AI Metahoop Arena

BEYOND COURT - Sports AI and the Media Art

AI Metahoop Arena

Note: This slide contains AI-generated images

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AI
METAHOOP ARENA

Korea's First Digital Science Basketball

We are creating an AI-XR fusion basketball platform that transforms every shot into data and content.

- Intelligent next-generation basketball infrastructure
- Real-time goal analysis
- Communication technology
- Automated broadcasting
- Goal: unmanned operation strategy

AI
METAHOOP ARENA

AI Sports Science

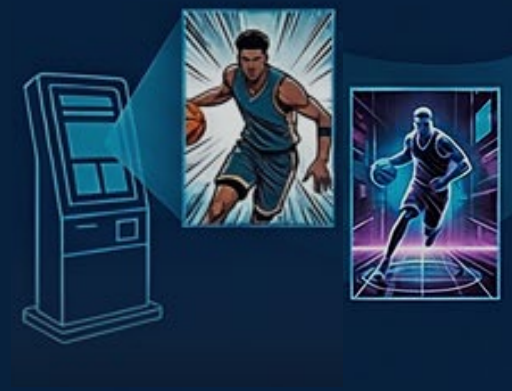
Automatic Broadcasting

AI Player tracking

AI Styling Photo booth

Interactive Media Art

Gamified Tournaments



AI METAHOOP ARENA

The beginning of a future-oriented sports space, where sports, AI, and art become one

Core Values

AI Real-Time Smart Goal Analysis

NBA-level precision shot accuracy and ARC analysis

AI Player Tracking & Smart Broadcasting

Automatic replay, highlights, cheering effects

Scientific Sports & Gamified Tournaments

AI-based entertainment and learning

Immersive Media Art Interaction

Motion sensors and tracking devices for interactive art

Fan Engagement & Branding

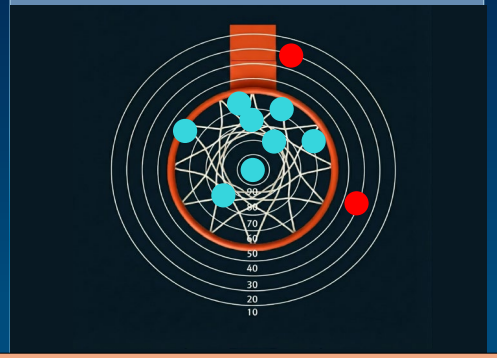
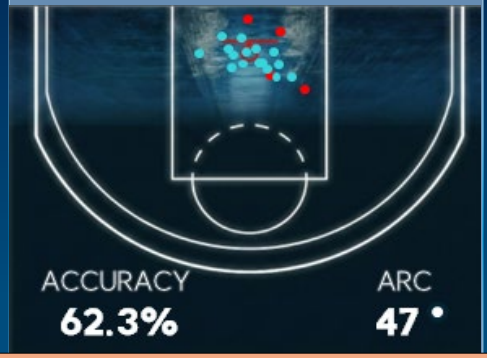
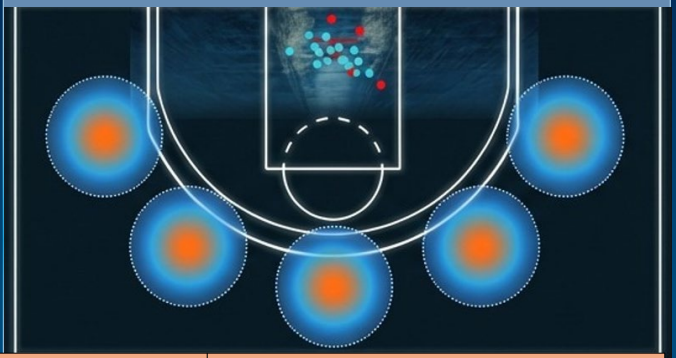
Phygital (Physical + Digital) sports platform

AI Metahoop Arena is more than just a basketball court. It is a Phygital (Physical + Digital) sports platform where cutting-edge AI sensing technology meets immersive media art. The arena reads the players' movements, analyzes the trajectory of the ball, and transforms the court itself into a responsive, living space that reacts to the flow of the game. We propose a new way to experience and enjoy sports.

