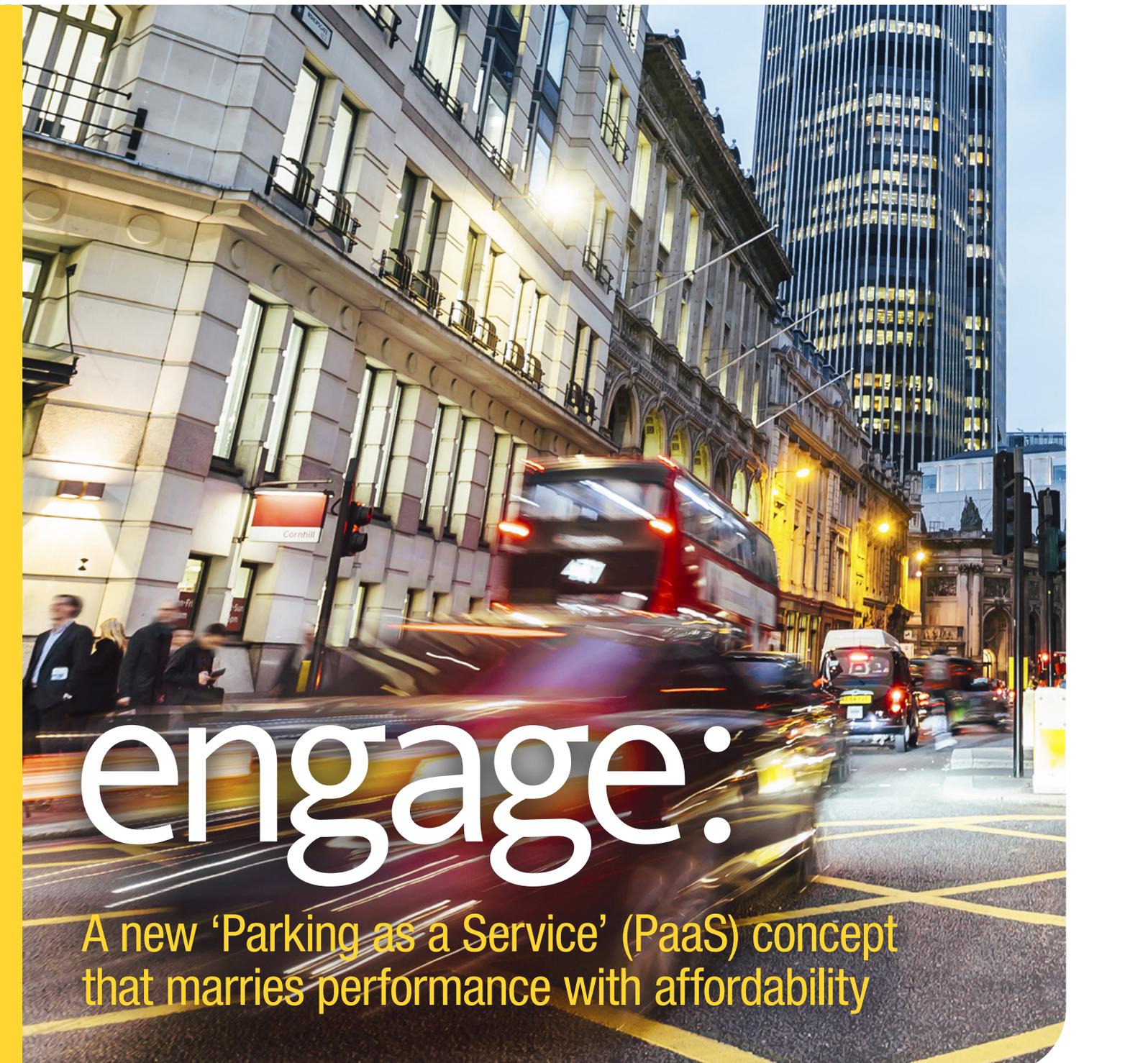


Whitepaper

# Parking as a Service



engage:

A new 'Parking as a Service' (PaaS) concept  
that marries performance with affordability

**APT SKIDATA**

## Precis

Both public sector bodies and private sector organisations could benefit from the revenues generated from parking, but acquiring, installing, and supporting the equipment requires an initial capital outlay that is often beyond reach. New, subscription-based models, however, may be the answer, giving organisations the opportunity of having high-quality, reliable parking technology delivered ‘as a service’, providing all the ‘value’ but at a fraction of the cost.

