



Car Park Revenue Management System at Swedavia AB, Eva-Lena Soderberg's Interview

The flying bug and Airport Car Park

Swedes love traveling and frequently hop on flights both for business and pleasure. In 2019 more than 40 million passengers flew to or from Swedavia's ten airports. Although there are a host of public transportation options to choose from, private cars continue to be the preferred mode of transportation in and out of the airport. A reason why Stockholm Arlanda Airport has around 16000 car parking slots across 15 car parks

Given the high density of private cars at the airport, finding vacant space can be frustrating and expensive for passengers, especially during peak seasons. For the airport too, managing large parking spaces and ensuring they are correctly priced to maximize revenue is a nightmare.

Ms. Eva-Lena Söderberg, the former Manager B2C Product & Pricing, Parking, and Entry at Swedavia AB who proposed a SmartLot software to manage the Swedavia Airport parking says


"We were looking for a software solution to manage our car parks as we wanted to enable smarter pricing and stronger decision support."

Ms Soderberg moved out of Swedavia before GrayMatter's SmartLot was onboarded at Stockholm Arlanda Airport and Göteborg Landvetter Airport, which together has 25,000 spaces across 22 car parks.

SmartLot by GrayMatter is a Car Park Revenue Management System (CPRM). It is a machine learning-based dynamic car park pricing and analytics system for airports, malls, and independent car parks. CPRMs forecasts occupancy, recommends optimal pricing and offers critical data-driven insights to maximize revenue and management control for both pre-bookings and drive-ups.

The Complexity of Car Parks

On the surface, car park spaces hide the complexity of options they offer. Passengers have a plethora of choices, like premium parking, which is very close to the terminal, express indoor and outdoor parking, long-term parking, pre-booked parking, and select parking spaces for staff of airlines and the airport and its vendors. Setting the parking fee for each of the options is therefore challenging.



It is truly baffling.
agrees Ms Soderberg. “What should the
customer mix be in every car park? How much can
you charge a business user as compared to a
family on vacation; what price would attract
long-term parking? How to price incentivize
pre-booking customers who are
increasingly growing.

Competition for car park revenue are the alternative forms of transportation - train, buses, taxis, and friends and family drop off and pick up of traveling passengers, and so, poor pricing strategies would push car users to other alternatives.

Automate Demand Forecast and Optimize Price

The Swedavia parking team did several studies to make the management understand that adopting regular parking fee hikes as a strategy to grow revenues would backfire, leading to empty parking lots.

The team also had to figure out a way to move customers between different car parks based on the pricing; know when to shut down a specific car park for routine maintenance with minimal loss of revenue; and how to accurately forecast the demand so as to maximize space utilization. From her previous experience in the hospitality industry, Ms. Soderberg was convinced that a revenue management system would certainly provide all the answers needed.

“We went looking out for such a system. I knew for sure that a tool like SmartLot, which primarily is for demand forecasting and price optimization, could well be extended for scenario planning, to manage parking pricing during a spike or downturn,” says Ms Söderberg. “Also, an AI-analytics driven solution would more accurately forecast demand and pricing optimization, then Excel which was being used.”

SmartLot from GrayMatter

Not being aware of GrayMatter or any other SmartLot product, Ms Söderberg and her team cast the net wide. Since Swedavia is a public company, the public procurement route had to be followed to select the vendor.

“Firstly, we had to figure out what we want from the system. It most certainly had to fulfill a few criteria such as being an off-the-shelf solution that has been tried and tested before, had accurate forecasting capability, is quick and easy to implement, and priced attractively,” she says.

Swedavia relied on historical data to which past trends and holidays like Christmas and Easter were added to predict future demand. But such a method has its own limitations.

“We had a strong business case for CPRMs” says Ms. Söderberg. “We were confident that the solution would increase parking revenue by 10% and thereby also take care of the ROI.”

Unfortunately, just when CPRMs got onboarded and went live in Swedavia, the world went into a forced shutdown due to the COVID pandemic. The stress test of CPRMs therefore could not be done.

The future of Parking

Research reports indicate that the Parking Management Market size crossed USD 3 billion in 2020 and is projected to expand at around 12% CAGR from 2021 to 2027. The growing number of vehicles and lack of proper and designated parking spaces are propelling the need for the development of parking management solutions.

Ms Söderberg is of the view that the future of car park utilization would need to consider the environment-conscious younger generation who are avoiding fossil-fuel-based private transport and air travel to contribute to reducing carbon footprint.



Global Headquarters

GrayMatter Software Services Pvt. Ltd.
4th Floor, West Wing, RMZ Ecoworld SEZ,
Outer Ring Road, Bangalore, INDIA
560 103

 + 91 80 6715 6666

 + 91 80 6715 6611

 info@graymatter.co.in