SMART GOAL ANALYSIS

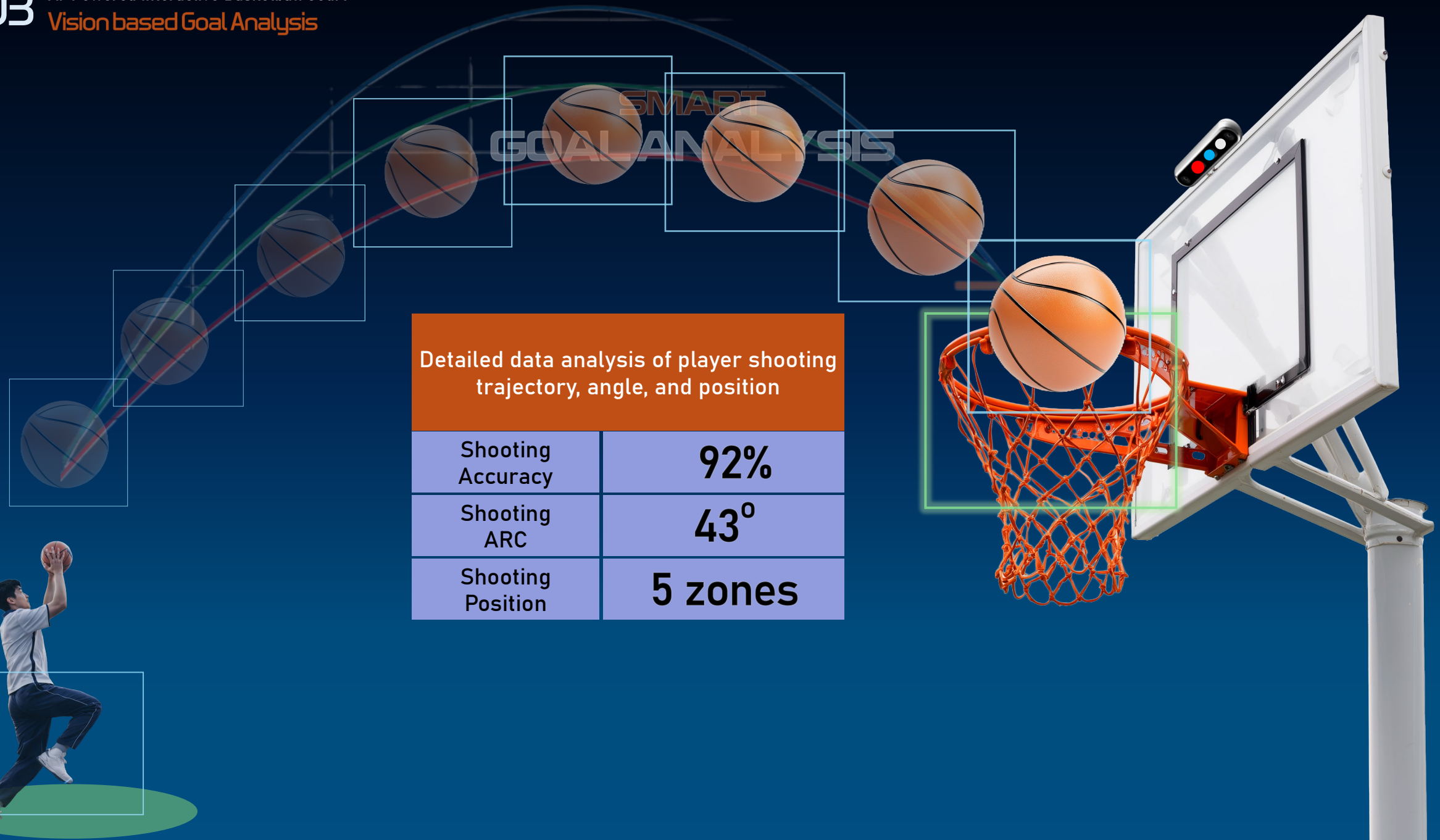
An interactive AI goal analysis system where the court responds the moment you take a shot

Smart Goal Analysis

3D Vision-based AI analysis	Shooting accuracy analysis	Shooting trajectory & ARC angle analysis	Position-based ARC and Goal Accuracy Analysis
			

Core Technology	Features	Application
3D Vision based on AI tech using AI Edge	• **Shooting Quality**: real-time shooting accuracy (e.g., 62.3%) and shooting ARC (e.g., 47°) analysis	Providing objective data-based training metrics.

