

# Designing Resilient Payment Networks for Unattended Parking



An eBook from **TNS**

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# Executive Summary

Parking operations are at a crossroads. Every entry, session, and exit represents a revenue opportunity — but only when the payment journey is seamless. In parking, “demand capture” means converting every eligible parking event into a completed, paid transaction with no drops and no leakage. Yet across the industry, payment failures, especially in unattended environments such as gates, kiosks, pay-by-app systems, and EV charging, continue to erode revenue, undermine trust, and reduce operational efficiency.

## Why does this matter?

When payment networks fail, operators lose more than just a transaction. They risk customer frustration, operational bottlenecks, and reputational damage. In the UK, for example, nearly half of drivers report payment failures at parking locations, while younger, app-first consumers experience even higher levels of friction. Every failed payment is a missed opportunity and a moment when a competitor can win loyalty.

## What will this eBook help you understand?

- Where and why parking payment networks break down
- How unattended journeys (gates, kiosks, apps, and EV chargers) expose hidden revenue risk
- How integrated payments, connectivity, and security reduce complexity and improve uptime
- How orchestration moves operators from fragmented endpoints to a unified, high-availability parking ecosystem

This guide explains how to transform parking operations from a patchwork of disconnected payment endpoints into a fully orchestrated, resilient system, unlocking hidden revenue and deliver a frictionless customer experience.

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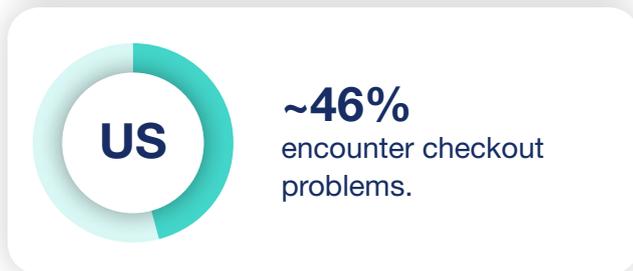
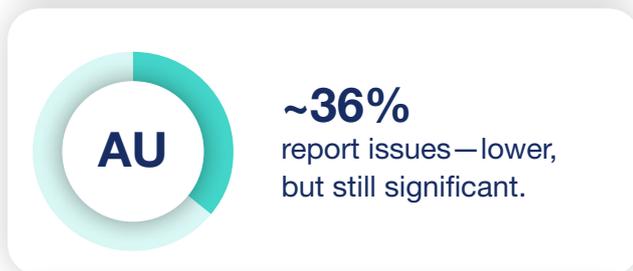
# Section 2

## The Parking Revenue Problem – Why Transactions Fail

Despite advances in payment technology, Parking operators continue to lose revenue due to failed transactions, especially in unattended environments such as gates, kiosks, and pay-by-app flows. These failures are not isolated incidents; they represent a persistent, measurable problem across global markets.

### Unattended Realities: Payment Failures Are Common

Recent consumer research shows that **40-50% of consumers** across Australia, the UK, and the US have experienced payment issues at checkout within the past year. In parking specifically, the problem is even more pronounced:



Data Source: Keeping Payments Simple – Exploring Consumer Demand for Seamless Payment Methods

These failures are often linked to fragmented payment apps, inconsistent acceptance of cards and digital wallets, and unreliable connectivity at unattended terminals. In the UK, the diversity of local council apps and payment providers further compounds the issue, making it more difficult for drivers to complete transactions smoothly.

### Age Skew: Younger Drivers Face More Problems

The impact of payment failures is not evenly distributed across age groups. Data indicated that drivers aged 18-34 experience significantly more problems paying for parking than those aged 55 and older. This disparity likely reflects younger consumers' greater reliance on app-based and digital payment methods, which are more susceptible to technical disruptions and inconsistent acceptance.

### Why It Requires Immediate Remediation: Revenue and Experience at Risk

Every failed authorization at the gate is a lost transaction - a direct hit to revenue. But the consequences go beyond the financial:

- **Customer Experience:** Payment friction at the gate or kiosk leads to frustration, longer queues, and negative perceptions of the parking operator.
- **Policy Friction:** Regulatory changes, such as the UK's "five-minute payment rule," introduce additional operational risk. Operators must balance compliance with the need to maintain a seamless payment experience.

Ultimately, payment failures undermine trust and operational efficiency. They create moments where customers may abandon the transaction, seek alternatives, or avoid certain parking locations altogether.

#### Key Takeaway:

To capture every eligible parking transaction, operators must address the root causes of payment failures, particularly in unattended environments. The following sections explore how integrated payment solutions and orchestration can close these gaps, reduce complexity, and unlock hidden revenue.

