

COMPARATIVE ANALYSIS

Smart Table Systems

PJM RFID-Based Table/Cage Solution

VS

AI Camera & Mode 3 RFID Hybrid Table/Cage Solution

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A two-part evaluation of the two leading smart-table architectures: a tangible comparison of the systems and architecture, and an intangible comparison of business impact and strategic roadmap. Each dimension is broken into its constituent sub-categories.

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Purpose and approach

Two broad architectures now dominate the smart-table market. **The PJM RFID-Based Table/Cage Solution** is built on chip attribution: every chip carries an RFID tag, antennas in the layout read those tags, and the system infers who is playing from the chips a player holds. **The AI Camera & Mode 3 RFID Hybrid Table/Cage Solution** takes a hybrid bet-attribution approach: AI-assisted cameras observe the player and the wager directly, while RFID confirms the chips and the cage inventory.

This document compares the two on two distinct planes. The tangible comparison examines the systems and architecture across four dimensions, each broken into its sub-categories: tracking (attribution method, player tracking), technology (RFID standard, chip and cage security), operations (dealer process and layout, game speed) and data (granularity, fidelity and evidence). The intangible comparison examines business impact and strategic roadmap: cost of ownership, the balance of compliance and customer experience, the leverage of the data, and the strategic roadmap. Each dimension opens with why it matters to the business, then states the position of both systems and closes with a verdict.

Common ground. Both architectures put RFID in the chips, and both deliver chip-level inventory, chain-of-custody and counterfeit control. On the money question they are at parity; chip provenance is the layer chip attribution was built for, and it does it well. What follows is therefore not a question of whether each can track the chip, but of what each can do beyond it, on the bet and the customer, where the two architectures diverge.

Headline finding: The two architectures are at parity on the money question; both track the chip. Beyond that shared foundation they diverge, and on every sub-category that turns on the bet or the customer **the AI Camera & Mode 3 RFID Hybrid Table/Cage Solution** is the stronger system, tangible and intangible. It is the recommended platform for a modern, multi-game gaming floor.

Part A. Tangible comparison: systems and architecture

This part assesses the physical and technical reality of each system across four dimensions and their sub-categories. The matrix below summarises every sub-category; the sections that follow expand each one in detail.

Summary matrix: tangible

Sub-category	PJM RFID-Based Table/Cage Solution	AI Camera & Mode 3 RFID Hybrid Table/Cage Solution	Winner
Shared Foundation			
Chip inventory and provenance	Delivers chip-level inventory, chain-of-custody and counterfeit control.	Same chip-level inventory and provenance.	Both
A.1 Tracking			
A.1.1 Attribution method	Chip is the identifying object; ownership inferred from chip movement.	AI video identifies the player and the bet directly; RFID confirms chips.	AI Camera & Mode 3 RFID Hybrid Table/Cage Solution
A.1.2 Player tracking	Fails when chips and identity diverge; not used in VIP or crowded mass tables.	Tracks the human; back-betting and any-position play handled.	AI Camera & Mode 3 RFID Hybrid Table/Cage Solution
A.2 Technology			
A.2.1 RFID standard	Proprietary Mode 2 PJM, licensed, single vendor.	Open Mode 3 (GS1), unlicensed, multi-vendor.	AI Camera & Mode 3 RFID Hybrid Table/Cage Solution
A.2.2 RFID equipment (Reader / Antenna)	Only source is single, licensed vendor for PJM.	Multiple, competitive sources.	AI Camera & Mode 3 RFID Hybrid Table/Cage Solution
A.2.3 Chip and cage security	No intake/activation; total-only Fill and Credit; damaged tag cannot be deactivated.	CVCS intake/activation; full lifecycle and location; damaged chips still deactivatable.	AI Camera & Mode 3 RFID Hybrid Table/Cage Solution
A.3 Operations			
A.3.1 Dealer process and layout	Manual buttons, tag-ins, stack splits, altered payout order; layout changes and lost boxes; heavy training.	Invisible; no layout change; standard procedure; side bets handled without extra steps.	AI Camera & Mode 3 RFID Hybrid Table/Cage Solution
A.3.2 Game speed	Reported 20% to 30% fewer hands per hour.	Pace maintained; payouts presented automatically.	AI Camera & Mode 3 RFID Hybrid Table/Cage Solution
A.4 Data			
A.4.1 Granularity	Inventory and chain-of-custody; player layer breaks once chips disperse.	Per-wager, per-position, every side bet, buy-in to buy-out, chip quantity, denomination and location.	AI Camera & Mode 3 RFID Hybrid Table/Cage Solution
A.4.2 Fidelity and evidence	Often weighted or estimated; no per-event image library.	Player-true actual play; retained image library per event.	AI Camera & Mode 3 RFID Hybrid Table/Cage Solution

A.1 Tracking

Why it matters. *Accurate attribution of play to the right person is the foundation for ratings, reinvestment, loyalty, AML monitoring and limit-setting. The first question is architectural (what does the system identify), the second is practical (does it hold up in live play); if either fails, every downstream use of the data is compromised.*

A.1.1 Attribution method

AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Uses a hybrid of AI-powered video and RFID. The Bet Attributor uses camera-assisted pose recognition to observe the player, the wager, and the relationship between buy-in and buy-out, so identity and currency are handled as separate layers. The chip is treated as currency; the bet is the unit of meaning.