Vision based Goal Analysis



Detailed data analysis of player shooting trajectory, angle, and position	
Shooting Accuracy	92%
Shooting ARC	43°
Shooting Position	5 zones

SMART GOAL ANALYSIS

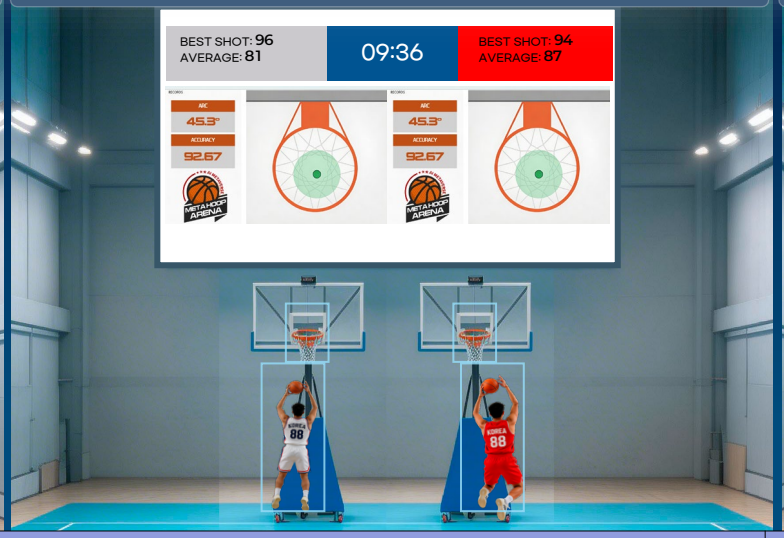
Game Play Mode for Fun and Basketball Learning

Single-Player Shooting Mode

Game Mode

A game-style basketball learning mode set based on a limited time and a limited number of shots per player.
Evaluates the highest score and average score.

Dual Shooting Mode



1:1 Game Mode

A game-style basketball learning mode set based on limited time and limited number of shots, where each player or team uses two basketball hoops. Evaluates the highest score and average score.

5-Position Speed Shooting Mode

Shooting Position(5) Game Moide

Based on a limited number of shots per player and set target scores for each of the five shooting positions, players move to the next position after achieving the required score. Evaluates the highest score and game time.

SMART
BROADCATING, REPLAY & HIGHLIGHT

With the combination of AI camera tracking technology and broadcasting technology, The moment you become the main character, AI PD is with you.

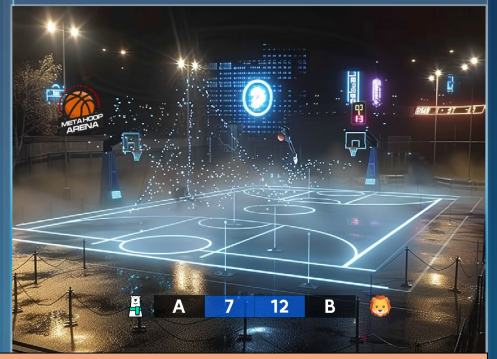
AI Goal Analysis Technical Specifications

AI Player Tracking Real-Time Game Broadcast

Automatic Saving & Playback of Goal Scenes

Automatic Highlight Creation after the Game

Automatic Scoreboard Layout-Logo/Time



Core Technology	Features	Application
Integration with 3–5 high-resolution cameras installed on the court. Players (above a certain size threshold) are automatically tracked and goal-scoring scenes are automatically saved.	• **Automatic player tracking broadcast:** Even without filming staff, AI cameras track players and groups in real time and transmit live game footage to large displays. • **Event detection:** AI detects scoring events, instantly captures and stores player poses, provides instant replay, and generates highlights.	Provides a professional match-like broadcasting environment without requiring professional personnel. Minimizes operational management burden for local governments and schools, and delivers branding effects for advanced basketball courts connected to social networks.