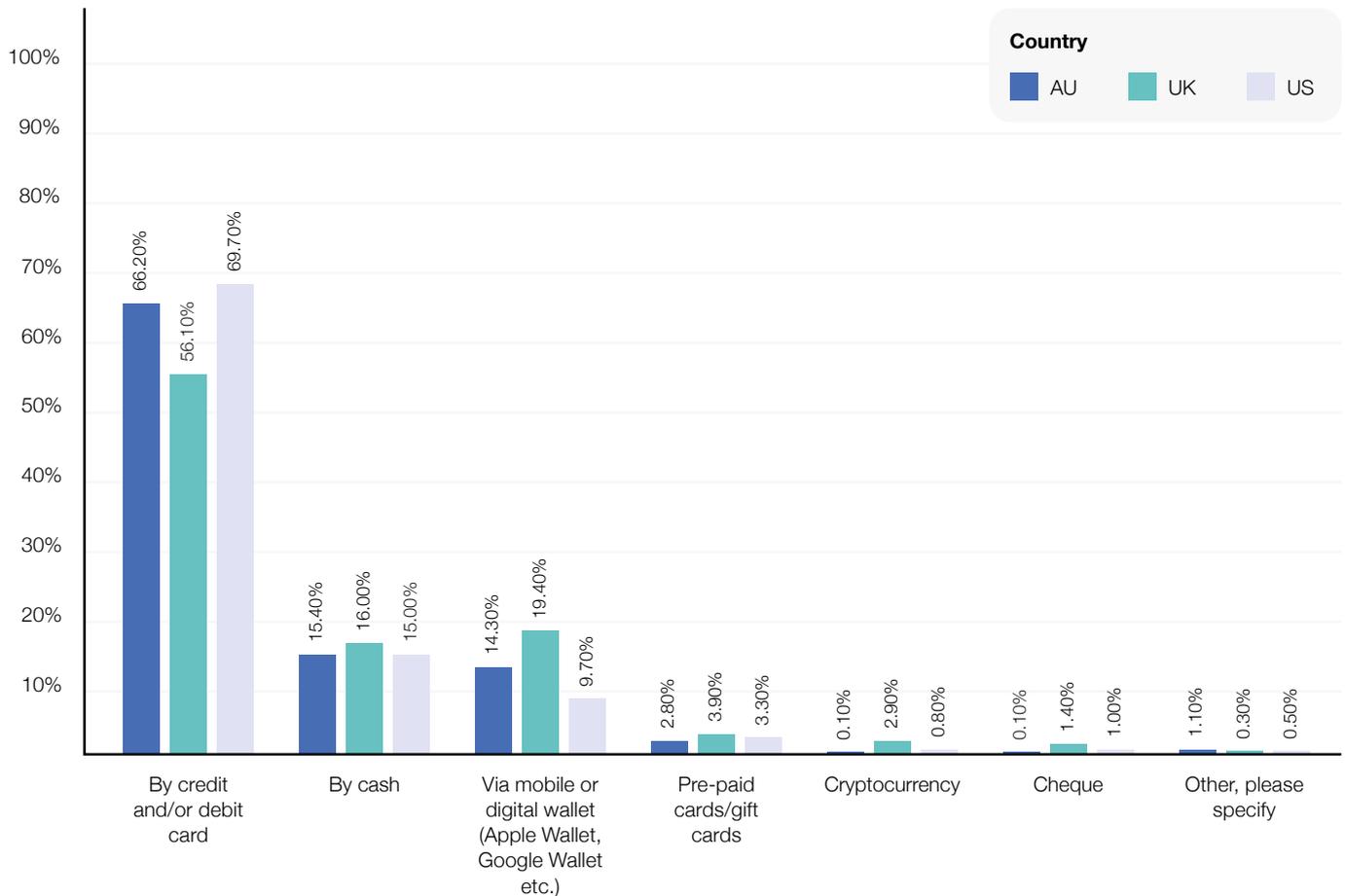
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# Section 3

## How Drivers Pay: Implications for Parking operators

Understanding how drivers prefer to pay is critical for maximizing demand capture and delivering a frictionless parking experience. Recent consumer research and market data reveal clear trends that should shape every operator's payment strategy.



Data Source: Keeping Payments Simple – Exploring Consumer Demand for Seamless Payment Methods | TNS

### Cards Dominate, Wallets Are Rising

Across major markets, cards remain the primary payment method for parking and other everyday transactions:

- **US:** Approximately 70% of consumers use cards as their main payment method.
- **Australia:** Approximately 66% prefer cards.
- **UK:** Approximately 56% use cards, with a notable shift toward digital wallets.

Mobile wallets are gaining ground, particularly in the UK and Australia:

- **UK:** 19% of consumers use mobile wallets.
- **Australia:** 14% of consumer use mobile wallets.
- **US:** 10% of consumers use mobile wallets, lower than other markets but steadily increasing.



## UK Wallet Momentum & Decline of Cash

The UK is leading the shift to digital payments:

- **More than 57% of UK adults now use mobile wallets** (UK Finance, 2024).
- **Cash usage has dropped below 10%** of all payments.

Drivers increasingly expect to “tap and go”, whether at a parking gate, kiosk, or through a mobile app.

### Implication:

Parking operators must prioritize tap-to-pay and mobile wallet acceptance at all entry and exit points. Failing to do so risks alienating a growing segment of digital-first drivers.

## Contactless Saturation: The New Normal

Contactless payments have become the default in the UK:

- **94.6% of eligible in-store card transactions were contactless in 2024** (Barclays Consumer Spend, Payments Cards & Mobile).

This behavior is now habitual - drivers expect the same speed and convenience at parking kiosks and gates as they do in retail environments.

### Implication:

Operators should ensure that all unattended terminals, gates, and kiosks support contactless cards and wallets. The expectation for “tap and go” is now widespread, and any friction at the point of payment can result in lost transactions and a diminished customer experience.

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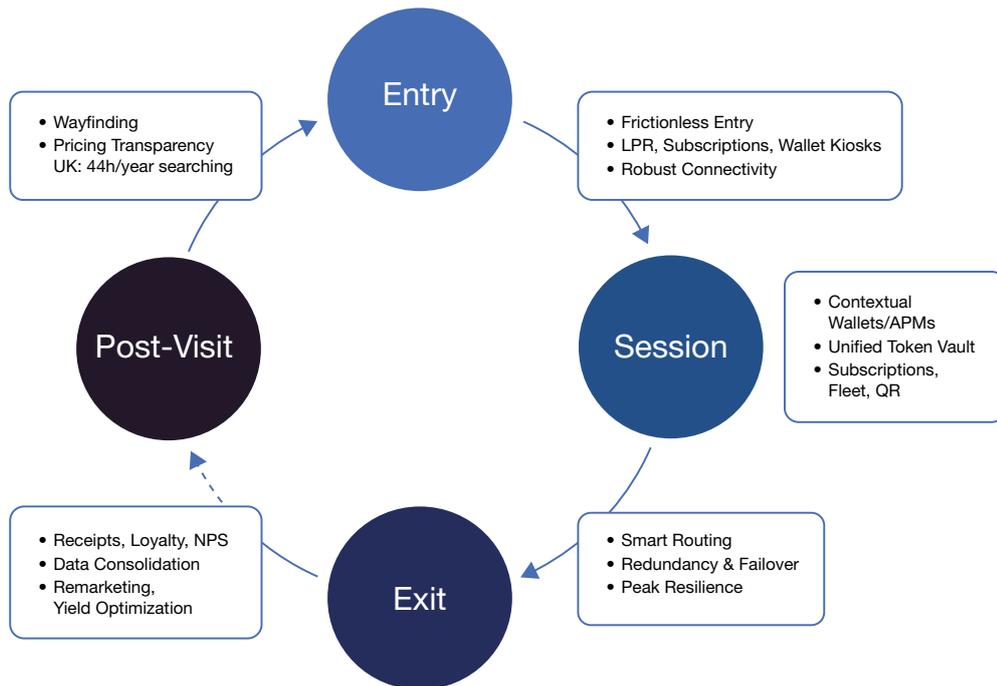
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# Section 4

## Demand Capture Flywheel, From Discovery to Exit

Maximizing parking revenue means capturing demand at every stage of the customer journey, not just at the payment terminal. The demand capture flywheel is a holistic framework connecting discovery, entry, session, exit, and post-visit engagement to ensure no revenue is left unrealized.

