



OPTIMUM PARKING MANAGEMENT  
**MAKING OPERATIONS  
PROFITABLE BY OPTIMIZING  
MANAGEMENT.**

**INDIGO**

MAKING SPACE FOR THE FUTURE

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## INTRODUCTION

Too often, ancillary parking lots are under-appreciated assets, neglected by their owners and managers until a problem arises.

Yet as we've learned in an article published in BOMA Magazine, the International Building Owners and Managers Association (BOMA) magazine, poor management decisions - deficient outsourcing contracts, inefficient operations, maintenance issues, employee theft, fraud, financial irregularities and poor use of occupancy statistics - can cause losses of up to 28% of parking revenues.

This is a sign that managing this essential mobility tool in our cities deserves to be examined more closely.



### PARKING LOTS: WOVEN INTO THE URBAN FABRIC

The history of parking lots is of course linked to the history of automobiles. Before they debuted in cities, streets were designed for travel by coach, tram or bicycle, or on foot. Then cars became financially accessible for a growing segment of the population and on-street parking quickly became saturated.

We believe that drivers searching for on-street parking represents about 30% of all traffic volume. This is particularly high near sites that generate parking needs such as subway stations, hospitals, shops, schools, educational institutions and workplaces. In a big city, where about 90% of on-street parking is free (this drops to 50% for downtown areas), this is one of the reasons why municipal authorities, concerned about the environmental, societal and economic implications of traffic congestion, rely more and more on policies that limit free on-street parking and often depend on the private sector to fill the gap.

### OPTIMUM PARKING MANAGEMENT: THE ART AND PRACTICE

Sound management of these infrastructures that are indispensable to city life allows us to optimize their operation and improve their profitability. Beyond the financial benefits, however, parking lots managed with profit in mind as well as efficiency can support the efforts of city authorities concerned with ensuring the quality of life and the environment of their citizens.

This article presents an overview of the key elements to consider in order to ensure optimal parking lot operations in a 21st century urban environment.



## CHOICES TO MAKE: CONTROL EQUIPMENT AND MANAGEMENT METHOD

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### THE CONTROL EQUIPMENT: CHOOSING THE RIGHT ENTRANCE CONFIGURATION

The parking lot is not the destination, but is the main entrance to a building or site for most users.

Caring about their experience when entering is therefore of utmost importance in terms of customer satisfaction as well as the image of the area. How this area is accessed will affect the parking lot management and profitability activities, so it is important to choose carefully.

There are three possible options:

- Gateless
- Gates and cashiers
- Gates and an automated payment system

#### **Gateless parking**

This is a parking lot without a gate that works on the honour system: users pay for a set time, in advance, based on how long they expect to stay.

This type of operation is generally suitable for small parking lots or long-term parking. It has the advantage of requiring a very low up-front investment and modest maintenance costs. It reduces the need for staff to ensure problem-free entry and exits, and easy payment.

We expect that automatic license plate reader technology (ALPR) will be used more and more by managers of this type of parking lot who are anxious to facilitate car turnover. But ALPR technology still needs to be refined and improved in order to find solutions to the problems caused by weather and diminish the people not paying.

Moreover, if staff are not present at the entrance gates, gateless parking does require monitoring and warning systems to reduce revenue losses due to non-payment, estimated at 30% of total revenues. However, this creates a negative image for the client whose only contact is a payment claim. Is this really saving costs?

#### **Parking with gates and cashiers**

Gated parking with a cashier presents at least one advantage over the other options: the human factor.

It enables personalized customer service that no pay-on-foot machine - at least with current technology - can replace: welcoming visitors with a smile!

The cashier can also intervene rapidly in the event of equipment failure and ensure better security of the premises. Staff can act quickly, for example, in opening a malfunctioning gate. We estimate that this could cause a significant loss of revenue.

But the disadvantages can also be attributed to the human factor! Staff costs more than machines, are harder to manage (discipline, grievances, work place accidents, etc.) and that management is more complex (payroll, vacations, absences, etc.). Plus, of course, the “human factor” increases the potential for fraud.

### **Parking with Gates and an Automated Payment System**

This parking configuration allows for better control over revenue losses due to non-payers and eliminates some disadvantages of hiring staff. Equipment costs can be significantly higher, but they are often offset by operating cost savings. On the other hand, the most reliable technology must be chosen and adapted to specific parking needs. Many managers look for a quick fix, a turnkey system that will magically solve all problems without first examining their current and future needs.

The concept of technology that offers a fully automated experience without human interaction should not overshadow the importance of customer service. If they don't have emotions, automatic payment systems cannot smile! Experience shows that human contact, even remotely (through an audio-video or intercom system) to explain pricing, hear complaints and give instructions, is always preferable in order to offer a better customer experience. A reduction in operating costs shouldn't be given priority over human contact.