SMART
BROADCATING, REPLAY & HIGHLIGHT

AI Tracking Camera & AI Goal-Detection Camera

1	AI player and ball tracking function with continuous live broadcasting
2	Continuous broadcasting of the entire court
3	Scene capture before and after the shooting motion when a goal is successful
4	Player pose capture before and after the shooting motion when a goal is successful
5	Scene capture before and after the shooting motion when a goal is successful
6	Player pose capture before and after the shooting motion when a goal is successful

Camera Control, Video Storage & Highlight Creation

Supports automated broadcasting control and AI media generation.

SMART
BROADCATING, REPLAY & HIGHLIGHT

Automatic replay linked with the AI goal analysis system, highlight video generation and social network broadcasting

Game Operation Control

Game Control Kiosk

Through the game control kiosk, game time, team names, game time, team logos, and highlight creation can be controlled.
In non-game mode, media art can be directly experienced through selectable modes..

AI Tracking & Shooting Analysis

Ai Depth / AI Tracking Camera

Installed at the rear of the court, AI Depth and PTZoptics cameras analyze players' positions and shooting angles in real time, track player movements, and broadcast the game live.

Video Storage, Replay & Highlight

Automatic Control Device (Media Server)

PTZoptics automatically controls the cameras. When a goal is scored, the player's pose is stored, LED displays output the video, and replay and highlight videos are generated. Lighting and media art equipment are also controlled.

Real-Time Social Network Streaming

Video to Image Conversion

Real-Time Social Networking and Image Conversion

While the game is being played on-site, it is simultaneously streamed to social networks.
Clips stored on the media server are automatically converted into AI images for highlight image generation.

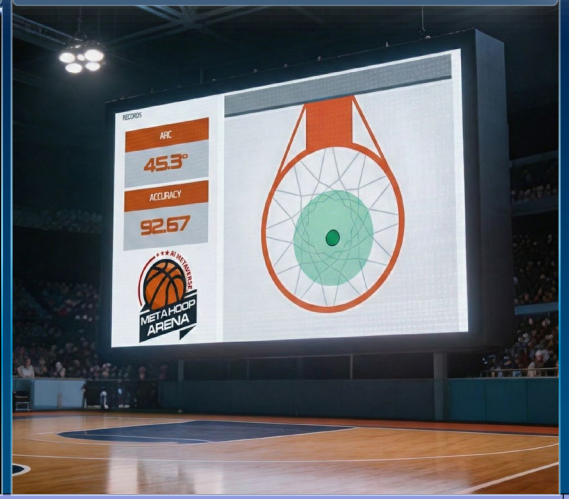
Fan Engagement

AI Photo Booth

Users on-site can create stylized images or AI videos from shot scenes, store them on smartphones via QR code, and receive the service.

SMART
BROADCATING, REPLAY & HIGHLIGHT

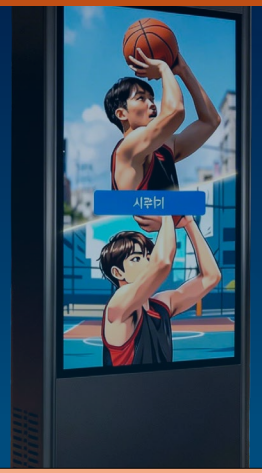
Automatic game reservation and setup, with AI-powered player tracking and live streaming to both on-site and social networks

AI Shooting Ball Detection	Goal Accuracy/ARC Analysis	Automatic Celebration Message Output	Instant Replay/Highlight Creation
			
AI Goal Monitoring	**Goal Accuracy/Entry Angle Analysis**	**Goal Success Celebration Video Replay**	**Instant Replay Upon Goal Success**
The AI 3D Depth camera and sensors installed on the basketball court are connected to the AI Edge server and network to continuously detect and analyze shooting balls.	When a shot attempt reaches the rim, the accuracy and entry angle of the ball passing through the hoop are immediately analyzed and displayed on the scoreboard.	When a goal is successful, a pre-prepared celebration video message and on-site footage are immediately replayed.	When a goal is successful, the scenes and poses before and after the shot are automatically captured and replayed through the instant replay function.

AI IMAGE/VIDEO STYLING

Become the main character in a comic on the basketball court,
Capture your coolest shooting scene on your smartphone.

AI Photobooth



AI Styling of Goal-Scoring Videos

Linked with the AI photo booth, the best poses from goal-scoring scenes are styled with AI.