### Demand Capture Flywheel for Parking



1.

### Discovery (Pre-Arrival): Reducing Search Time and Congestion

The journey begins before a driver even arrives. **Wayfinding tools, transparent pricing, and advance reservations** help drivers find parking more quickly and reduce urban congestion.

- **UK drivers spend approximately 44 hours per year searching for parking**, with London drivers among the worst affected (INRIX UK study).

#### Implication:

Operators that invest in digital discovery tools, including apps, signage, real-time availability, and clear pricing, can improve customer satisfaction while increasing occupancy and revenue.

2.

### Entry: Friction-Free Access and Revenue Protection

First impressions matter. Frictionless entry enabled by license plate recognition (LPR), subscriptions and transponders, and wallet-ready kiosks sets the tone for the entire experience:

- **Robust connectivity is essential:** Downtime or network failures can force operators to open gates, resulting in direct revenue loss and operational disruption.

#### Best practice:

Ensure all entry points support contactless, mobile, and subscription-based access, backed by managed connectivity and failover systems to always keep gates operational.

# 3.

## Session: Seamless Payment Options and Unified Accounts

During the parking session, drivers expect contextual payment options, from wallets and alternative payment methods (APMs) to fleet cards and QR codes.

- **Unified token vaults** allow operators to link subscriptions, fleet accounts, and QR payments under a single customer profile, reducing breakage and abandoned transactions.

### Implication:

Present the right payment options at the right time, and unify accounts to deliver a seamless, transparent experience.

# 4.

## Exit: Smart Routing and Always-On Transactions

The exit is a critical revenue moment. TNS's **Smart routing** directs transactions to acquirers with the highest authorization rates, maximizing successful payments.

- **Redundancy and failover** are essential during peak periods, such as events and holidays, to prevent downtime and maintain transaction continuity.

### Implication:

Operators should deploy payment orchestration platforms that support multi-acquirer routing and real-time monitoring to ensure every eligible exit results in a completed payment.

### Sources

- Searching for Parking Costs the UK £23.3 Billion a Year | INRIX <https://inrix.com/press-releases/parking-pain-uk/>
- Payment Orchestration Report | TNS [https://tnsi.com/wp-content/uploads/2024/11/TNS-Payment-Orchestration-Report\\_Unattended.pdf](https://tnsi.com/wp-content/uploads/2024/11/TNS-Payment-Orchestration-Report_Unattended.pdf)

# 5.

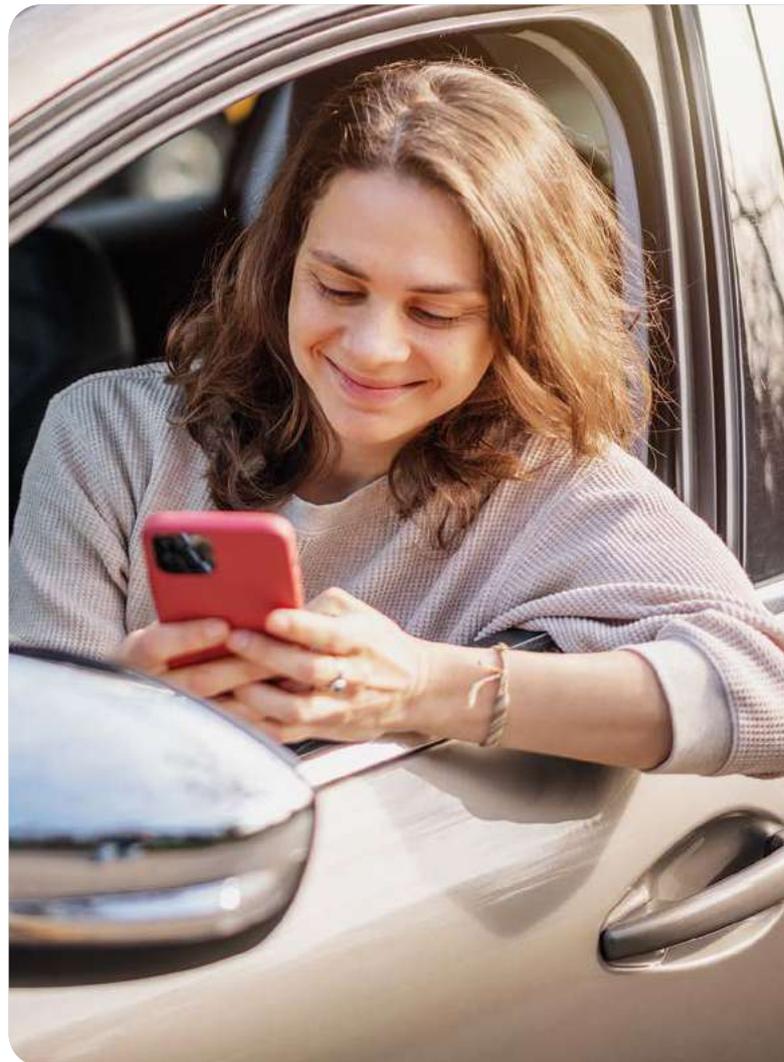
## Post-Visit: Data, Loyalty, and Yield Optimization

The journey does not end at exit. **Digital receipts, loyalty programs, and Net Promoter Score (NPS) feedback loops** drive repeat business and actionable insights.

- **Consolidating data across channels**, including web, app, kiosk and gate, enables remarketing, personalized offers, and dynamic pricing strategies to optimize yield.

### Implication:

Operators that close the loop through post-visit engagement converts one-time parkers into loyal customers while unlocking additional revenue opportunities.



# Section 5

## Integrated Payments

Modern parking operations require more than simply accepting payments; they require a unified, resilient, and intelligent payment infrastructure. At TNS, this is delivered through the **Accept, Connect, Orchestrate, Protect** Framework, a structured approach that integrates payment acceptance, secure connectivity, intelligent traffic management, and end-to-end protection. The result is higher uptime, reduced complexity, and a consistent customer experience across every parking touchpoint.

