

PYRAMID

Case Study / Success Story

Notify and Locate Guests Efficiently:
Restaurant Automation with PLS

Introduction

The Dutch company De Digitale supplies restaurants with complete self-service solutions, relying on products from Pyramid Computer GmbH. Pyramid provides De Digitale with POLYTOUCH® brand kiosk systems and the paging and locating system PLS.

De Digitale’s customers include *t’Eiland*, which offers its guests a wide selection of food and beverages: snacks, sandwiches, burgers, salads, dinners, dessert, ice cream, milkshakes, coffee, tea, lemonade, and more.



Services for De Digitale:

- Analysis of requirements, consultation and design
- Training of De Digitale employees to independently install, measure and calibrate the PLS at the customer’s premises*
- Complete self-service solutions
- Customizing of all PLS components (kiosk, pucks and hub)
- Technical service & after-sales support

*These services can also be provided by Pyramid.

“By using the PLS and the POLYTOUCH® self-service terminals, we were able to increase the ticket size in the restaurants by up to 35% and thus significantly increase our turnover.”

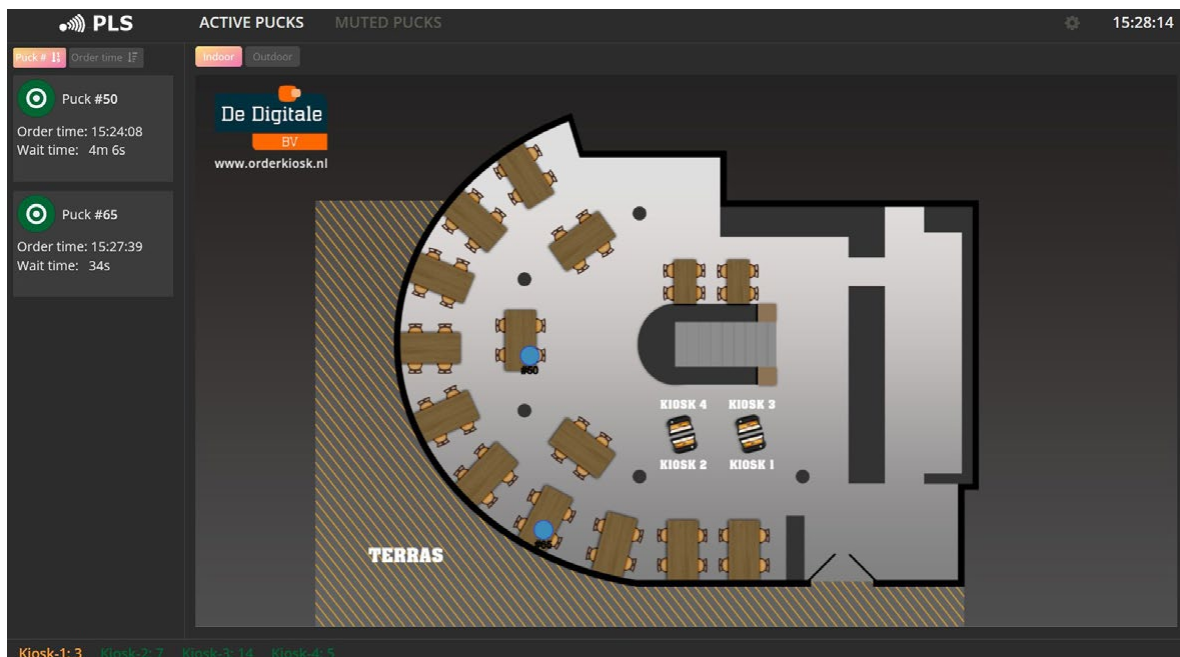
- Jeffrey Brouwer,
Owner, De Digitale BV
www.dedigitale.com

Order and pay at the self-order kiosk

In the restaurant in Nunspeet, for example, guests can place orders and pay at the POLYTOUCH® PASSPORT 32. The kiosk's large display makes it ideal for clearly presenting *t'Eiland's* extensive menu. Once the order has been placed, the self-service terminal issues a pager shaped like a puck. From this point on, service staff can track the guests' location on their screen and serve them wherever they are – either in the indoor or the outdoor area of the restaurant. When the order is delivered, the puck is collected by the server and reinserted into the terminal for the next use.