AI Image Styling

Images

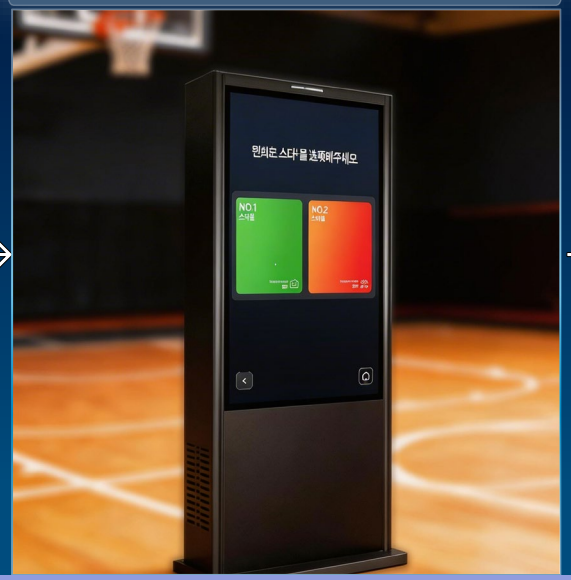
AI Video Styling

Videos

Core Technology	Features	Application
Game footage automatically clipped by AI is converted into images & stylized content by Generative AI.	• **AI Styling:** Through the kiosk (AI Style App), personal play photos are transformed into webtoon, retro, futuristic, and hero-style formats.. • **Mobile Storage:** The converted results (Image/Video) can be downloaded to a smartphone via QR code or shared on social media.	Transforms the sports experience into digital content, appealing to the preferences of the MZ generation and creating natural viral marketing effects.

AI IMAGE/VIDEO STYLING

**Become the main character in a comic on the basketball court,
Capture your coolest shooting moment on your smartphone.**

AI Photo Booth	Import Game Images	AI Style Selection	Smartphone Download
			 
AI Styling Kiosk	**Select Game Images**	**Style Selection**	**Smartphone Download**
Provides an AI photo booth that converts game-clipped images or videos into AI-styled content.	Provides a function to select images from automatically generated game footage and convert them into AI images or videos.	Select AI image style or video style.	Scan the QR code to download AI images. Highlight videos are automatically sent via email.

INTERACTIVE MEDIA ARTS AND SPACE VIEW

When there is no game, the court becomes a canvas,
At night, it becomes art as it is filled with light.

Interaction and Media Art

Sensor + Projection Integration
Projection interaction linked with 2D/3D sensors

Media Art (Video)
Media art using LED displays

Media Art (Illumination)
Linked with gobo lighting and beam projectors

Art Using LED Floors
Interaction based on LED floors and media platforms

Core Technology	Features	Application
By integrating motion sensors and projection mapping technology, the court floor is utilized as a media art canvas.	• **Visitor Mode:** At night or during non-game hours, the basketball court transforms into an interactive media art exhibition space that responds to movement. (e.g., Meta Galaxy Court) • **Space Production:** Utilizing gobo lighting, beam projectors, or large LED (indoor/outdoor) systems to produce media art. It can be used as a promotional channel by implementing club, local government, or sponsor logos and campaign messages as video content.	**Transforms nighttime public spaces into safe and beautiful "digital landmarks," enhancing city brand value and serving as a promotional medium.**

INTERACTIVE MEDIA ARTS AND SPACE VIEW

When there is no game, the court becomes a canvas.
At night, it becomes art as it is filled with light.

Interactive Media Art Control

Automatic Media Art Control

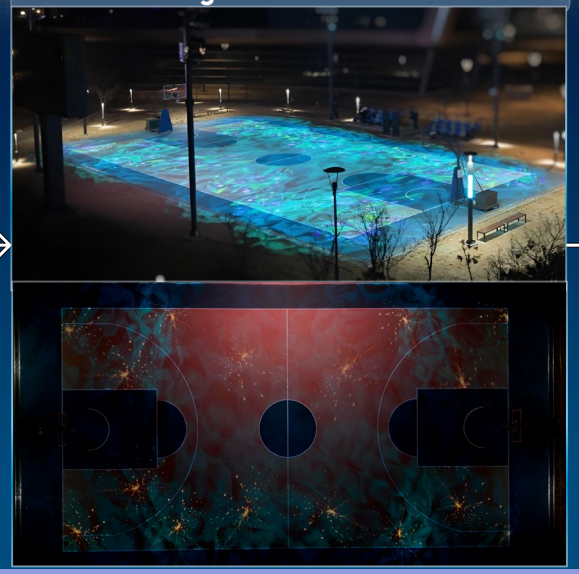
Control of lighting, LED displays, projectors, and gobo lighting during games or in non-game mode, either manually or automatically.