### The Four Pillars, Defined for Parking



#### 1. Accept

What it means:

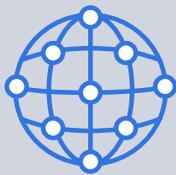
- Enable drivers to pay with any method—cards, wallets, QR codes, fleet accounts, or mobile app—across all touchpoints, gates, kiosks, mobile applications, and EV chargers.
- Support for contactless, mobile, and alternative payment methods is now a baseline expectation.



#### 3. Orchestrate

What it means:

- Deploy a single API layer to unify all payment endpoints, including attended, unattended, online and mobile channels.
- Support acquirer-agnostic routing, token vaults for unified customer profiles, smart routing to improve authorization rates, and real-time monitoring to protect uptime.
- Simplify integration, accelerate new feature deployment, and enable dynamic pricing and advanced analytics.



#### 2. Connect

What it means:

- Ensure every payment terminal, gate, and kiosk remains continuously connected through managed, multi-carrier connectivity.
- Reliable connections prevent downtime, reduce revenue loss from forced gate opening and enable real-time data flows.



#### 4. Protect

What it means:

- Secure every transaction with PCI DSS Level 1 compliance, tokenization, and end-to-end encryption.
- Reduce compliance scope and operational risk, while safeguarding customer trust and brand reputation.

## What Orchestration Adds

- **Single API:** Integrate all payment flows—gate, kiosk, app, EV—through a single connection.
- **Acquirer-Agnostic Routing:** Direct transactions to the best-performing acquirer based on real-time performance.
- **Token Vault:** Securely store and unify customer credentials using tokenization while minimizing data exposure, and enable seamless cross-channel experiences.
- **Smart Routing:** Optimize for higher approval rates and lower transaction costs.
- **Monitoring & Switch Management:** Real-time visibility and automated failover for maximum uptime, especially at unattended endpoints.

## Did you know?

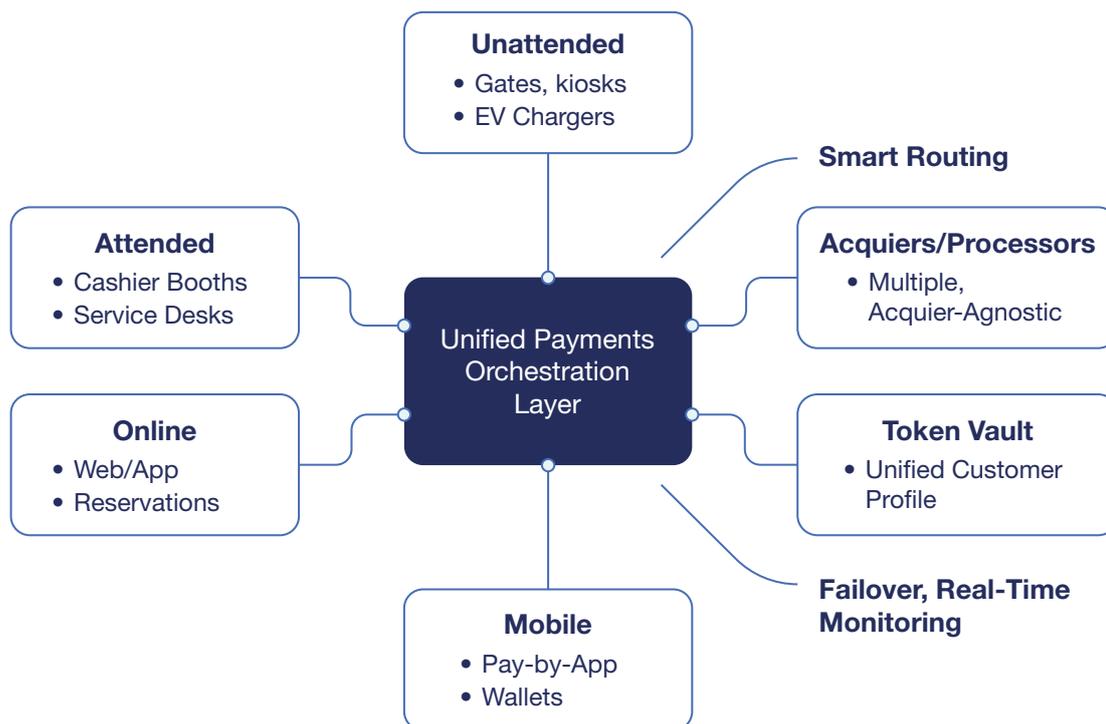


76% of POS-centric enterprises enable their payment stack through orchestration.



81% do so specifically to integrate with in-person POS channels.

## Unified Payments Layer for Parking



Integrated payments are not simply about accepting funds; they are about orchestrating every transaction, protecting every customer interaction, and connecting every endpoint for maximum uptime and revenue. Orchestration is rapidly becoming the industry standard for future-ready parking operations.

# Section 6

## Market Proof: What the Data Says

To understand the urgency and opportunity in modernizing parking payments, it is essential to examine global data. The following insights illustrate the scale of the challenge and reinforce the business case for integrated, resilient payment infrastructure.



### Parking Search & Congestion

- **Urban drivers worldwide spend significant time searching for parking.**
  - In major cities, the impact is pronounced. London drivers **lost 67 hours** annually searching for parking, and broader congestion data from 2024 shows **101 hours lost** in London traffic overall (INRIX Global Traffic Scorecard 2024).
  - Similar patterns are evident across other global cities, where congestion and parking search time affect productivity and increase emissions.

