

SUCCESSFUL INTEGRATION OF TWO PARKING SYSTEMS IN ONE MALL

DIGITAL TRANSFORMATION CASE STUDY






Example of a modern urban space Forum Gdańsk



IMPLEMENTED SOLUTIONS



PROJECT OVERVIEW

-  The presented case study examines integration of NaviParking's software with software and hardware of Amano Xparc at parking lot in Forum Gdańsk.
-  The main objective was to introduce mobile payments for the customers. Other goals were to: upgrade the digital facility in the shopping mall by adding parking spots of the 6th level of the Forum Gdańsk parking lot to the website cyfrowyparking.pl and parking spots on the levels 2-5 to the database of the NaviPay mobile application.
-  The parking lot gained an updated version of the API (the older one was deployed five years prior by Amano Xparc). Thanks to the deployment of the new products drivers obtained e.g. a possibility to reserve parking spaces in advance, on-line payments and contactless entry and exit from the facility.
-  The aforementioned integration was possible thanks to establishing a solid partnership between NaviParking and Car Park Sp. z o.o – a distributor of Amano Xparc products in Poland.
-  Fruitful cooperation with Car Park and the integration with Amano's API opened the door for a further (and way faster) process of adding new parking lots to the common system in the future.

P About the facility

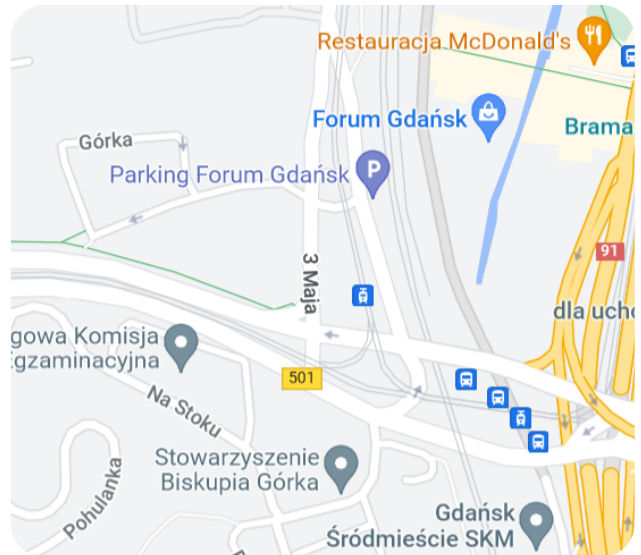
Forum Gdańsk – a shopping mall located at Targ Sienny 7 street in the heart of Gdańsk, Poland. Annually the 180 retail stores (situated on approx. 63 thousands square meters) are visited by 13.5 mln clients. The biggest tenants of the retail area at Forum Gdańsk are: Helios, H&M, TK Maxx, Zara, Media Markt and Eurospar. The parking lot at Forum Gdańsk has 1100 parking spaces: the levels 2-5 are indoor (four EV chargers are located at the 5th floor) and the 6th level is an outdoor space.

On the levels 2-5 clients can pay online for their stay via the NaviPay application (apart from the traditional way of payment). On the 6th floor of the parking lot the clients of Forum Gdańsk have access to around 100 spaces with reservations and subscriptions at cyfrowyparking.pl. NaviParking rented 20 of them.

The parking lot is placed in a strategic area of the city which makes it an attractive place to leave a car – in the vicinity of the train station, Gdańsk Śródmieście transfer hub, the historic Main Town, numerous tourist attractions and a wide variety of service points.

! Identified challenges, needs and objectives to be achieved

The NaviParking team aimed to expand the scope of digital tools available to the users of the Forum Gdańsk parking lot, turning it into a more convenient, attractive and safe facility. Among the new features were going to be: mobile online payments, automatic and contactless exit and entry from the parking lot, tracking the real time of parking and possibly min-



imizing the lines to cash registers. In the long term perspective these steps were meant to elevate the renown of the entire facility and increase its popularity.

From the technical point of view the main objective at the Forum Gdańsk parking lot was to integrate the existing software (Application Programming Interface) and hardware of Amano Parking Management System with NaviParking software, namely: a website cyfrowyparking.pl and the NaviPay mobile application. For this purpose it was vital to establish a close cooperation with Car Park Sp. z o.o., the main distributor of Amano's products in Poland.

Aside from the integration of two different softwares, the NaviParking team set a goal to upgrade the Amano's API to its newer version.

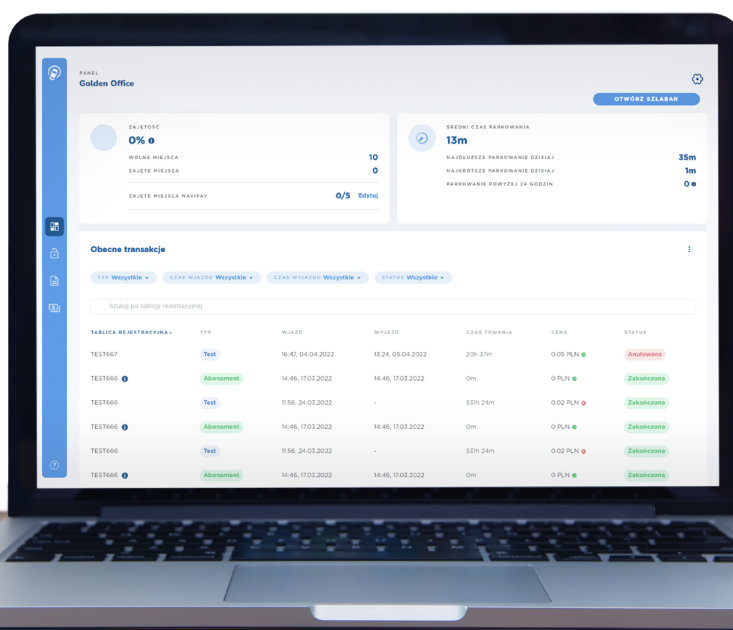
Observing the needs on the local market, the NaviParking team identified a significant demand for parking spaces among clients of a hospitality sector in the immediate neighborhood. The observation inspired the NaviParking team to rent 20 parking spots from Forum Gdańsk and invite hotel guests from the area to use the parking lot at the parking lot belonging to the shopping mall.