Media Art Equipment

Media Art Devices

Linked with ARCNET-DMX-based devices and capable of 4K HDMI output to LED displays.

Media Linkage During Non-Game Hours



Convert the Court into a Media Art Venue During Non-Game Hours

Utilize the court as a media art and experiential space when no games are being played.

LED Display-Based Content

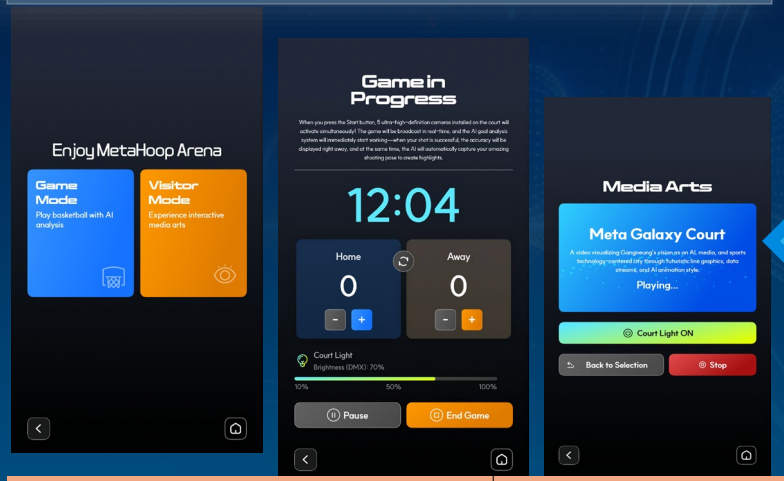
AI Content Projection

Automatically project AI content using the LED displays installed on the court.

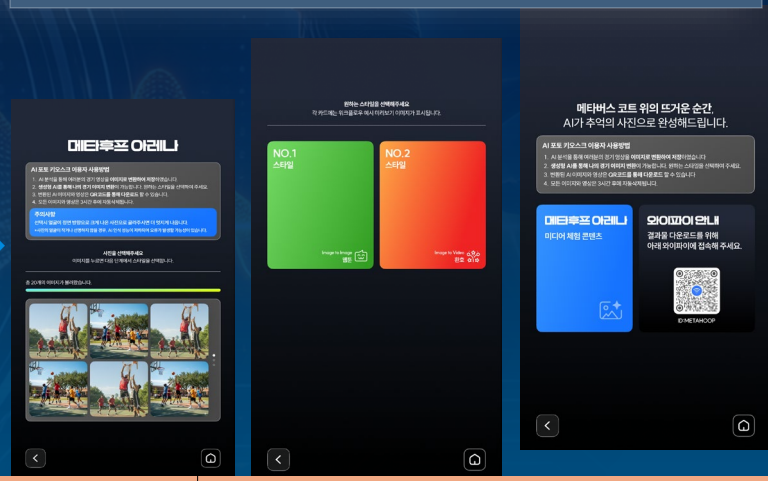
EASY TO USE
UI/UX OPERATION

UX Easy Touch Kiosk for Everyone No complexity, intuitive enjoyment, and reservation system integration

Game Control & Media Art User Interface



AI Styling Photo Booth User Interface



Core Technology	Features	Application
Through a kiosk with an intuitive UI/UX, this is an integrated control system (Omni Controller) that manages the entire court.	• **One-touch control:** Even without an administrator, users can directly operate game modes/visitor modes, start/end games, control lighting (DMX), and operate the scoreboard with ease. • **Modular system:** Configured to allow selection of only the necessary functions according to indoor/outdoor, new installation/remodeling, and on-site conditions.	By enabling users to directly control game operation and interactive media art, it presents a fully unmanned, zero-operation-cost management model that minimizes administrative burden.