#### What this means:

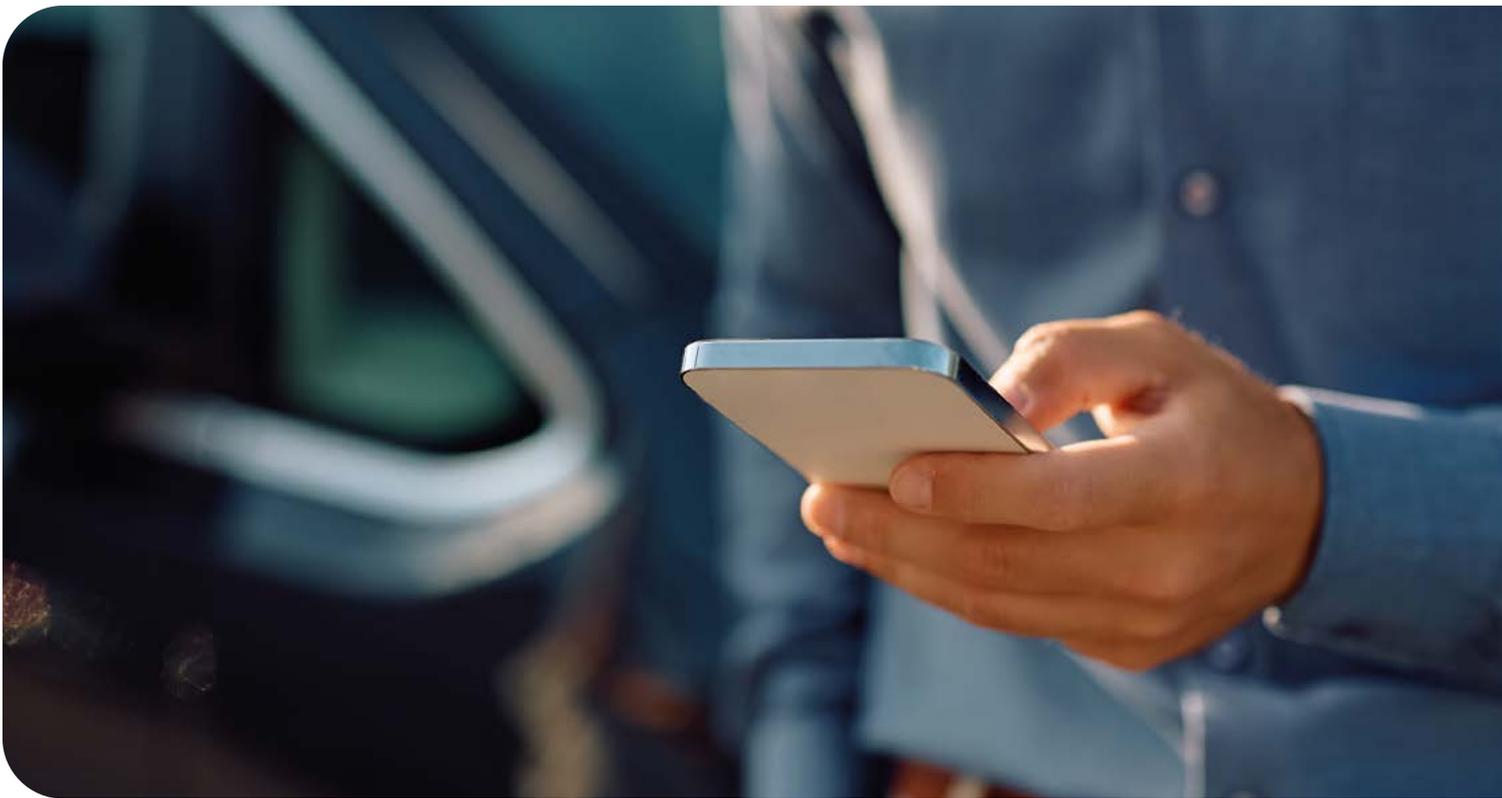
Reducing friction in discovery and entry through digital wayfinding, reservations, and transparent pricing can measurably improve customer satisfaction while contributing to reduced congestion.

### Fraud & Reputation

- **Payment card fraud remains a growing global risk.**
  - Card fraud losses are projected to reach **\$49 billion by 2030** (Nilson Report via Mastercard).
  - Reputation is a critical business asset: **70-80% of a company's market value is now intangible, driven by trust and brand equity** (Harvard Business Review).

#### What this means:

Secure, resilient payment infrastructure is not solely a compliance requirement. It is essential to protecting revenue and long-term brand value. A single breach or high-profile payment failure can have disproportionate reputational impact.



## PCI DSS v4 Timeline

- Updated global payment security standards are already in effect.
  - PCI DSS v4.0 introduces future-dated controls that become **mandatory after March 31, 2025** (RSI Security, LinfordCo).
  - These requirements affect parking estates upgrading terminals, gates, and kiosks, including mandates for multi-factor authentication, logging, and secure software updates.

### What this means:

Operators should plan proactively for compliance. Non-compliance may result in fines, expanded audit scope, or even suspension of payment acceptance.

## Industry Sizing

- The global parking market is substantial, although published estimates vary.
  - Market valuations for global parking lots and garages range from **\$28.1 billion to \$91.3 billion** in 2024 (Kentley Insights, TBRC).
  - Variability reflects differences in scope, including public versus private facilities, on-street inventory, and the inclusion of technology services.

### What this means:

While the market is clearly significant, sizing data should be used cautiously and without overstatement. Operators should prioritize operational KPIs and localized growth opportunities rather than relying solely on global market totals.

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# Section 7

## Channel Deep Dive, Where Revenue Hides

Parking revenue is often lost in the details of each payment channel. The following analysis highlights common failure points and practical solutions to unlock demand capture across the most critical parking payment journeys.

### 7A. Pay at Gate / Kiosk (Unattended)

#### Common Failure Modes:

Device downtime (hardware/network issues)

Single acquirer dependency with no failover

Lack of wallet or alternative payment acceptance

Unreliable connectivity (SIM or network outages)

Complex, multi-step checkout flows

#### How to fix:

- **Acquirer-agnostic routing:** Route transactions to the best-performing processor to maximize approval rates and uptime
- **Multi-carrier SIM with intelligent roaming:** Maintain continuous connectivity even if one network fails.
- **Guest checkout flows:** Enable frictionless, account-free payments for one-time users.
- **Unified tokenization:** Support cards, wallets, fleet accounts, and other payment types within a single secure token vault.
- **Monitoring & alerting:** Implement real-time visibility to detect and resolve issues before they impact revenue

#### What this means:

Every unattended terminal can become a revenue leak if not designed for resilience and flexibility. Operators should prioritize redundancy, payment diversity, and proactive monitoring.



## 7B. Pay by App / LPR / Subscriptions

### Demographic Trends:

- Younger drivers (18-34) prefer digital-first options, including apps, QR codes and license plate recognition (LPR).
- Older drivers are generally more comfortable with staffed checkout or traditional kiosks.

### Best Practice:

- **Tokenization and unified vault architecture:** Ensure stored payment credentials function seamlessly across gate, kiosk, and web and app channels.
- **Flexible payment flows:** Offer both digital and traditional options to maximize inclusivity and conversion.

#### What this means:

Digital adoption is rising, but operators must bridge generational preferences. Unified tokenization ensures a smooth experience for all.

