Eliminating Parking
HEADACHES
with Technology

By James Maglothin

It's a thought that can strike horror in the hearts of event organizers. The event is over, you've shut the marquee lights down and locked the doors, and you are feeling pretty good about the day. Until you gaze out onto your venue's parking lots and garages. There you see hundreds of cars at a standstill, angry drivers sitting in line trying to leave. Chances are you are also hearing the blaring of car horns and more than a few unprintable comments. Sound familiar?

One of the hottest trends in parking technology today is parking guidance. Many parking owners are installing single space sensor and parking guidance systems that record whether a space is occupied and indicate to parkers its status through a variety of color-coded lights—green for open, red for occupied, and blue for ADA accessible parking.

Parking has always been one of the most challenging aspects of event management, particularly for large events. Moving tens of thousands of cars into parking facilities prior to an event can seem like a Herculean effort, and even when event-goers successfully enter parking lots and structures, their ordeal isn't necessarily over. It can be difficult for them to find available parking, and they often have to drive up and down aisles—or from one level to another—looking for an open spot. This isn't just a customer service problem; it's a potential safety issue too because people who are searching for parking spaces are more likely to get into accidents with other vehicles or pedestrians.

And then the process repeats itself once the event is over. We have all experienced the frustration of the mass migration of cars trying to get out of parking facilities after an event, and the extreme congestion that is typical both inside parking areas and along local roadways. When you have thousands-or tens of thousands—of people exiting parking areas simultaneously at the end of an event, delays are all but inevitable. It's not unusual for patrons to have to wait 30 minutes or more sitting in their idling vehicles and waiting to exit parking facilities after attending an event. These delays are aggravating to people who are stuck in long exit lines, and they can make those patrons less likely to attend the event in the future. It can also make people avoid other events in the same venue. Parking nightmares like these can have a long-term negative impact on events and venues that can last for years.

The good news is that when it comes to meeting the challenges posed by event parking, there's an app for that. Or more precisely, there is a technical tool to meet just about any parking challenge an event organizer may face. Today's parking industry is being revolutionized by an influx of new and valuable technologies, many of which offer particular benefits for event parking. These tools make parking more user-friendly, more convenient to operate, and more profitable. And they solve many of the most difficult parking challenges facing event organizers.

For most event managers, parking is a bottom-line issue because they rely on their parking facilities to generate revenue. Furthermore, they often face stiff competition from both private and public parking facilities that are located close by, so by making parking more convenient for event attendees, event managers can compete more effectively for parking dollars. The question for event managers, then, is which parking technologies offer the most benefit and how can they best be put to work to provide better customer service and more meaningful administrative utilization?

Managing Entrances And Exits

Parking challenges begin at the front door—or when it comes to parking, at the entrance gate. In an environment in which large numbers of vehicles are typically arriving at the same time, and then later exiting simultaneously, it's essential to be able to move people in and out of parking facilities quickly and seamlessly.

Historically, event parking has been manually managed by deploying a large number of staff at entry or exit points to collect cash parking fees from customers. At more and more parking facilities the process is becoming automated, with access and revenue control equipment managing both the entry and exit experiences for event-goers. Automating the parking access and revenue control provides a better experience for attendees and can also save owners thousands of dollars a year by reducing the risk of theft by employees handling money. Reducing the number of staff required within a parking facility can also considerably decrease a facility's overhead.

Access and revenue control equipment includes the gates that manage entrances and exits to assure that people park in proper areas and that they don't leave without paying. It also includes payment tools that accept credit cards and cash, and they can be configured to permit parkers to pay before getting into their cars to leave (pay-on-foot) and cash and credit card equipment at exits. Another popular strategy for large events is to configure the revenue control equipment to accept pre-payment at entry. Typically, the flow of arriving event-goers is spread out over several hours before a large event, whereas, the exit flow peaks all at once when the event is over. Collecting payments at entry allows owners to take advantage of the dispersed entry queue to process the payment transactions. Following the event, customers present a validated credential at exit or the owner simply raises the gates to allow the most expeditious exit possible. Each access and revenue control suite can be configured to address the unique needs of an event parking facility and reduce queuing of vehicles as they enter and exit parking lots and garages.

Unlike in the past, many access and revenue control equipment providers are integrating third-party tools into their equipment to make them even more useful. Whereas in the past the equipment worked autonomously and served the sole function of controlling access and collecting parking fees, today's equipment can handle numerous additional management functions. Systems can now be set up to read bar codes on event admission tickets and cell phones or charge a credit card associated with a mobile app, for instance, significantly enhancing the usefulness of the revenue and control equipment and making a parking facility more attractive to event-goers.

