磁石科技

Smart Park Solution

Integrating Technology with Nature, Creating Infinite Possibilities

Contact : Sharon Lee Phone/We Chat: 1800 2588 449

Website: magni-ai.com

Address: 517, Tianxin Building, Futian district, ShenZhen, P.R.China.

磁石科技

Challenges and Issues

01

Ineffective Safety Management

Traditional security measures that rely on manual patrols and fixed cameras struggle to achieve proactive, 24/7 monitoring and rapid response to safety incidents, lost individuals, and emergencies.

02

High Management Costs

Daily park operations—including maintenance, cleaning, visitor management, plant pruning, irrigation, and control of lighting, audio, and water features—require substantial human and material resources, driving up operational costs.

03

Poor Visitor Experience

Visitors face practical issues like parking and restroom access, coupled with a lack of digital guides, personalized recommendations, and interactive content, failing to meet modern expectations for convenience and engagement.

04

Uninformed Decision-Making

Management decisions often lack a data-driven foundation, missing key metrics like visitor flow data and facility utilization rates. This over-reliance on experience compromises scientific rigor and precision.

05

Excessive Energy Consumption

Systems like public lighting and irrigation often waste energy and water due to inefficient practices (e.g., lights on all night, flood irrigation), lacking smart, demand-based controls.

磁石科技

Smart Park

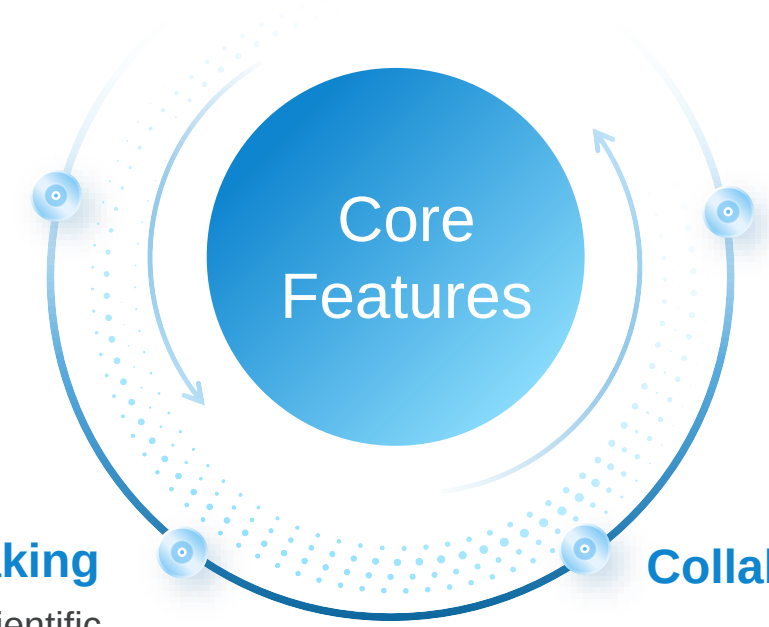
The development of smart parks is both a necessary step in smart city development and a direct response to the public's demand for higher-quality services.

Technologically, the maturity of new infrastructure such as IoT, AI, and 5G provides solid support for the digital transformation of parks. This transformation fundamentally addresses the long-standing issues of traditional parks in safety management, operational efficiency, and resource consumption.

Through digital upgrades, parks are evolving from simple scenic spaces into secure, convenient, and interactive modern public areas, achieving improvements in both management efficiency and visitor experience.

Core Philosophy

To conduct a comprehensive, full-process digital upgrade of parks utilizing technologies such as the Internet of Things (IoT), Big Data, Cloud Computing, and Artificial Intelligence (AI).



Comprehensive Sensing

Real-time monitoring of the environment, facilities, and visitor flow through various sensors.

Interactive Experience

Creates new possibilities for interaction between people and the park, as well as among visitors.

Intelligent Decision-Making

Enables prediction, early warning, and scientific decision-making based on data analytics.

Collaborative Synergy

Integrates data across all subsystems to achieve unified command and dispatch.

Goals

Through the application of advanced technologies, system development, and management optimization, we aim to build a secure, efficient, connected, and green smart scenic area by enabling streamlined monitoring, refined management, data-driven marketing, intelligent emergency response, visitor-centric services, and networked ecological conservation.