## 7C. EV Charging in Parking Estates

### Regulatory & Market Drivers:

- **AFIR (EU):** Requires ad hoc payment options, meaning no app or account is required, and mandates clear price transparency at public chargers.
- **Ocpp (now IEC 63584):** Establishes the global standard for charger interoperability and integrated payment systems.

### Design Requirements:

- Accept bank cards and ad hoc QR payments at all chargers.
- Clearly display tariffs and session pricing.
- Ensure chargers are interoperable and compliant with latest standards.

#### What this means:

As EV adoption increases, parking operators must treat charging as a core revenue channel. Removing payment friction and meeting regulatory standards are essential to supporting long-term growth.



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# Section 8

## Country Chapters: Tailored Demand Capture Strategies

Parking payment trends and operational challenges vary by region. Operators must tailor demand capture strategies to local consumer behavior, regulatory frameworks, and technology adoption patterns.

### United Kingdom

#### Trends:

- High adoption of mobile wallets and near-universal contactless card usage.
- Policy changes (e.g. PPSAP) are driving greater transparency and consumer protection in parking payments.
- Fragmented landscape of local council apps and payment providers.

#### Implications:

- Prioritize wallet and contactless acceptance at all touchpoints.
- Invest in payment orchestration to unify fragmented payment flows and maintain compliance with evolving regulations.
- Monitor policy updates to remain aligned with consumer rights and accessibility requirements.

### United States

#### Trends:

- Persistent Legacy fragmentation, with a mix of older and modern payment systems across regions and operators.
- High exposure to pay-at-pump in mixed fuel and parking environments (approximately 59% usage).
- Diverse consumer preferences and regulatory frameworks across states.

#### Implications:

- Orchestrate payments across multiple acquirers and devices to maximize uptime and operational flexibility.
- Design for both digital-first and traditional payment flow to serve all user segments.
- Ensure robust connectivity and redundancy, particularly in high-volume or mixed-use environments



## Australia & New Zealand

### Trends:

- Measured innovation: operators and consumers are open to new payment methods but expect reliability and simplicity.
- Lower levels of self-service resistance in Australia (approximately 16%), with continued strong reliance on card payments.
- Gradual adoption of mobile wallets, with pilot programs often preceding broader rollouts.

### Implications:

- Pilot wallet acceptance and enhanced connectivity in selected locations before scaling.
- Maintain strong card acceptance and simple, intuitive user flows.
- Monitor consumer feedback and regulatory developments to guide the pace of innovation.

## Spain & Malaysia

### Trends:

- Mobile-first expectations are increasing, particularly in urban centers, although cash remains important for many users.
- Regulatory and market environments encourage payment diversity and accessibility.
- Operators must design experiences that serve digital-preferred and cash-preferred segments.

### Implications:

- Design simple, inclusive app and kiosk flows that support both mobile and cash payments.
- Integrate local alternative payment methods (APMs) through orchestration to maximize reach.
- Stay informed on local regulations related to payment transparency and consumer rights.

### Key Takeaway:

There is no universal approach to parking payments. Operators who tailor demand capture strategies to local consumer behavior, regulatory context, and technology adoption will be best positioned to unlock revenue opportunities and deliver high-quality customer experiences.

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# Section 9

## Case Study - “Sky Wing Parking” (Airport)

### Scenario

A major international airport experiences persistent revenue leakage and operational disruption due to outdated parking payment infrastructure. Frequent downtime at gates and kiosks forced staff to open barriers, resulting in significant lost revenue from unpaid exits. Fragmented systems limited acceptance of contactless and mobile wallet payments, while critical data remained siloed across multiple platforms.

### Modernization Solution

The airport deployed a unified orchestration and managed connectivity stack across all parking touchpoints:

- **Modernized gates and kiosks** to support card, mobile wallets, and fleet payments.
- **Implemented subscriptions and transponders** for frequent travelers.
- **Introduced acquirer-agnostic orchestration** to support high availability and multi-processor failover.
- **Enabled real-time monitoring and alerting** to proactively identify and resolve issues.
- **Established a unified data layer** for consolidated reporting and advanced analytics.