PJM RFID-Based Table/Cage Solution. Relies on chip attribution: PJM RFID embedded in the chip makes the chip the carrier of the play record, and the system reasons about ownership by tracking which chip moved to which box. Identity is bound to the currency itself.

Winner: AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Separating identity from currency is the more robust architecture; binding identity to the chip fails wherever the two diverge, which on a live floor is most of the time.

A.1.2 Player tracking and practical accuracy

AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Because it tracks the human, it handles back-betting and lets a player bet anywhere on the table, seated or standing, without being constrained to a fixed box, producing accurate per-player turnover and win/loss.

PJM RFID-Based Table/Cage Solution. Breaks down whenever chip ownership and player identity diverge: junket runners buy and distribute chips to several VIPs, and paper warrants are used in place of physical chips. In practice the chip-attribution layer is not used in VIP rooms or on crowded mass-market tables, because once chips disperse the system can no longer attribute them, and back bets are often left anonymous or rated manually.

Winner: AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Tracking the player directly gives a rating that does not break down during ordinary casino behaviour or junket operations.

A.2 Technology

Why it matters. *The RFID standard and the chip itself determine vendor freedom, hardware longevity and the integrity of the cash-equivalent on the floor. A closed standard, a fragile tag, or a cage with no activation step each creates lock-in or security gaps that are expensive to unwind.*

A.2.1 RFID standard

AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Reads chips on the open Mode 3 GS1 standard, which is unlicensed and supported by multiple manufacturers, so the operator can multi-source chips and hardware.

PJM RFID-Based Table/Cage Solution. Uses proprietary PJM (phase-jitter-modulation) Mode 2 RFID, licensed from a single vendor. The two modes share the same frequency but are not interoperable, so the choice commits the operator to one vendor's hardware and roadmap for the life of the chip set.

Winner: AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. An open, multi-vendor standard preserves choice; the proprietary standard locks the operator to a single supplier.

A.2.2 RFID equipment (Reader / Antenna)

AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. The operator can multi-source reading hardware from competitive and innovative vendors.

PJM RFID-Based Table/Cage Solution. All reading hardware is controlled by one vendor, suppressing innovation, and creating a supply chain risk.

Winner: AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Using an open standard mitigates supply chain risk and may even allow switching to a different solution vendor without changing the entire architecture.

A.2.3 Chip and cage security

AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. The CVCS chip-management system requires an intake/activation step on delivery: chips leave the factory locked and hold no value until the casino activates them, so chips stolen in transit are worthless on the floor. If an RFID tag is later damaged, the chip can still be identified and deactivated using its other IDs, and the system maintains full lifecycle status (valid, deactivated, destroyed, hound) and chip location across cage, float and cabinet.

PJM RFID-Based Table/Cage Solution. Cage systems without an intake/activation step cannot guarantee that stolen, undelivered chips are unusable and reportedly check only the total amount on Fill and Credit rather than individual tags. With a single identifier, a chip whose tag is damaged cannot be identified or deactivated.

Winner: AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Mandatory activation, multi-ID deactivation and full lifecycle tracking deliver a materially stronger security model.

A.3 Operations

Why it matters. *The technology touches dealing procedure, table layout and game speed. Anything that loads the dealer, forces a change to the layout, or slows the game carries a direct revenue, productivity and integrity cost.*

A.3.1 Dealer operations and game process

AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Runs invisibly and requires no change to the table layout: dealers keep their standard dealing procedure, with no tag-ins or stack splits and no new buttons to manage, so they can focus on hosting the game. Because it combines camera-assisted AI with RFID, it also tracks the full range of side bets accurately at each position without adding any dealer step or any change to the felt.

PJM RFID-Based Table/Cage Solution. Re-engineers the game around the technology. Dealers manually press start, end and result buttons, tag shared wagers such as tie and pair, split chip stacks above the antenna read limit, and alter payout order so the rated player is paid last; weak or dead chips and card-buffer errors trigger their own processes. The table layout itself has to change to

support shared-antenna side bets, and some layouts sacrificed a betting box to fit a new side bet. Reported training runs to around 24 hours for pit managers and 8 hours for dealers, plus weeks of post-go-live support. A separate function that lets a manager rewrite an incorrect payout record has also been flagged as a collusion risk.