## Overcoming capital expenditure challenges

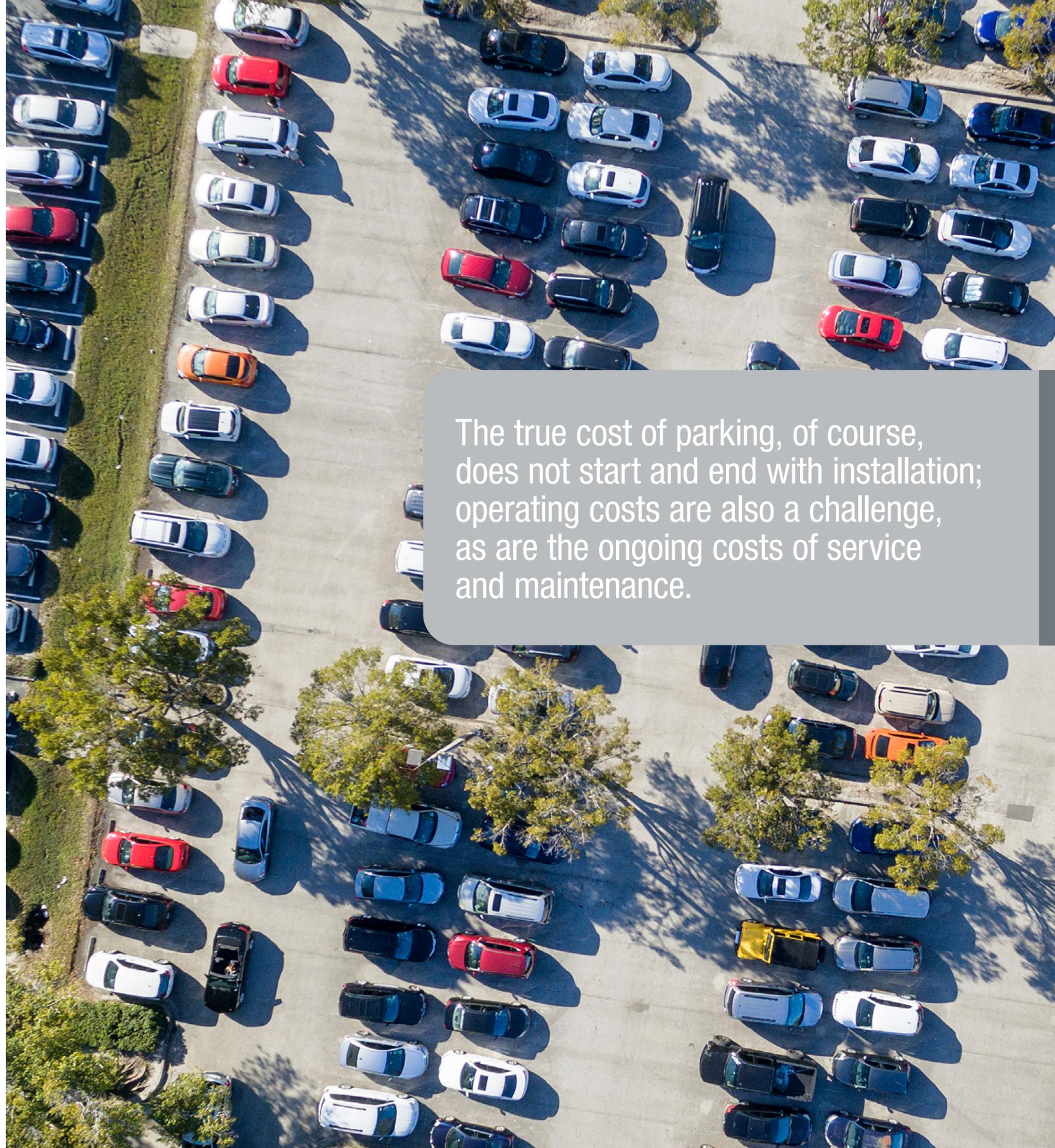
Cash, or to use a more formal phrase ‘capital expenditure’ (Capex), has always been one of the biggest challenges facing an asset owner or operator looking to procure parking equipment to control and collect revenues from their car parks. Local Authorities, NHS Trusts, and other public sector bodies not only have to work to tight budgets, but also face close scrutiny on how public money is spent. With COVID-19, and pressure on the wider economy, many private sector organisations, especially in the Retail space, are also now even more focused on achieving value for money and keeping capex to a minimum.

The true cost of parking, of course, does not start and end with installation; operating costs are also a challenge, as are the ongoing costs of service and maintenance. Owners/operators also have other challenges, engaging with multiple parties including Payment Service Providers (PSPs) to facilitate different payment methods, for example,

or working out the best ways of managing enforcement.

The change in economic fortunes brought about by the pandemic is prompting some to think differently about parking in the future and how it can be made accessible to a wider audience of users without significant upfront cost. Existing ways of working are being re-examined, to see if there are lessons from other industries that could be learned by the parking industry. Among them is the concept of ‘as-a-service’ provision, avoiding the obstacle of large upfront expenditure but rather spreading the costs over three- to five-years and including not just the equipment but also a total, managed service to support every part of a customer’s operational delivery.