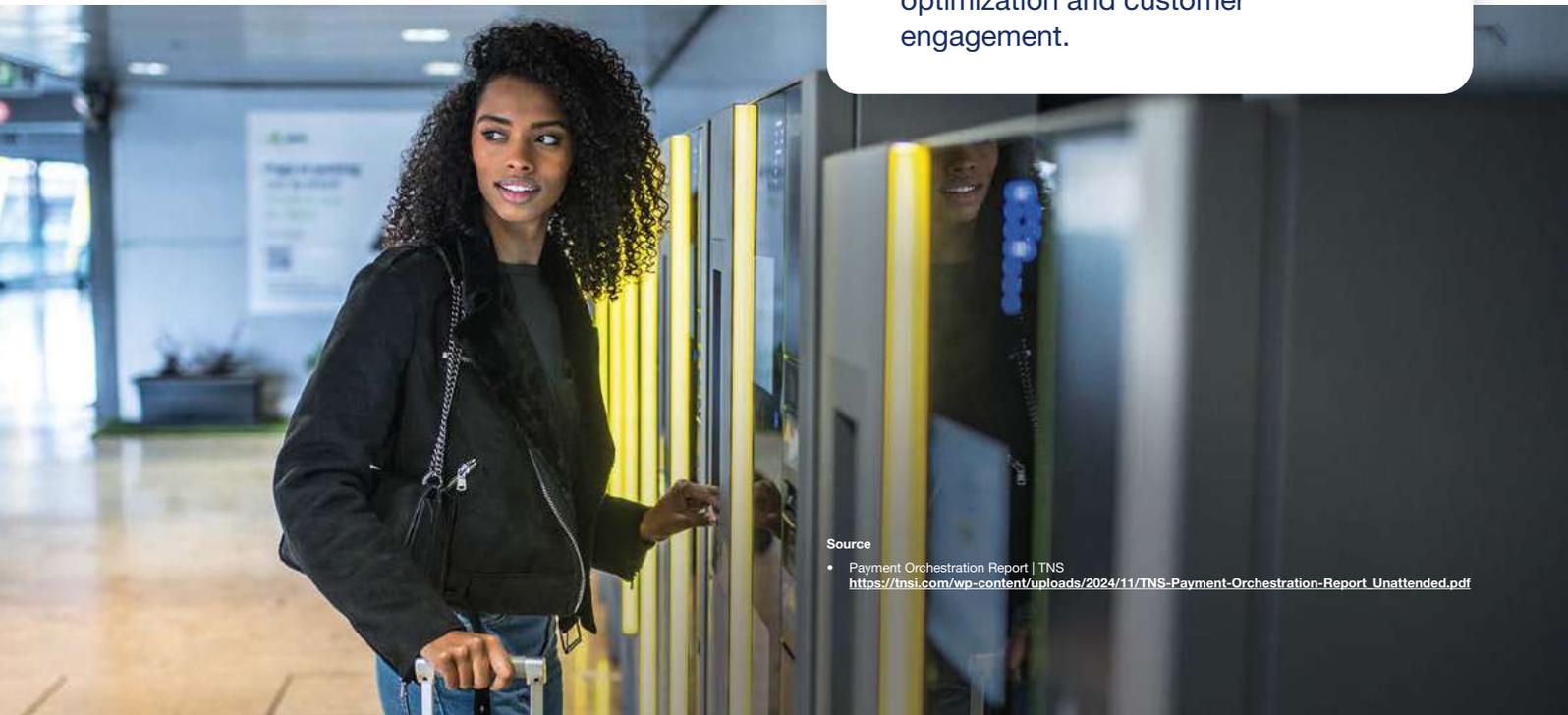
### Before/After Storyboard

#### Before:

- Frequent device and network downtime.
- Forced “open gates” policy during outages.
- Revenue leakage in millions annually.
- Inconsistent customer experience.
- Siloed data and slow reporting.

#### After:

- High availability across all payment endpoints.
- Seamless acceptance of cards, wallets, and subscription-based access.
- Multi-processor failover ensures transactions continue even if one acquirer is unavailable.
- Real-time alerts enable rapid response to issues.
- A unified data platform delivering actionable insights for yield optimization and customer engagement.



Source

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# Section 10

## Compliance and Security: Trust as a Growth Lever

### PCI DSS v4: Key Changes for Parking Operators

PCI DSS v4.0 introduces significant new requirements for all environments that handle payment data, including parking estates with gates, kiosks, and unattended terminals.

#### Key changes (mandatory after March 31, 2025)

- **Multi-Factor Authentication (MFA):** Required for all access to cardholder data environments, not limited to remote access.
- **Logging and Monitoring:** Enhanced requirements for logging access and continuously monitoring payment system activity.
- **Sensitive Authentication Data (SAD) Handling:** Stricter controls on governing the storage, transmission, and deletion of sensitive authentication data.
- **Script Integrity:** New controls to ensure scripts on payment pages are authorized and monitored for tampering.

#### What this means:

Operators must plan and budget for upgrades now. Failure to comply may result in fines, expanded audit scope, and potential suspension of payment acceptance.

### Fraud Risk in Unattended Environments

- **Macro risk:** Global card fraud losses are projected to reach **\$49 billion by 2030** (Nilson Report via Mastercard).
- **Unattended environments** Gates, kiosks, and EV chargers face elevated risk due to physical accessibility, limited on-site oversight, and dependence on network connectivity.
- **Reputational impact:** According to Harvard Business Review, **70-80% of a company's market value is intangible**—driven by trust and brand reputation. A single breach or high-profile fraud event can have outsized business consequences.

#### What this means:

Layered security, including encryption, tokenization, real-time monitoring, and acquirer-agnostic failover, is essential for protecting both revenue and long-term brand reputation in unattended parking environments.

Operators that treat compliance and fraud prevention as strategic investments, rather than technical obligations, position trust as a competitive advantage.



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# Section 11

## From Pilot to Portfolio: A Practical Roadmap for Integrated Parking Payments

A successful transition to integrated, orchestrated parking payments requires a phased and disciplined approach. The following 30/60/90-day roadmap provides a practical framework, along with a checklist operators can use in their Request for Proposal (RFP) and vendor selection processes.

### 90 Days to Deployment

#### 30 Days: Establish the Foundation

- Conduct a comprehensive **site audit** to inventory all payment devices, including gates, kiosks, mobile apps, and EV chargers.
- Map current **payment flows** and identify friction points or failure risks.
- Establish a **KPI baseline**, including authorization rate, device uptime, payment success rate, and queue times.
- Assess **wallet and card acceptance gaps**, as well as current compliance status

#### 60 Days: Pilot and Validate

- Launch a payment **orchestration proof of concept (POC)** at two representative sites.
  - Enable multi-acquirer routing to improve resilience.
  - Deploy SIM based and multi-carrier roaming to ensure continuous connectivity
- Monitor conversion rates, payment success, and operational KPIs.
- Gather customer and staff feedback to support iterative improvements.

#### 90 Days: Scale & Optimize

- Expand the orchestration and connectivity stack to high-traffic locations including airport and city hotspots.
- Include **subscriptions, loyalty programs, and digital receipts** to drive repeat usage.
- Integrate analytics and reporting to enable real-time insights and continuous optimization.