Streamlined Monitoring & Operations

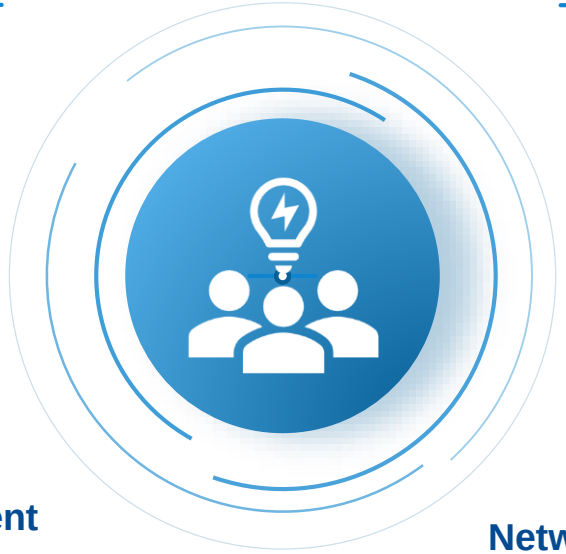
A standardized service-based framework integrates monitoring and operational systems—including security, ticketing, and parking management—through common protocols and architectures.

Intelligent Emergency Command

An intelligent, efficient, and comprehensive command system built on information technology enhances the park's capability to respond to emergencies and handle incidents.

Refined Scenic Area Management

Digital workflows and institutional protocols are implemented across all park management processes, elevating operational standards and improving management effectiveness.



Visitor-Centric Services

Information systems provide visitors with comprehensive details on dining, transportation, attractions, shopping, and entertainment, while enabling intelligent, human-centered services such as inquiries, complaints, and bookings.

Data-Driven Marketing Decisions

In-depth data analysis from license plate recognition, ticketing management, and decision-support systems enables precise visitor statistics and analytics, forming a basis for targeted marketing strategies.

Networked Ecological Conservation

IoT technology enables networked monitoring and early warning for park resources, alongside the establishment of an ecological resource database.

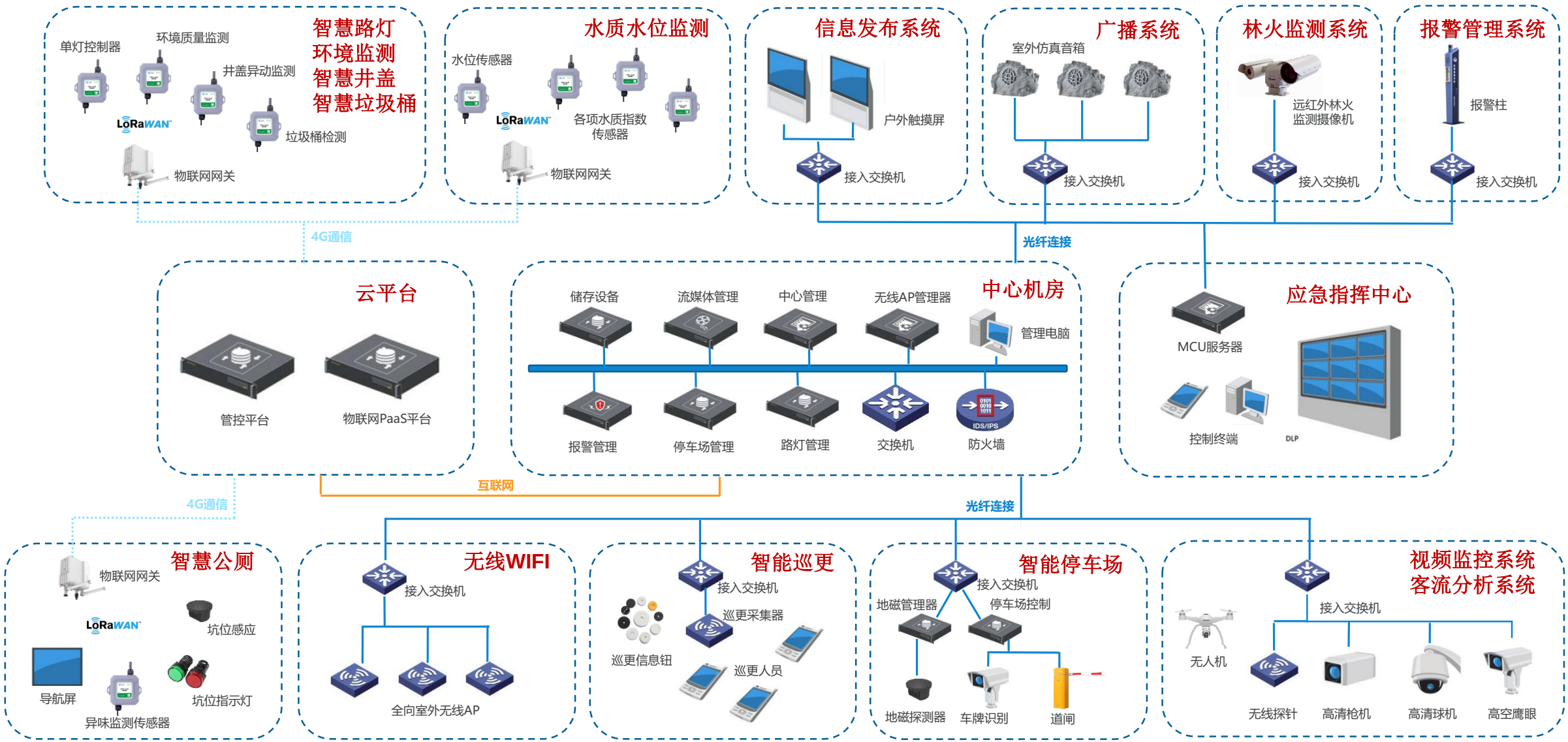
Security → **Efficiency** → **Connectivity** → **Sustainability**