The technology behind this pinpoint table service is called PLS and – like the self-ordering kiosk – it comes from Pyramid Computer. PLS is a high-precision location system (RTLS) whose hardware and software components locate guests in real time. In contrast to other Bluetooth-based beaconing solutions, the PLS determines the location of a tag by measuring the angle. This leads to a localization accuracy of 20 cm (8").

Typically, it takes approximately five hours to set up a PLS system. Depending on size, the premises will be equipped with 5 to 10 antennas on the ceiling or walls. Detailed information on the advantages of localization using Bluetooth and angle of arrival measurements can be found in our white paper *Indoor Localization - A Comparison of Technologies*.



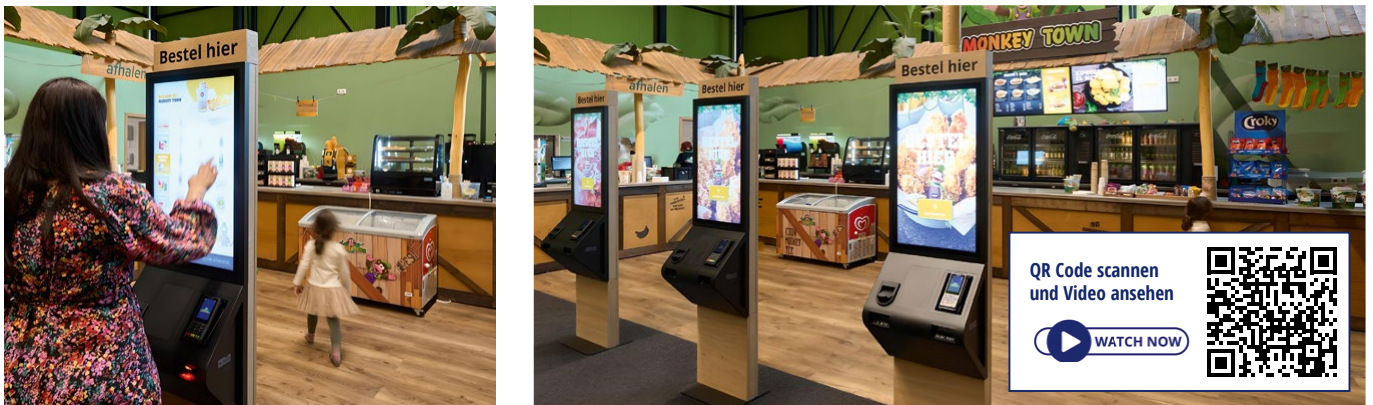
t'Eiland in Nunspeet: Access to the restaurant is via the terrace. The self-service terminals are positioned in front of the order counter, so that guests become aware of the self-service option.

The PLS for *t'Eiland* in Nunspeet consists of four kiosk terminals with pager dispensers, a network server as a hub, as well as pucks and antennas (locators). Initial analysis has shown that the self-service solution was very well received shortly after its launch: only 50% of guests still order at the conventional checkouts, the other 50% at a terminal. At *t'Eiland*, it has also been shown again that in a franchise restaurant, an order at a self-service kiosk generates approximately 35% more in sales than at the order counter.

The reasons? First, without the pressure of a long line behind them, guests tend to treat themselves, and second, unlike some employees, a kiosk never forgets upselling – all thanks to De Digitale's clever and user-friendly interface.