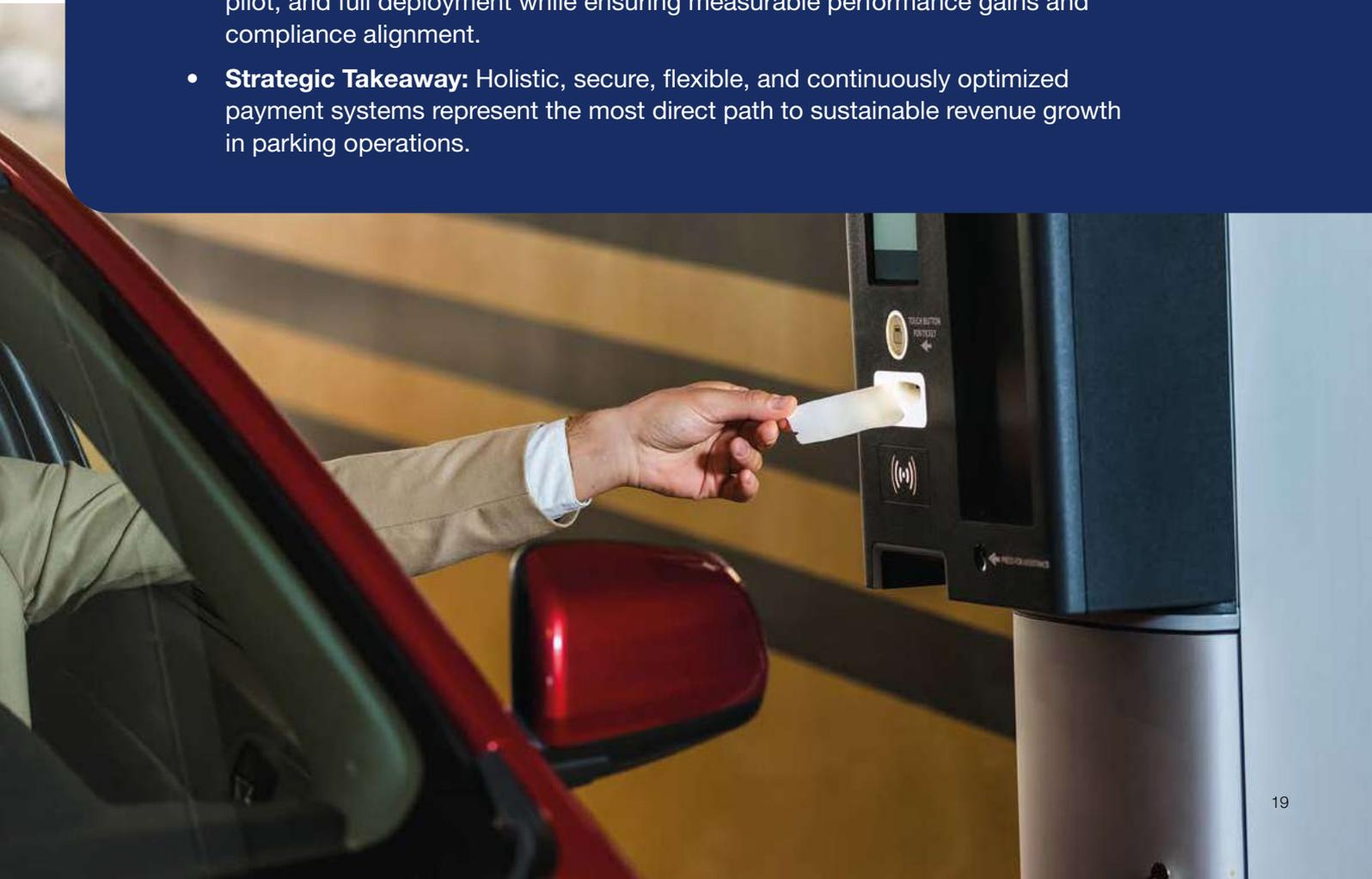
### RFP Checklist: What to Require from Vendors

- **Omnichannel capability:** Support attended, unattended, online, and mobile payments environments through a unified infrastructure.
- **Acquirer-agnostic routing:** Route transactions across multiple processors to maximize uptime, approval rates, and resilience.
- **Monitoring and alerts:** Provide real-time visibility and proactive issue detection across all payment endpoints.
- **PCI DSS Level 1 compliance:** Maintain security controls that support audit readiness and long-term regulatory alignment.
- **Token vault:** Securely store and unify cards, wallets, and fleet credentials to enable seamless cross-channel experiences.
- **EV compliance:** Support ad hoc payments, transparent pricing, and OCPP/IEC 63584 standards for charging infrastructure.

A structured, phased rollout combined with a robust RFP process enables Parking operators to move from pilot to full portfolio deployment with minimal risk and maximum impact.

## Executive Summary: Key Takeaways

- **Demand Capture Defined:** Every parking event, from entry to exit, can and should be converted into a completed, paid transaction.
- **Revenue Risk Awareness:** Payment failures in unattended environments, including gates, kiosks, apps, EV charging, directly affect revenue, customer experience, and loyalty.
- **Driver Payment Behavior:** Cards remain dominant globally, while mobile wallets and contactless adoption continue to rise. Operators must support diverse payment methods to meet evolving expectations.
- **The Revenue Flywheel:** Revenue is captured across discovery, entry, session, exit, and post-visit engagement. Friction at any stage reduces conversion.
- **Integrated Payments Pillars:** The Accept, Connect, Orchestrate, Protect Framework unifies endpoints, optimizes routing, ensures uptime, and strengthens compliance.
- **Data-Driven Validation:** Global statistics on search time, fraud exposure, PCI requirements, and market scale reinforce the urgency for modernization.
- **Channel-Specific Risks:** Each payment channel presents distinct failure points. Solutions include acquirer-agnostic routing, tokenization, and regulatory alignment.
- **Regional Nuance:** Strategies must reflect local adoption patterns, regulatory frameworks, and consumer behaviors.
- **Real-World Impact:** Orchestration and resilient connectivity can transform parking from a revenue vulnerability into a strategic asset, reducing leakage and improving customer experience.
- **Implementation Roadmap:** A phased 30/60/90-day approach supports audit, pilot, and full deployment while ensuring measurable performance gains and compliance alignment.
- **Strategic Takeaway:** Holistic, secure, flexible, and continuously optimized payment systems represent the most direct path to sustainable revenue growth in parking operations.



# Ready to Capture More Revenue and Strengthen Trust?

Parking operators that modernize payment infrastructure through orchestration, resilient connectivity, and a layered security position themselves for sustainable growth and operational confidence.

TNS partners with operators to deliver integrated, future-ready payment solutions across the Accept, Connect, Orchestrate, Protect Framework.

With expertise in orchestration, connectivity, and compliance, TNS enables operators to:

- **Accept** every payment method, everywhere—cards, wallets, fleet, and more.
- **Connect** every device through resilient, always-on infrastructure.
- **Orchestrate** transactions for maximum uptime and revenue performance.
- **Protect** operations with enterprise-grade security and compliance controls.



## Take the Next Step:

Contact TNS to discuss how to transform every parking event into a seamless, paid experience and unlock new growth opportunities.

<https://tnsi.com/industries/payments/parking/>  
or reach out to your TNS representative today.

#### Appendices

- **Glossary:** APMs, tokenization, orchestration, AFIR, OCPP/IEC 63584, PCI DSS v4, OCA AFIR, IEC 63584, PCI timeline.
- **Source notes & links:** INRIX, UK Finance, Barclays, BPA/PPSAP, Nilson/Mastercard, HBR, INRIX UK 2017 | UK Finance 2024 wallets | Barclays contactless 2024 | BPA panel | Mastercard / Nilson | HBR "Reputation & Its Risks".