Winner: AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. The AI Camera & Mode 3 RFID Hybrid Table/Cage Solution leaves the dealer free to host, needs no layout change and still captures every side bet; the PJM RFID-Based Table/Cage Solution re-engineers both the game and the layout and turns the dealer into a compliance operator.

A.3.2 Game speed

AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Maintains the pace of the game; payout amounts are presented automatically, so the dealer does not slow down to compute them.

PJM RFID-Based Table/Cage Solution. Operators evaluating the system have reported the added process steps reduce game speed by 20% to 30%, and the lost betting box reduces the number of players per table.

Winner: AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Maintaining hands per hour protects table revenue that the chip-attribution process erodes.

A.4 Data

Why it matters. *The value of a smart table is ultimately the data it produces. Both richness (how much and how granular) and fidelity (how trustworthy and defensible) determine whether the operator can rely on ratings, yield tables and detect patterns, or must fall back on estimates.*

A.4.1 Granularity and player-true capture

AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Captures play at a fine grain and ties it to the actual player: every wager and every side bet at every position, back bets, position changes, the buy-in to buy-out relationship, and the exact quantity, denomination and location of each chip.

PJM RFID-Based Table/Cage Solution. Produces inventory and chain-of-custody data; the player-level layer becomes unreliable once chips disperse among players, so the richest part of the dataset, who played what, is the part most likely to be missing.

Winner: AI Camera & Mode 3 RFID Hybrid Table/Cage Solution captures a far richer, player-true record of actual play, down to every side bet.

A.4.2 Data fidelity and evidence

AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Because the player is observed directly, ratings reflect actual play, and a retained library of images for every event provides visual evidence for each transaction in disputes and surveillance.

PJM RFID-Based Table/Cage Solution. Player-level figures are frequently weighted or estimated rather than recorded as actual, which reduces fidelity and the trust that can be placed in the data, and there is no comparable per-event image record.

Winner: AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Higher-fidelity, evidence-backed data is more defensible and more useful for yield and surveillance.

Part B. Intangible comparison: business impact and strategic roadmap

This part assesses what each architecture means for the business over its lifetime: total cost of ownership, the balance of compliance and customer experience, the leverage of the data, and the strategic roadmap. The matrix summarises each sub-category; the sections that follow expand each one.

Summary matrix: intangible

Sub-category	PJM RFID-Based Table/Cage Solution	AI Camera & Mode 3 RFID Hybrid Table/Cage Solution	Winner
B.1 Total cost of ownership	Heavy footprint; grows into a de-facto table-management system; high integration overhead.	Lightweight, self-contained; standard SQL; low integration burden.	AI Camera & Mode 3 RFID Hybrid Table/Cage Solution
B.2 Compliance and customer experience	Meets compliance by making the game procedural; loads the dealer and changes the layout; answers customer and bet only indirectly.	Meets compliance transparently above the floor; answers customer and bet directly; no impact on dealing, layout or experience; privacy-preserving.	AI Camera & Mode 3 RFID Hybrid Table/Cage Solution
B.3 Leveraging the data	Compliance-first, inventory-centric; each function must retrofit; player layer too weak for loyalty and marketing.	One clean, player-true stream captured once, serving integrity, loyalty and marketing (side bet vs main) and analytics.	AI Camera & Mode 3 RFID Hybrid Table/Cage Solution
B.4 Strategic roadmap	Baccarat-first; blackjack and Mississippi Stud win/loss only; far from roulette; proprietary chip set costly to reverse.	Baccarat AI pattern transfers to new games (showcased June 2026); faster iteration; open standard keeps exit cost low; path to ~90% to 95% coverage.	AI Camera & Mode 3 RFID Hybrid Table/Cage Solution

B.1 Total cost of ownership and IT burden

Why it matters. *The headline licence is only part of the cost. Footprint, integration and the number of systems claiming the same data drive the true lifetime cost and the load on the IT function.*

AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Behaves the way a mature IT function wants a smart table to behave: a lightweight, self-contained component that does one job well, stores its data in a standard SQL database, and integrates through a small number of clean interfaces.

PJM RFID-Based Table/Cage Solution. Carries a heavy infrastructure footprint and tends to expand beyond a smart table into a de-facto table-management system, so the operator ends up running two systems that claim the same data, and every integration, reconciliation and patch cycle becomes a multi-vendor negotiation that compounds over time.

Winner: AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. A materially lower cost of ownership and integration burden across the life of the platform.

