



Lumos Mirrors at Red Sea International Airport: Smart Restroom Solutions Enhancing Passenger Experience

A case study in innovative airport restroom design, sustainability, and smart mirror technology

Transforming Airport Restrooms with Smart Mirror Technology

Red Sea International Airport is redefining the future of travel by focusing on every touchpoint of the passenger journey—including restrooms.

To achieve this, Elegancia partnered with Lumos Mirrors, a leader in **smart mirror solutions**, to design and install **illuminated mirror cabinets with integrated touchless amenities**. The result is a seamless combination of **modern restroom design, hygiene innovation, and sustainability**.



Project Goals: Enhancing Passenger Experience & Sustainability

The project focused on delivering high-performance restroom solutions aligned with global airport standards:

Improve Passenger Experience

Provide modern, user-friendly, and visually appealing restroom environments for international travellers.

Implement Touchless Hygiene

Reduce germ transmission with advanced **contactless restroom technology** throughout the facility.

Promote Sustainability

Lower waste and energy consumption through **eco-friendly restroom systems** and smart design.

Optimise Space

Integrate multiple functions into compact, efficient mirror units without sacrificing aesthetics.

Key Challenges in Airport Restroom Design

Designing for a high-traffic international airport required overcoming several significant challenges:

High Passenger Volume

Managing heavy footfall with durable, long-lasting restroom fixtures built for continuous use.

Limited Space

Designing compact solutions without sacrificing functionality or the quality of the user experience.

Luxury Aesthetics

Maintaining the premium visual standards expected in a world-class international airport environment.

Deadlines & Budget

Meeting strict project timelines and financial constraints without compromising on quality or safety.

Safety & Hygiene Standards

Ensuring full compliance with international safety, hygiene, and building regulations throughout.

Innovative Solution: Integrated Smart Mirror Systems

Lumos Mirrors delivered a **next-generation restroom solution** combining multiple technologies into one sleek, unified system.



High-Speed Integrated Hand Dryers

Reduce paper towel usage and improve sustainability with powerful, energy-efficient drying technology built directly into the mirror unit.



Touchless Soap & Towel Dispensers

Enhance hygiene with fully **contactless restroom experiences**, minimising surface contact and germ transmission at every step.



Energy-Efficient LED Mirror Lighting

Adjustable illumination delivers improved visibility and a premium ambiance, while significantly reducing energy consumption.



Space-Saving Mirror Cabinet Design

Hidden storage enables easy maintenance and efficient space utilisation, keeping restrooms clean and uncluttered.

Results: Measurable Improvements in Efficiency & Sustainability

The implementation of Lumos Mirrors delivered strong, measurable outcomes across all key performance indicators:

100%

On-Time Delivery

Project completed before the airport's grand opening, meeting every milestone on schedule.

30%

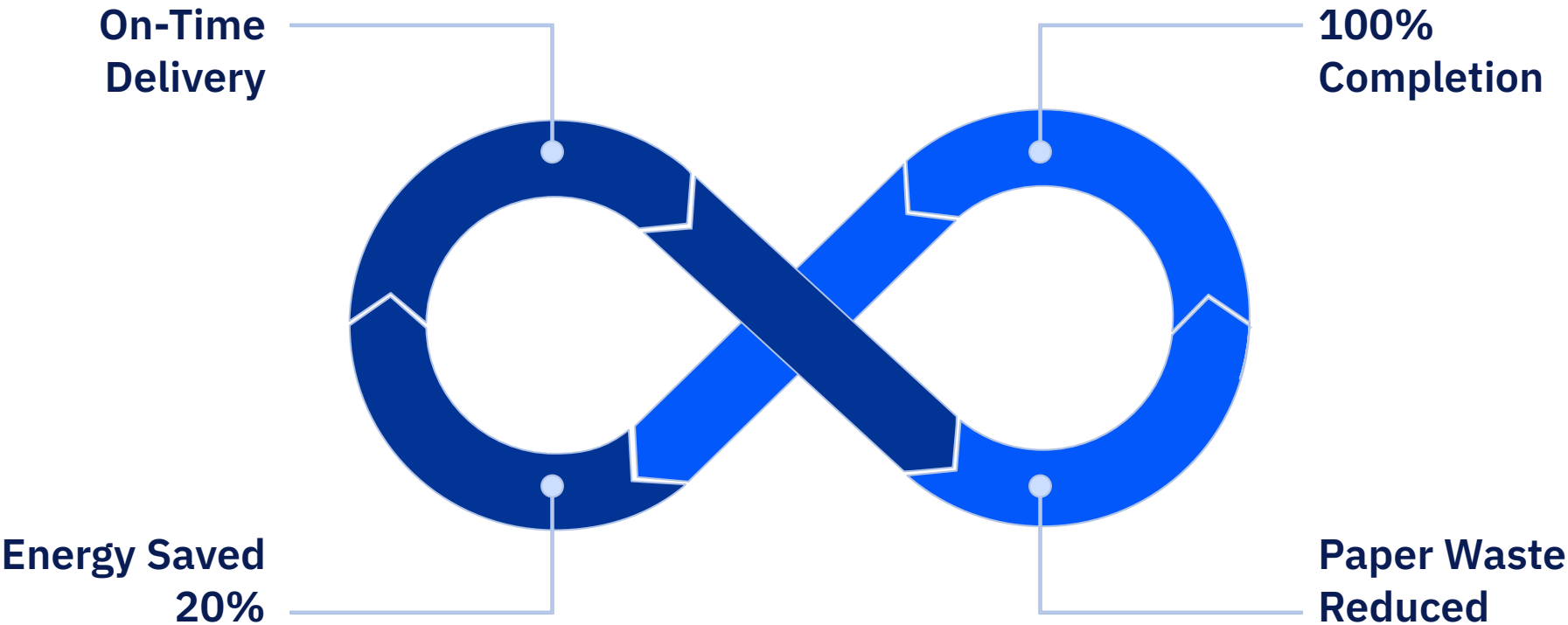
Paper Waste Reduction

Achieved through integrated hand dryers and smart dispensing systems reducing unnecessary consumption.

20%

Energy Savings

Driven by efficient LED lighting and optimised system design across all restroom operations.





Client Testimonials: Proven Success in Airport Innovation

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"Lumos Mirrors delivered high-quality, efficient solutions on time and within budget. Their contribution was critical to the project's success."

— Elegancia (General Contractor)

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"The smart mirror units exceeded expectations in both functionality and design, supporting our goal of delivering a world-class airport experience."

— Airport Management

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Conclusion: Setting a New Benchmark in Airport Restroom Solutions

This project demonstrates how **smart restroom technology** can transform passenger experiences while supporting sustainability goals.

By integrating **touchless systems, energy-efficient lighting, and space-saving designs**, Lumos Mirrors has set a new global standard across three critical dimensions:

Airport Restroom Innovation

Pioneering next-generation restroom environments that elevate the passenger journey at every touchpoint.

Sustainable Infrastructure

Delivering eco-friendly solutions that reduce waste, conserve energy, and support long-term operational efficiency.

Passenger Comfort & Hygiene

Ensuring every traveller enjoys a clean, safe, and premium restroom experience from arrival to departure.

✔ **Lumos Mirrors is shaping the future of smart, sustainable airport design—one mirror at a time.**