But before exploring the concept of Parking-as-a-Service (PaaS) in more detail, what options are currently available for owners/operators of smaller car parks to explore?



The true cost of parking, of course, does not start and end with installation; operating costs are also a challenge, as are the ongoing costs of service and maintenance.



## Limited choice in **small car park solutions**

Small car park owners/operators have limited options available to them, mainly down to financial constraints. Having a barriered solution is not only expensive to purchase and install, but also to service, maintain and operate. This has led to the majority of these smaller car parks opting for a barrierless solution, often linked to Automatic Number Plate Recognition (ANPR) technology, which involves payment via vehicle registration or mobile phone.

The arguments for a barrierless solution are well rehearsed, and in some cases are appropriate for the site and the need. But there are just as many cases where the solution is not fit for purpose, and a decision taken more around 'affordability' rather than 'suitability'.

The principal disadvantages to such solutions tend to centre around the customer experience. The threat of enforcement can, for example, push people to limit the duration of their stay and curtail their shopping trips leading to a potential revenue loss.

Conversely barrierless car parks can easily be perceived as 'free' by customers/visitors who are not paying attention to the signage. This can result in enforcement notices being received a few weeks after their visit and leave them with a very sour taste in the mouth, often taking to social media to vent their anger.

Pay & Display machines can cause issues with lost tickets and drivers who invariably try to resolve the problem with onsite staff who are unable to assist rather than appealing through the correct channels, resulting in further upsetting the driver. Many Pay & Display machines are also old and unreliable, with small keyboards that can be hard to read, leading to further mistakes and confusion. Many are not in service, or taken out of service, because of vandalism.

Also confusing, time-consuming, and prone to customer error are Pay by phone solutions. The logic of moving away from P&D in favour of Pay by phone is a sound one, and certainly overcomes the issue of machine reliability, or arriving to find a machine is broken. But Pay by phone can be very confusing, especially for those less-familiar with app-based systems including the elderly, and can drive customers away from using a car park, rather than towards it.

ANPR-based systems are certainly on-trend, and when they work well, can work very well indeed. But again they rely on vehicle registrations being entered accurately (is it a nought or a capital 'O'?) or risk being denied entry/exit and/or receiving a PCN and/or a lengthy battle to prove they wanted to pay but made a simple mistake.

Whereas the customer is often disadvantaged by barrierless solutions, the benefits appear largely to be weighted in favour of the Enforcement Operators who often fund free parking systems and profit from issuing PCNs. While they are comparatively low cost to purchase and install, poor reliability can lead to considerable expense in terms of equipment downtime and the resultant loss of revenue. Poor customer experience also 'costs' in the long run in relation to reputational damage and customers choosing to vote with their feet.

## The rise of the **subscription-based model**

Some customers have inevitably been put off buying more reliable technologies and more appropriate solutions because of cost, or a perception of cost. Manufacturers have also been arguably slow off the mark in breaking with 'traditional' models and finding new solutions to old problems. But the world is evolving, and subscription-based models are finding their way into new industries, including parking.

Subscription models are not new. Many of us will be familiar with subscriptions as the basis of a mobile phone contract, for example, but they are also becoming more popular through products such as Netflix/Peloton/Amazon Prime/Spotify etc.

More recently, vehicle manufacturers who already had a leasing model, are now providing a subscription model allowing for six-month ownership, frequent vehicle changes and all-inclusive service and maintenance (Jaguar Land Rover has a scheme called Pivotal, Volvo has one called

Care, Audi calls its service Audi On Demand etc).

The key benefits to these are that they involve low up-front costs, have easy to understand ongoing monthly costs and enable the customer to profit from all ongoing software developments and improvements. They are the same advantages that owners/operators can enjoy with subscription-based parking.

Creating a new subscription-based service is giving owner/occupiers the chance to access the best performing technologies in car parks where they might have ordinarily

opted for a cheaper P&D alternative. It is similarly enabling owner/occupiers to look at their existing estate and upgrade technology already installed with a barriered solution that offers better reliability. And they are also addressing those owner/occupiers who have space that could be given over to parking, but where it would be too expensive to deploy and manage using a traditional pay-on-foot solution.

So how does 'Parking-as-a-Service' work?





At a practical level, PaaS is a cashless-based solution, removing the need (and cost) of cash collection

## The launch of Parking-as-a-Service (PaaS)

In its simplest form, Parking-as-a-Service is a combination of technology and service, where the responsibility for installing and maintaining the parking equipment rests entirely with the manufacturer and for which the operator pays an agreed, monthly fee for five years.