### **TIP: Increasing parking spaces**

The choice of monitoring equipment that really meets the needs of a parking lot and its users will affect its operating costs and, subsequently, its income. Implementing measures to reclaim space could also contribute by adding the human factor. For example:

**Purchasing parking technology is a little like the sophisticated version of buying a washing machine today. Just because a manufacturer offers 25 buttons and 17 options on a machine doesn't mean you need all of them or are going to use them. If you can't anticipate how your facilities will operate in the future, you might be making an important investment that doesn't meet your needs and those of your clients.**

**Source:** What to Do if You Have the Newest – and What to Do if You Don't! Parking Today.

- Valet parking to allow for double parking;
- Employee carpooling that doubles parking capacity if the physical limitations allow for it;
- Tandem parking for regular users (e.g. employees) with some spots built to allow several cars to be parked adjacently.

### MANAGEMENT METHOD: IN-HOUSE OR OUTSOURCED?

Internally managing a parking lot may allow for better control over the human, financial and technical resources, and on the face be more cost-efficient. This solution can probably be advantageous for facilities that do not manage a high volume of vehicles, or for parking lots used only for monthly customers. In some cases, it's true that an internal team will have difficulty acquiring the skills, knowledge, know-how and expertise of a recognized subcontractor. We must avoid falling into the trap of trying to reduce operating costs by doing everything internally. Buyer beware! Paying less for a service up front usually results in higher costs in the mid- to long-term.

**To make an informed choice, it may be useful to ask whether the organization has the in-house skills to accomplish the following:**

- Provide the same level of service at the parking lot as elsewhere in the organization.
- Make all efforts and take all initiatives to seize revenue opportunities.
- Acquire the best equipment available for their situation.
- Analyze traffic, installations and user needs to select and configure the equipment, procedures, pricing and facilities accordingly.
- Closely monitor all financial transactions (credit card payments, fraud, theft, mismanagement, taxation, revenue tax credits and refunds, etc.).
- Regularly review procedures for improvement and for long-term planning.
- Manage staff, relevant training programs, labour relations and the turnover rate (which is often high) and plan for future needs.
- Manage delays, and temporary or extended absences by a cashier.
- Manage client departures after parking lot hours of operation.
- Keep abreast of the latest technological developments for parking, assess its relevance for the site and acquire the equipment at the best possible price (including through quantity discounts).

## DATA: A RESOURCE TO HARNESS

**As new technologies are implemented, the data is added to the parking managers' database. Too often, however, staff do not have the expertise to turn that raw material into actionable information.**

Whatever the control equipment used, to varying degrees they all store these data about parking lot users, their habits and needs, which if properly analyzed and used, can improve customer service and optimize parking lot operations.

A good data management system can provide a detailed picture of the parking situation and ensure the accuracy, consistency and speed of accessing historic data. It can almost instantly perform many tasks that were once very costly in terms of time and resources. In particular :

- Analyzing minute-by-minute occupancy;
- Analyzing the rate structure;
- Modeling the new rate structures and measuring impacts;
- Maximizing profitability;
- Managing performance.

Data on turnover, space occupancy, parking times and payment methods used by clients enable continuous business and facility improvements: establishing cashier work schedules and planning automation periods based on traffic, checking fraud and identifying causes of revenue losses.

The data analysis also enables the production of management reports that identify irregularity and inefficiency factors or provide useful information about revenue. For example: the number of free spaces available to company executives and their value or the best rate to offer based on parking volume.

**The data we get from our systems is a double-edged sword... It can provide a very useful picture of our business but that requires both human and financial resources to extract it, visualize it, analyze it and transform it into evidentiary data to support business decisions.**

**Source:** What to Do if You Have the Newest – and What to Do if You Don't! Parking Today.

## OPTIMIZING CONTRACTUAL AGREEMENTS

Too often, when a parking lot is run by a subcontractor, contractual agreements consist of a short document that does not include performance standards, the responsibilities of each party, reporting and verification obligations or a responsibilities grid and operating expenses.

These incomplete and imprecise contracts lead to operational inefficiency as well as theft and loss of income.

It is essential that all contracts specify the responsibilities and obligations of not only the various stakeholders, owners and managers, but also the other parties involved. It is necessary to design and align the subcontractor's compensation structure with the project contractor.

**The parking management contract for a building doesn't specify how the space will be cleaned (it never was) or how the manager deals with abandoned cars (there were more than 100 vehicles taking up space that didn't generate revenue). A new contract allowed us to remedy these oversights and increase revenue.**

**Source:** Parking Matters: The 14% Tenant, By Barbara Chance, Ph.D., and Clyde Wilson, BOMA.

## SMART PARKING: NOT JUST A QUESTION OF TECHNOLOGY

We are entering the era of the "smart city". The smart city uses information and communications technology (ICT) to improve, among others, the quality of urban services or to reduce costs.

Smart Parking is a key element of this emerging concept. With the rapid advancement of "smart" technologies, we can generate new efficiencies, better control revenues and expenses and improve customer service. Municipalities rely more and more on policies that restrict free on-street parking, and often rely on the private sector to fill the void.