The flexibility of PLS

The PLS also demonstrates its flexibility at De Digitale's customer *Monkey Town*. *Monkey Town* runs indoor play areas with a restaurant section for children and accompanying adults. In the restaurant section, young and adult visitors can place orders on the POLYTOUCH® PASSPORT 32, which issues a pager. As soon as the order is ready to be picked up, the guest is called to the counter by the pager, which vibrates, flashes and beeps. The advantages of this paging technology compared to an employee calling out the serving number or displaying it on a digital signage board: the guest can move freely around the venue while waiting for their order, without having to worry about missing or overlooking the notification that their food is ready to be picked up.



The PLS infrastructure in *Monkey Town* restaurants includes two to three POLYTOUCH® PASSPORT 32 kiosk terminals with integrated puck dispensers, a network server as a hub, 3 to 5 antennas (locators) and 50 to 80 pucks.

Guests who prefer to order at the counter don't have to miss out on the benefits of paging. They are handed the pager by the employee, who links it to the order via an activation station. This hardware in the form of a small box is part of *Monkey Town's* PLS package and allows the puck to be activated easily and quickly.

De Digitale uses the PLS system's extensive remote maintenance functions to monitor its customer's installations. Using a web application developed by Pyramid, De Digitale can track the status of all of the PLS's components (server, dispenser, pucks) in real time. The software uses the collected data to generate a variety of important benchmarks that provide insights into the use of the dispensers, the distribution of pucks dispensed over the course of a day, the average time it takes to fill an order, etc. If a De Digitale customer wishes to, they can use the PLS monitoring software to observe the installation in their own restaurant and collect the KPIs themselves. *Monkey Town*, for example, is making use of this option.

Location	Component	Status
Amersfoort	Completely active reader	85
	Pucks with low battery	0
	Completely dead pucks	7
Spijkenisse	Completely active reader	50
	Pucks with low battery	2
	Completely dead pucks	10
Eindhoven	Completely active reader	50
	Pucks with low battery	0
	Completely dead pucks	15
Amsterdam	Completely active reader	7
	Pucks with low battery	2
	Completely dead pucks	7
Heerlen	Completely active reader	50
	Pucks with low battery	2
	Completely dead pucks	2
Bleiswijk	Completely active reader	50
	Pucks with low battery	0
	Completely dead pucks	1
Dortmund	Completely active reader	30
	Pucks with low battery	3
	Completely dead pucks	11
Warmond	Completely active reader	66
	Pucks with low battery	0
	Completely dead pucks	47
Breda	Completely active reader	50
	Pucks with low battery	0
	Completely dead pucks	43
Gouda	Completely active reader	66
	Pucks with low battery	0
	Completely dead pucks	0
Duisburg	Completely active reader	50
	Pucks with low battery	9
	Completely dead pucks	70
Diemen	Completely active reader	1
	Pucks with low battery	0
	Completely dead pucks	1

Monitoring of PLS installation at *Monkey Town* stores.



PLS KPIs of a *Monkey Town* location.

Reduced waiting times thanks to PLS

By using the PLS and the POLYTOUCH® self-service terminals, De Digitale and Pyramid Computer were able to increase orders in these restaurants by up to 35%, thus increasing turnover significantly. In addition, the terminals have created more service capacity, which reduces the time guests have to wait to place their orders. As employees are less busy taking orders, they can concentrate more on preparing food and pouring beverages. This reduces the amount of time guests have to wait until their order is ready.

Pyramid Computer's paging and localization system is also in use in KAIMUG's Thai restaurants in Zurich (localization with manual pager dispensing), in several Dean & David branches (paggers dispensed by kiosks) and in the restaurants of approximately two dozen Italian Esselunga supermarkets (paggers dispensed via activation station).



The POLYTOUCH® PASSPORT 32 as a self-ordering terminal for the PLS at Dean & David.

Pyramid Computer GmbH and its brands – AKHET®, faytech® and POLYTOUCH® – provide solutions for the comprehensive digitalization of entire branches.

The POLYTOUCH® brand offers tailor-made kiosk solutions thanks to maximum modularity. We get the best out of self-checkin and self-checkout, self-ordering and indoor localization!