The model instantly removes the principal hurdle to take-up – capital expenditure – as no upfront payment is required. A fixed, monthly subscription cost is better for cashflow, and provides the operator with total visibility of ongoing cost and return on investment. All of the service, maintenance and software upgrades are included in the cost, which means there are no unpleasant surprises, and PSP and banking – another potential obstacle – is all handled by the provider.

At a practical level, PaaS is a cashless-based solution, removing the need (and cost) of cash collection, and removing the security headache of having cash on site which impacts insurance premiums and eliminates the likelihood of fraud. In terms of technology, the operator has a choice of entry system, exit system, and payment system. They can choose between gates and barriers of different sizes and the type of ANPR camera mount best suited to their requirements. Packages can include intercom as part of a portfolio of bundled hardware, alongside a maintenance package and transaction (i.e payment) bundles. Once the

technology is chosen, the customer is connected to APT SKIDATA's engage. cloud software and they are ready to go.

For a simple one entry/one exit solution for a car park of 200 spaces, the monthly subscription could be as low as £1,250 per month. The revenues generated by such a car park, however, could be as high as £16,000 per month, giving a return on investment of eight times the monthly fee.

Using our single entry/exit car park as an example, the customer journey is a simple one. On arrival, they drive up to the barrier, the ANPR system records their license plate, and the barrier opens. On exit, they again drive up to the barrier, the ANPR system recognises their license plate and a cost is displayed on the exit terminal screen. The driver taps their card on the contactless icon, payment is acknowledged and the barrier opens for them to depart. Payments are collected through the PSP into the acquiring bank. Once a month, the operator is sent a statement of their account. APT SKIDATA then charges a monthly subscription and pays any collected revenues.



## Value beyond price: the customer experience

PaaS delivers benefits that go far beyond price. It is as much about the customer experience that will prove its true 'value'. By removing the need to visit a dedicated pay station, and enabling customers to pay on exit, PaaS helps to further simplify the customer journey and remove the potential for human error at the pay machine.

## PaaS delivers benefits that go far beyond price.

In terms of the operator, providing a barriered solution enables them to capture 100% of the car park revenue. It means no customers will end up with a PCN on their windshield or through their letterbox. This in turn removes the likelihood of the negative press that almost always accompanies any unfair penalty charge being imposed and any cost of enforcement.

Reliability is further improved through regular software upgrades which happen automatically and without additional cost. Software upgrades in 'traditional' contracts are invariably a bone of contention and the ongoing costs difficult to predict or account for. At a practical level, it also means that

the operator's equipment is always using the most recent software available, and therefore benefiting from any features added since the equipment was first installed.

Perhaps the biggest benefit of all, beyond cost and customer experience, is that it takes all of the hassle and responsibility of operating a car park away from the operator and onto the shoulders of the provider. The maintenance provided as part of the contract allows fixes to be done quickly and remotely where possible, and if an engineer is required on site, then they do so within an agreed timeframe to keep any potential disruption to a minimum.

## Simplicity – the secret to PaaS' future success

### So, what of the future?

The major advantage of PaaS is its simplicity, and in enabling high quality, highly-reliable systems to be made available to smaller car parks where traditionally such technology may not have even been considered. This does not mean, however, that future developments will not be forthcoming. Quite the opposite; work is already underway in devising further features to enhance the customer experience.

These include features such as 'reserve', a new reservations platform to guarantee the customer a parking space when they arrive. This will also allow operators to build on their current car park usage, potentially working with entertainment venues in town centres, or patient and visitor reservations in hospitals.

There is also 'charge' to accommodate the increasing prevalence of Electric Vehicles. 'Charge' is a simple way of encouraging more EV drivers to park in operator car parks by providing EV charging stations that are fully integrated with the existing parking infrastructure. It will enable drivers to pay for both parking and for charging in the same, single transaction upon exit.

A further feature is 'loyalty', a way of offering discounts on parking through validations provided in offices, shops, restaurants, cinemas and theatres. Discounted parking always appeals, and a key advantage to PaaS will be the opportunity to deliver the same levels of sophistication that the larger car parks are able to offer, but at a fraction of the price.



## Conclusion

Parking-as-a-Service is a concept with the ability to transform the way public sector bodies see, experience, and procure parking systems in the future. It could make possible what to many is currently impossible, enabling them to realise new revenue streams, and a better customer experience, but without taking on a challenge and a cost that is beyond their comfort zone and the public purse. What is required is a little imagination, and the willingness to embrace a new way of thinking.

**APTSKIDATA**

Unit 1, Maxted Corner, Maxted Road, Hemel Hempstead, HP2 7RA  
T: +44 (0)20 8421 2211 E: [enquiries@aptskidata.co.uk](mailto:enquiries@aptskidata.co.uk)  
[www.aptskidata.co.uk](http://www.aptskidata.co.uk)