💡 Solution: integration with Amano and deployment of NaviParking's software

Before the implementation of products of NaviParking, the Forum Gdańsk parking lot was equipped with hardware and software created by the Amano Parking Management System, i.e. barriers, intercoms, QR code readers (that were installed five years ago before the integration with NaviParking's products) and API.

To address the challenges, NaviParking decided to use the following **software**:

- **NaviParking Manager** – a program designed for a parking lot's administrators and tenants. It gives full insight into data describing statistics (traffic at the facility, occupancy rate) and transactions previews. The program allows managers to assign clients to particular tenants of the parking spots.
- **NaviPay** – a mobile application that allows external customers to pay a parking fee from a phone (in the form of a digital ticket) and enter a parking lot contactlessly.



- **Cyfrowyparking.pl** – multilingual platform that offers parking reservation and subscription services.

When it comes to **hardware**, the NaviParking team didn't have a need to install any new equipment at the Forum Gdańsk's parking lot.

Stages of deployment

Cooperation between NaviParking and administrators of the Forum Gdańsk parking lot started in April 2022. The official contract was signed on 13th July 2022. The partnership between NaviParking and Car Park began in May 2022.

Taking into account the aforementioned objectives, NaviParking's developers needed to obtain access to the Amano system from Car Park (which happened in May 2022). Due to complexity of the entire process of softwares' integration, the NaviParking team established an additional time margin for successful performance. The process of integration of both softwares lasted from May 2022 till 25th July 2022 and was concluded with positive outcomes.

In the next phase the parking spots at the 6th level were added to cyfrowyparking.pl, so after opening the facility the drivers could start reserving spots and buying subscriptions, as well as enter and exit the facility seamlessly and in a contactless manner. The other part of the parking lot (levels 2-5) became available to the users via the NaviPay application.

Even though digital parking tools of NaviParking enable drivers to enter and exit parking lots without any paper tickets, it turned out that after integration with

the Amano system the flow is partially different: the NaviPay application still offers a contactless exit from the parking lot, but to enter it, a driver has to stop in front of the barrier and take a traditional ticket from a dedicated machine.

Next stage involved testing the installed elements and the online reservation system onsite at the Forum Gdańsk parking lot. In the course of testing the team detected a problem with so-called penalty fees. A driver, while booking a parking spot at Forum Gdańsk via cyfrowyparking.pl, was obliged to park on the 6th floor. In case of leaving a car on a different level, a user was meant to be charged by the system with a penalty fee. Onsite testing showed that the operation didn't work correctly. Moreover, some of the QR code readers deployed in the past at the facility didn't work according to the requirements.

Both issues were resolved successfully and the testing period onsite finished within two days. The digitized parking lot at Forum Gdańsk opened on 25th July 2022.

Obtained results

The integration process of Amano's system with NaviParking's software was finalized successfully and all the detected bugs were corrected. The previous version of Amano's API was correctly updated according to the initial plan.

As a result of the process, the parking lot became divided into two areas (6th level and levels 2-5) with two different softwares (cyfrowyparking.pl platform and the NaviPay mobile application). NaviParking's products opened more options for the drivers (booking parking spots in advance, online payments, security cameras at the

facility, automatic exit (and in case of the users of cyfrowyparking.pl users – also automatic entrance without any paper tickets).

The parking lot's administrators obtained NaviParking Manager – a flexible and modern tool to monitor the traffic at the facility and the data about it. The client monetized 20 parking spots rented by NaviParking and gained a possibility to popularize the parking lot.

One month after the opening the parking lot it was not known if the deployed solutions managed to reduce the lines to the entry barriers at Forum Gdańsk yet.

Thanks to the partnership with Car Park and integration on the level of Amano's API, adding new facilities (equipped with Amano products) to the NaviParking system is going to be a very fast procedure. The project resulted in creating new business relationships and building experience in digital transformation.



Apart from acquiring a meaningful client (the key shopping mall in Tricity)

we needed to build a partnership with Car Park Sp. z o.o. – exclusive distributor of Amano PMS and the parking lot manager at Forum Gdańsk. This partnership resulted in a technical integration at API level which can be a start of a great adventure and a new chapter for NaviParking itself. I can see immense potential in this collaboration where we can scale our solutions purely through software and leveraging Amano hardware installed in some of the most prestigious buildings in Poland and around the world.

MATEUSZ BRZozowski

Business Project Manager @ NaviParking



Lessons Learned

- ✓ The NaviParking team faced a new challenge: updating and upgrading the existing digital parking system in the renowned shopping mall Forum Gdańsk. The task required a different management and planning compared to the projects where NaviParking was performing digital transformation of traditional parking lots from the very beginning.
- ✓ We expanded our expertise with this project by integrating external software of Amano with software designed by NaviParking's developers.
- ✓ NaviParking created solid business relationships not only with the Forum Gdańsk decision makers but also with a renowned tech company Car Park.

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