B.2 Compliance and the customer experience

Why it matters. *Compliance is now the primary reason the technology is deployed, but it must not be bought at the expense of the experience or of operations. The real test is which architecture meets today's and tomorrow's regulation transparently, with the technology invisible at the table, rather than by re-engineering the game, loading the dealer or interrupting the customer.*

AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Answers the regulator's three questions directly (know the customer, know the bet, know the money), observing the buy-in to buy-out relationship that is the key financial-crime and safer-gambling signal. Crucially, it does this transparently: the intelligence sits above the floor, so compliance is achieved with no change to dealing procedure, table layout or the customer experience. As regulation evolves, new requirements are absorbed in the software layer rather than pushed onto the dealer or the felt.

PJM RFID-Based Table/Cage Solution. Can meet compliance but does so by making the game more procedural: it answers the customer and bet questions only indirectly while loading the dealer and changing the layout. It tends to satisfy the letter of regulation at the cost of the experience and of operations, and each new requirement tends to surface as another manual step at the table.

Winner: AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. The AI Camera & Mode 3 RFID Hybrid Table/Cage Solution balances both best: it meets and adapts to regulation with transparent technology that leaves operations and the player experience intact, where the PJM RFID-Based Table/Cage Solution trades experience and operational simplicity for compliance.

B.3 Leveraging the data

Why it matters. *Granular play data should be captured once and then serve many purposes: integrity and compliance, loyalty and marketing, and analytics and yield. Whether that is possible depends on how clean, granular and trustworthy the single source is.*

AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Produces one clean, player-true stream that is captured once and made available across functions. Integrity and surveillance draw on it for evidence; loyalty and marketing use the same granular record, including the split between side bets and main bets, to understand how each player actually plays and to align offers and comps accordingly; and analytics uses it for yield and pattern detection. Because the stream is real-time, a host can act while the player is still in the seat.

PJM RFID-Based Table/Cage Solution. Its compliance-first, inventory-centric shape means each function has to retrofit to whatever the dashboards accept, and because the player-level layer is unreliable, the data cannot dependably feed loyalty and marketing; much of the potential value is never realised.

Winner: AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. Capture once, use many: The AI Camera & Mode 3 RFID Hybrid Table/Cage Solution's single granular dataset serves integrity, loyalty, marketing and analytics at the same time, where chip-attribution data struggles to reach beyond compliance.

B.4 Strategic roadmap and future-proofing

Why it matters. *A smart-table decision is a decade-long bet on which vendor can digitise the whole floor, adapt as regulation and game types evolve, and change course cheaply if the environment*

shifts. What matters is less which games are live today than how quickly a vendor can extend its platform to the next game, and how locked-in the operator is if it needs to move.

AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. G2E Asia in June 2026 showcased AI-enabled smart tables for blackjack, roulette and sic bo, and is deliberately taking its time to bring them to market. The strategic significance is the platform pattern rather than any single game: the camera-assisted AI approach proven at scale on baccarat transfers directly to other games, so each new game is faster to build and validate than the last. On roulette, for example, the AI already reads the exact portion of a chip on a line or corner and calculates the payout automatically. Because the chip standard is open and the layers are independently replaceable, switching cost and exit risk also stay low.

PJM RFID-Based Table/Cage Solution is baccarat-first and proprietary. On blackjack and Mississippi Stud it currently captures only turnover and win/loss, lacking payout and collection, and it remains far from a working roulette product, so new games arrive slowly and on the vendor's timetable. The proprietary chip set is also expensive to reverse, since changing course means replacing chips, antennas, training and data at once, leaving much of the floor un-digitised in the interim.

Winner: AI Camera & Mode 3 RFID Hybrid Table/Cage Solution. The platform that can iterate from one game to the next fastest, while keeping exit cost low, will digitise the floor first; the AI Camera & Mode 3 RFID Hybrid Table/Cage Solution 's reusable AI pattern and open standard give it that advantage.

Overall conclusion

Across both planes of assessment, the result is consistent. The two architectures share a foundation: both track the chip and answer the money question. Beyond that, on the tangible sub-categories of attribution method, player tracking, RFID standard, chip hardware, chip and cage security, dealer process and layout, game speed, data granularity and data fidelity, the AI Camera & Mode 3 RFID Hybrid Table/Cage Solution is the stronger system. On the intangible sub-categories of cost of ownership, the balance of compliance and customer experience, the leverage of the data, and the strategic roadmap, it is again the clear choice.

The AI Camera & Mode 3 RFID Hybrid Table/Cage Solution is the recommended smart-table platform. It meets the compliance obligations every operator now faces while protecting the experience, the cost base and the strategic optionality that a chip-attribution architecture puts at risk.

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