Some parking lot redesigns eliminate gates or integrate technology solutions for automatic license plate readers (ALPR) in order to eliminate bottlenecks at entrances and exits. Installation of this technology will truly take off within 5 years according to certain experts, once some problems such as those described earlier have been resolved.

Cities are interested in solutions that would enable motorists, through a network of communicating sensors installed in the road, to see available parking spaces in real time as well as the rates. Information will be posted on variable message signs (VMS), mobile phones and GPS to inform and guide drivers and

provide additional services (e.g. to locate a parked car).

Parking in the future will be smart: technological advances will be used to encourage the fluidity of movement (in many cases, with an emphasis on providing advantages for electric cars such as charging stations) and payments (via Smartphones); apps will be developed with information on available spaces in real time, allowing for reservations and more.

Parking in the future, to be truly “smart”, will be environmentally friendly. Green parking infrastructure is already expanding. For example, Rutgers University in New Jersey has covered one of its parking lots with solar panels that generate 1.4 megawatts of electricity and reduce carbon emissions from the University by 1,200 tons per year. The institution is saving \$220,000 per year in electricity costs.

Future parking needs must be thought out and planned today. An organization offering unparalleled customer service with a high financial return will take advantage of new technologies and develop the best internal management processes in accordance with best industry practices.

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## CONCLUSION

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### **PARKING MANAGEMENT: INCREASING COMPLEXITY DRIVEN BY COMPETITION, PUBLIC POLICIES AND TECHNOLOGICAL ADVANCES.**

By 2019, global revenues from parking management (equipment, systems and services) should almost double compared to 2014, increasing from US \$5 billion to just over \$9 billion according to the research firm Markets and Markets.

This rapid growth is due to a steady increase in the number of vehicles on the road, combined with authorities' willingness to reduce the impact of traffic congestion on the environment, including a significant reduction in the availability of free on-street parking.

Add to that the technological advances offered by "smart" parking solutions that promote the fluidity and convenience of the parking experience and you have an industry that will reach a high level of complexity and will require increasingly targeted expertise.

In the heyday of the "car craze," the parking lot was primarily a utilitarian area, the size of which represented a competitive advantage. In the 21st century, it has become a strategic challenge for public authorities and institutions that receive many visitors, the sound management of which is not only desirable but essential.

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## BIOS

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### **LOUIS JACOB, CPA, CA - EXECUTIVE VICE-PRESIDENT**

A graduate of the University of Quebec in Trois-Rivières, Mr. Jacob was a chartered accountant at Raymond Chabot Grand Thornton and controller at SITQ, a Caisse de dépôt et placement du Québec Real Estate subsidiary. In 1991, he started in parking industry as a shareholder and Montreal general manager for Gestiparc Inc. Since 2005, following the acquisition of Gestiparc Inc. by VINCI Park Infra SA (Indigo Park Canada Inc. since November 5th, 2015), Louis Jacob has been serving as Executive Vice-President of Indigo Park Canada Inc. and as such is responsible for all Canadian activities.

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### **DANIEL GERMAIN - OPERATIONS VICE-PRESIDENT**

Daniel Germain serves as Vice-President Operations for Indigo and has over 25 years of progressive management experience in the parking industry. After VINCI Park SA purchased a majority of shares of Gestiparc in 2004, Mr. Germain was promoted to Operations Vice-President in 2005. He is member of the Board of Administrator of the Canadian Parking Association.

Mr. Germain was directly involved in the transition of both the Toronto Pearson International Airport and Montreal's Pierre Elliot Trudeau International Airport and remains involved in the operations of both of these airport operations. Given his experience with arguably two of the largest airports in Canada he will continue to be involved in a supporting role in regards to marketing and operations of the EIA.

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### **ERICK LORD - VICE-PRESIDENT EASTERN QUEBEC & ATLANTIC PROVINCES**

Mr. Lord Erick joined the Indigo family in the mid-1990s as an area manager. He becomes, in 2002, General Manager in the office of the City of Quebec. He brings with him a strong knowledge of the Company, having actively participated in its evolution for nearly 20 years. With solid experience in business development, he does not hesitate to conquer new markets. Since 2015, Mr. Lord holds the position of Vice-President Eastern Quebec & Atlantic Provinces and is currently responsible for the overall management of more than 134 parking sites spread around Quebec City, Beauce, Rimouski, the Saguenay and in the Atlantic. He also coordinates a team of over 300 employees.

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### **DANIELLE DESJARDINS - EDITORIAL WORK AND RESEARCH**

For the last few years, Danielle Desjardins has been providing research, analysis and writing services, for reports, studies and white papers, through her company La Fabrique de sens. Before that she worked for many years for a large organization in the communication sector, where she oversaw strategic planning, among other things. She is particularly interested by the impact digital technologies have on society.