

# Automation Technology for Every Business Model

AT ITS CORE THE BUSINESS MODEL OF PARKING IS PRETTY SIMPLE:  
PEOPLE PARK THEIR CARS, AND PEOPLE PAY YOU FOR PARKING.

This is pretty much the same whether you're running parking for a campus or a city, a hospital or an airport. Probably the only exception is valet parking – where somebody else parks the car and you still pay for parking... plus a tip!

It turns out there are five different ways to tackle this simple park-and-pay approach (or perhaps ten if you consider that access controlled parking and enforcement controlled parking are different models too; but for simplicity let's say five).

Each of these five has several technologies and audit requirements geared toward solving the same problem: Getting paid for parking. Notably these models are primarily geared toward ensuring the transient parkers pay. The recurring (credentialed) parkers are generally less of an issue. **Here are those five models with some more concrete examples:**

## 1 Pay before you Park

Most commonly this is called Contract Parking, Monthly Parking, Permit Parking, or just reserved parking. You want to invoice your parkers and have them pay before they arrive at the parking facility. It's also the permit model used by campus operations selling hangtags, or for a city's residential permit program. Failure to pay means a parker is not allowed to park, either by physical restriction from the facility (access control) or through citation (enforcement control). This can be for a long-term parking commitment, or just a single use (reservation/validation).

Implementation of this technology involves a variety of payment options up-front such as payroll-deduction, monthly billing, or even online options. In addition there's the credential distribution problem: how to get the credential/permit into the hands of the parker. Today's most modern solution is to sell the credential online, and mail it directly from the manufacturer right to the parker (just like how Amazon.com sells and delivers your book without you leaving your house).

## 2 Pay on Arrival

This is a broad categorization for transient and infrequent parkers. Technologies here include events parking, pay-by-space, pay-and-display, and occasionally this model is also found for deposit-on-entry (usually attended) or flat-rate pay-on-entry systems (usually automated and unattended). It's sometimes also called "cigar box" parking or "cash apron" parking. And for the highly technology-challenged it's an honor box.

This model relies on a parker arriving to the lot/facility without a pre-paid credential. As such there's a very high percentage of cash transactions, leading to the inevitable balancing issues (i.e. shrinkage) that come with cash transactions, making it less popular than other more auditable business models. The propensity of operators moving toward automation (pay-by-space, pay-and-display) and use of credit cards is improving audit control.

## 3 Pay while you Park

A relative newcomer to North America this category of technologies includes pay-on-foot machines, in-car meters, and pay-by-cell solutions. Payment occurs while the parking is still happening. On the access controlled side of things payment is received before the parker exits the facility, and in fact must bring a pre-paid credential to the exit lane. For an enforcement-oriented solution the parker activates the in-car meter with payment occurring as remaining time decrements. And for a cell phone model a parker can top-up parking payment via text message, while the car is already parked.

All of these solutions work very well from an audit perspective, removing the human cashier from the model entirely, but do involve education and training for parkers.

## 4 Pay on Departure

By far the most common technology here is a manned cashier lane at the exit to a facility. Cash management continues to be the challenge here, and parkers will try to game the system testing your exception handling with sob-stories about lost tickets and having no money to pay.

Automation is the most desired solution to the pay on exit model. Pay-in-lane solutions (including cash) or credit card-in-card-out models work very well too and minimize the chance that the revenue will disappear from your organization.

## 5 Pay after you Park

As crazy as this might sound the concept of payment after parking is actually getting some traction in our industry. Called "micropayment aggregation" the idea here is to tie several individual parking events back to a single credit card for end-of-the-month billing. This is advantageous to the parking operator to help keep card processing fees down – it's cheaper to process one big transaction rather than a bunch of small ones. Implementation here is to require the parker to provide a credential on exit, and then sum the monthly transactions together to bill a card-on-file at the end of the month. Like the other models, automation is the key to simplifying billings and maintaining strong audit controls.

From these five different business models starts to emerge **some common themes:** The first is that there are many technologies available to solve some very similar problems, so as an operator you have choice in your technologies. The second theme, and perhaps more important, is that cash plus cashiers makes for difficult auditing – so the easier solution is to remove the cashiers... automation is where it's at today (even cash automation) so you'll need to consider this as you implement your next generation parking solution. ■