磁石科技

Smart Park Capabilities List

Capabilities List					
Security & Monitoring	Smart Security	Resource Dispatch & Management	Intelligent Dispatching	Public Convenience	Smart Tour Guide
	Smart Fire Protection		Data Analysis System		Smart Parking
	UAV (Drone) Countermeasures		Intelligent Passenger Flow Analysis		Smart Plant Recognition
	UAV (Drone) Patrol		Smart Lighting		Smart Fitness Equipment
	Smart Environmental Monitoring		Water-Saving Irrigation		Mobile Payment
	Pest and Disease Monitoring		Smart Energy Management		Smart Emergency Assistance
	Public Opinion Monitoring		Smart Music System		Smart Interactive Games
			Sightseeing Vehicle Dispatch System		Wi-Fi Coverage
			Intelligent Cleaning		Parent-Child Interaction
			Intelligent Maintenance		
			Smart Information Distribution		
			Smart Waste Bins		
			Smart Fountain Management		
			Broadcast Management		
			Patrol Inspection Management		
			Event Management		

Business Architecture



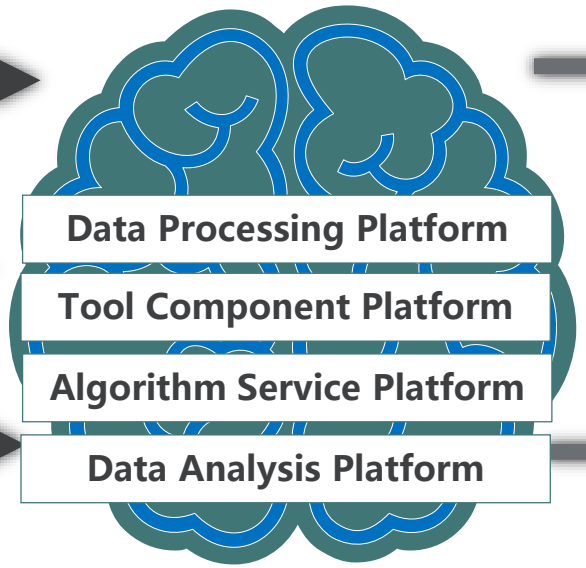
Data Resource Center

Park Data
Parking space occupancy, visitor volume, traffic flow, ticketing data, video surveillance data...

External Data
Meteorological data, OTA data...

Internet Data
Weibo, websites, forums...

Integrated Regional Data



Park Passenger Flow Analysis

Park Revenue Data Analysis

Visitor Behavior Analysis

- Unify Data, Break Silos, Enable Shared Integration
- Deliver a high-speed data platform with modular tools, intelligent algorithms, and customized analytics, providing parks with end-to-end data-driven solutions—from mining to decision-making.

Big Data Analytics

Integrated Control System

Unified GIS platform for centralized management of resources, devices, and operations.

Visitor Flow Analysis

Real-time analysis combining ticketing, surveillance, and monitoring data.

Vehicle Flow Analysis

Real-time parking and traffic monitoring to prevent congestion.

Ticketing Analysis

Comprehensive insights from OTA, manual, and self-service sales data.

Complaint Management

Track and analyze complaints by volume, resolution, category, and trends.

Online Review Analysis

Evaluate feedback from OTAs and social media to guide service improvements.