Offering Guidance

One of the hottest trends in parking technology today is parking guidance. Many parking owners are installing single space sensor and parking guidance systems that record whether a space is occupied and indicate to parkers its status through a variety of color-coded lights—green for open, red for occupied, and blue for ADA accessible parking. The easily visible sensors can be mounted above spaces or in the ground adjacent to spaces, depending on the type of facility (in indoor structures the sensors are mounted overhead, and in lots or rooftop parking areas sensors are installed on the ground, beneath the vehicle). In combination with signage at the end of parking lanes, sensors

provide clear direction to open spaces.

The benefits of parking guidance to event-goers are obvious. Yet, as important as these customer service advantages are, the direct benefits to parking owners and operators are just as significant. The sensors collect essential data about parking utilization trends within a facility and then transmit that data to an on-premise or cloud-based management system that tracks parkers' behavior. That data can tell event parking managers when parkers tend to arrive prior to events and how long they stay afterwards. They also record which areas within the structure are most attractive to drivers. These business intelligence tools can be used to operate the facility more efficiently and market it more effectively.

A properly implemented single space parking guidance system also allows a facility to be efficiently loaded to 100% capacity, as opposed to forcing customers to search aimlessly for the last few parking spaces in a near-full facility. Facilities without single space monitoring systems are generally considered "effectively full" when they reach 90-95% occupancy. This effective increase in capacity of 5-10% benefits both the event-goers' ability to locate convenient parking as well as maximizing parking revenue for event managers. It should be noted that, typically, manual staff is deployed throughout facilities during large events to direct customers to available spaces and minimize the number of unused spaces.

The financial implications of achieving 100% capacity can be significant. Take, for instance, a moderately large parking facility with 2500 spaces, and assume that up to 5% of the spaces remain unused during an event due to a lack of proper parking guidance. At every event that facility may be experiencing as many as 125 empty spaces. When you consider that parking fees for attending an event in an urban community can cost as much as $50, that's $6,250 per event that event managers are potentially losing. Even at a more moderate rate of $25 to park (well below market value for most cities), event managers are still losing over $3,000 per event by not filling parking spaces. There are staffing implications, as well. Many parking managers hire staff to direct parkers to open spaces. Sensors eliminate the need for these attendants, which can provide significant savings in staffing costs.

Also, by reducing the amount of time drivers spend looking for a space, single space sensors provide several important additional benefits. For instance, they can reduce wear and tear on parking facilities, which can lead to significant savings in maintenance and repair costs. There are also important environmental advantages when the emissions produced by vehicles within the parking structure are reduced. Finally, the sensors eliminate the need to position attendants throughout parking areas to direct attendees to open parking spaces, which can represent a significant payroll savings.

Smart Parking

Our smart phones have practically become an extension of our bodies at this point. Most of us hardly ever let them out of our sight, and we turn to them throughout the day as a source of information and a communication tool. Just as mobile technologies are transforming our day-to-day lives, they also provide tremendous parking-related benefits for both event-goers and event managers.

One of the most intriguing developments in event management in recent years has been the advent of loyalty programs utilizing mobile apps to enhance the event-going experience, including parking. A number of venues are already taking advantage of these mobile tools, but there are untapped parking benefits that could further enhance loyalty programs. For instance, a venue's loyalty app could send push notifications to event subscribers and VIP parkers to tell them where parking is available in closest proximity to their seats. Those loyalty program app members can then get into their seats more quickly when they are directed to close spaces that are available, and they can even get out of parking areas more quickly when the event is over.

There are many other benefits offered by mobile parking technologies. For instance, mobile apps can be used to pay for event parking, therefore removing the delays that can result from having to walk to pay-on-foot equipment or having to stop at entries or exits to pay with cash or credit cards. Mobile apps can also be configured to read bar codes to permit attendees with season-long parking permits to enter and exit seamlessly. These same bar codes can also be used to manage premium parking strategies by permitting entrance only to those who purchased premium parking packages. In addition to providing an exceptional parking experience to premium parkers, this approach can provide additional parking revenues.

Business Intelligence Revolution

Parking facilities serving large special events are particularly susceptible to parking challenges. It can be a nightmare to move thousands of cars into parking areas prior to the event and then get them out again when it's over. Fortunately, the business intelligence revolution that's taking place right now can offer significant benefits to event-goers and event managers alike. This revolution is focused on big data analytics, operational streamlining, and profit maximization. The new parking technology tools that are constantly being introduced can help parking event managers administer and market their facilities more effectively and they can save venues thousands of dollars in operational costs. And by providing a more customer-friendly parking experience, they can provide an important competitive advantage over nearby parking facilities with which they must compete for market share. Not only can they make parking more customer-friendly, but they can also dramatically improve the bottom line for event parking facilities.

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