OMNI OPERATION
CENTRALIZED MANAGMENT

All devices and equipment on the court are automatically managed centrally and operated unmanned via touchscreen

Main System Integration Specifications

AI-Powered Interactive Basketball Court

Korea's First AI Interactive Experience Basketball Court (Pilot Launch)

Gangneung AI Metaverse Park

- NBA-standard court (28 × 15 m)
- Vision cameras & AI Edge devices
- Automated broadcasting system
- (5 cameras, auto replay, highlights)
- XR media system
- LED display (6 × 3.5 m), speakers, lighting
- Interactive media arts
- AI styling (image & video)

Play becomes sport. Movement becomes experience. Space expands into leisure and culture.

COMMERCIALIZATION
COMMERCIAL PROPOSAL

Available for both indoor and outdoor courts, whether newly built or remodeled. Customized consulting provided for the KBA, local governments, and education offices

Solution

Basic Package (STANDARD)

- AI Analysis System (3D Vision, AI Edge)
- TV or LED Display
- Control Server (Light Package)
- Small Kiosk or LED PAD
- Software and Program Configuration

Smart Package (SMART)

- Includes Standard Package
- Automated Broadcasting System
- Automatic clip storage and replay when a goal is scored
- Highlight generation
- Clip video > Styling conversion
- Media Server (Medium Package)
- 1 Kiosk unit

Pro Package (PRO)

- Smart Package (Full Court Version)
- Dedicated Media Art System
- Gobo Light / Laser Beam Light
- Beam Projector
- Motion Sensor (optional service)
- Media Server (Pro Package)
- 2 Kiosk units

Turnkey Project

Turnkey Construction

Total Design and Construction

Indoor / Outdoor AI Basketball Court
New Installation / Remodeling.

"We build state-of-the-art AI MetaHoop Arena facilities with innovative know-how."

PARTNERS

PTZ OPTICS · dotworkz · intel · PEGATRON · RSPCT BASKETBALL SHOOTING, PERFECTED · Enlight

AI METAHOOP ARENA

System Configuration and Scientific Basketball Service

AI MetaHoop Arena System

Category	Components	Detailed Functions & Features
Intelligent Detection	AI Tracking Camera	Full-court player and group tracking, ball tracking (Ball Tracking) technology test distribution planned
Precision Analysis	3D Vision Sensor	Installed above the hoop; real-time analysis of shot success accuracy (%) and entry angle (degree)
Central Control	AI Edge & Media Server	Integrated control of all sensors and cameras, data analysis and media art output, ARCNET-DMX support
User Interface	Dual Kiosks (2 units)	[Game Control] Unmanned operation and essential UX support
		[Fan Service] AI style conversion and QR storage function
Environmental Production	LED & Special Lighting	Large LED display (broadcast/replay), Gobo and wave lighting-linked media art

Core Services & KBA Expansion

Category	Details	Strategic Value
AI Scientific Training	Real-time analysis of AI goal analysis and shooting angles	"Record and register": Database and certification foundation for all game records using 3D sensors and AI Edge; real-time analysis of goal accuracy, position-based shooting success rate, and shooting angle
Automatic Game Broadcast & Highlight	Camera tracking, automatic broadcast, real-time replay, highlight	Real-time tracking of players and groups during games; automatic storage and transmission of scoring scenes; full automation of broadcast, replay, celebration, and highlight
Remote Tournament	Online-connected remote tournament games (accuracy /position metrics)	True eSports – "Expansion of basketball base": Encourages participation of youth and general clubs by adding fun to lifestyle sports
AI Style Transfer	Converts goal scenes into AI-style images/videos for mobile (QR) storage	"Fan Engagement": Providing new media content optimized for the MZ generation to revive basketball popularity
		Intuitive kiosk operation allows anyone to directly execute media art and enjoy immersive experiences

Core Operations & Business Strengths, Operational Strategy

Category	Details	Expected Effects
OMNI Operation System	Integrated management based on intuitive UI/UX	Minimization of management personnel and maximization of user autonomy
Unmanned Operation System	Optimized design for permanent unmanned operation through linkage between central control server and kiosks	Reduction of fixed labor costs for local governments and operating institutions; improved operational efficiency
Media Art Convergence	Increased court value through night gobo lighting, wave lighting, and dimming control	Enhanced utilization of the court during non-game hours and establishment as a regional landmark
Scalability (Option)	Motion-responsive media art effects supported by adding interactive sensors	Expansion beyond a simple sports facility into a multi-cultural space
		*For indoor arenas, configured with LED floor or sensor-based systems
Sponsorship Events	Sponsorship in various events	Product branding effects and business model development through diverse event competitions and sponsorships