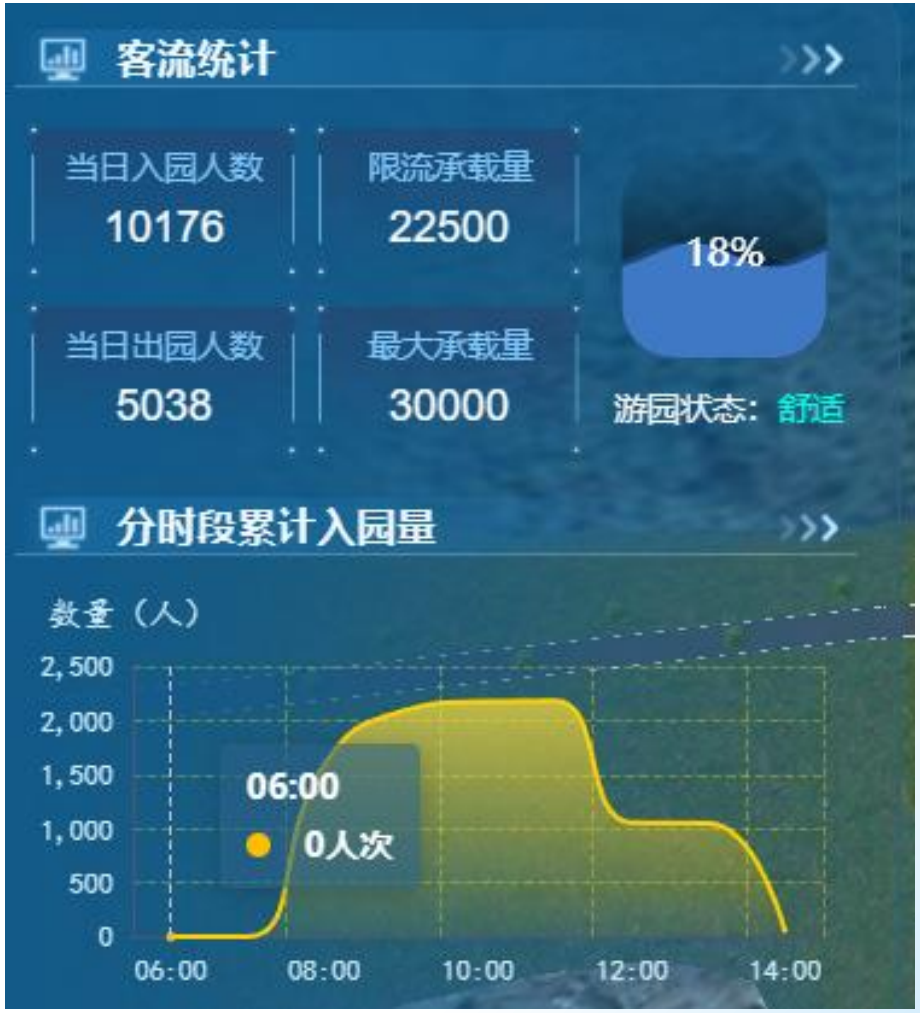
WiFi Analytics

Analyze visitor movement and behavior via connection data.

Holiday Monitoring

Monitor peak-season operations and identify management gaps through complaint analysis.

Real-time Visitor Flow Monitoring and Guidance



The Smart Park management platform utilizes big data analytics to monitor real-time visitor flow within the park.

Based on this data, managers can more accurately predict peak periods and rationally allocate human resources, thereby improving service efficiency.

Simultaneously, an intelligent guidance system optimizes visitor movement, prevents congestion, and ensures orderly circulation both inside and outside the park.

Eco-Efficiency & Resource Optimization

Big data analytics enables the smarter utilization of park resources for energy conservation. By monitoring facility usage, the Smart Park management platform can optimize energy consumption and reduce waste—for instance, by dimming lights and adjusting HVAC in less crowded areas.

The system further incorporates smart fitness equipment that generates renewable energy. For example, equipment with dual solar and self-powering systems converts both solar energy and kinetic energy from public exercise into electricity for nighttime lighting.

磁石科技

01 Challenges and Issues

02 Introduction to Smart Parks

03 Solutions

04 Success Stories

Success Stories

Success Stories

System Interface

Success Stories

System Interface

磁石科技

Thank you for your attention!

Contact : Sharon Lee Phone/We Chat: 1800 2588 449

Website: magni-ai.com

Address: 517, Tianxin Building, Futian district, ShenZhen, P.R.China.