules; contrast and font rules; audio/visual coordination where applicable.	OK / Gap / N/A
10	**What site acceptance test confirms readiness for service?**	The final test should use live data, real lighting, and operational procedures.	SAT script; live feed test; failover test; readability walk-through; maintenance handover pack.	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.