ALIGNED WITH KBA
K-DIVISION ROADMAP

The lifelong sport dreamed of by Korean basketball,
for all citizens

KBA / K-DIVISION Future Strategy

Million Basketball Players Development

The shortage of players is the biggest threat to the future of basketball. Currently, the total number of registered elite players across elementary, middle, high school, and university levels is 2,300. In particular, the population of school sports basketball players is continuously decreasing.
Therefore, we must establish a strategy to nurture 1 million lifestyle basketball players who will become the future of Korean basketball.

Opening the Era of 100,000 Basketball Clubs

The number of basketball clubs is decreasing. Currently, the number of registered teams is 2,000. We need a strategy to open the era of 100,000 basketball clubs.

Restoring Korea's as a Top Asian Sports Nation

We will restore the popularity and status of basketball.
Basketball was once the sport that excited the entire nation, but now it is fading from public interest.
Through systematic player development and strengthening competitiveness, we must revive it as a sport loved by the people.

Strengthening Global Competitiveness

Korea, once dominant in Asia, is now lagging behind all countries. Even in Asia, it is difficult to advance to the world stage.
We must innovate the player development and management system so that Korea can once again rise to the top four in Asia.

Establishing Financial Independence for Basketball

The chronic financial crisis threatens the survival of the basketball association.
Structural reform, not temporary financial measures, is needed.
Through an integrated marketing strategy that connects games, teams, and players, financial independence must be achieved.

FUTURE VALUE
EXPECTED BENEFITS

Expansion of the Basketball Base
Activation of Lifestyle Sports

Future Value and Expected Effects

01 Lifestyle Sports Activation

Through AI interactive content and 3x3-focused expansion, it promotes participation in lifestyle sports and increases the basketball population.

02 Scientific Player Development

By providing data-based precise feedback, it identifies players' strengths and weaknesses and contributes to the development of scientific sports through systematic training.

03 Smart Infrastructure Innovation

Maximizes the efficiency of sports facilities and enhances asset value, while building a data-centered operating system that reduces management burdens.

04 Fan Engagement and Content Strengthening

Through automatically generated highlight videos and content from scoring scenes, it expands media influence.

05 Industrial Impact and Job Creation

By creating new jobs through AI/DX-based interactive media and sports technology, it strengthens the global competitiveness of the Korean sports industry.

06 Global Advancement

Establishing sports team leadership that represents Korea and competes on the global stage.

AI MetaHoop Arena provides an AI-based experiential basketball environment in public and school facilities to achieve the core goals of the KBA K-DIVISION roadmap. Through 5x5 and 3x3 basketball digital records and analysis services, it maximizes user satisfaction.

COMMERCIALIZATION
BUSINESS MODEL

| Customer & Partnership |

Public Agencies

Local Governments & Public Institutions	Partner Value
• Provision of park and sports facility infrastructure • Integration with smart city and youth sports policies	• 24/7 utilization of public facilities • Smart city branding • Data-driven sports policy using always-on public infrastructure

Sports Training Institutes

Sports & Educational Institutions	Partner Value
• Basketball associations • Clubs and academies • Schools and universities	• AI-based training data • Automated performance and analytics reports • Expanded media exposure for athletes

Sport Brands

Brands & Agencies	Partner Value
• Sports brands • Advertising agencies • Local advertisers	• Branded highlight content • Sponsored events and activations • Context-aware advertising

| Revenue Model |

Revenue Model	Description
Court-as-a-Service	Platform licensing
AI Training Packages	Team & academy analytics services
Content Revenue	Highlights & AI-generated images
Media Art Sponsorship	Nighttime content operation
Data Services	Anonymized sports data

AI Metahoop Arena goes beyond
the mere adoption of technology –
it contributes to public health and a happier life.
It lays the foundation for the long-term growth of
Korean basketball and drives innovation that
transforms the paradigm of community sports.
AI Metahoop Arena is here to lead that change

AI METAVERSE
METAHOOP ARENA

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