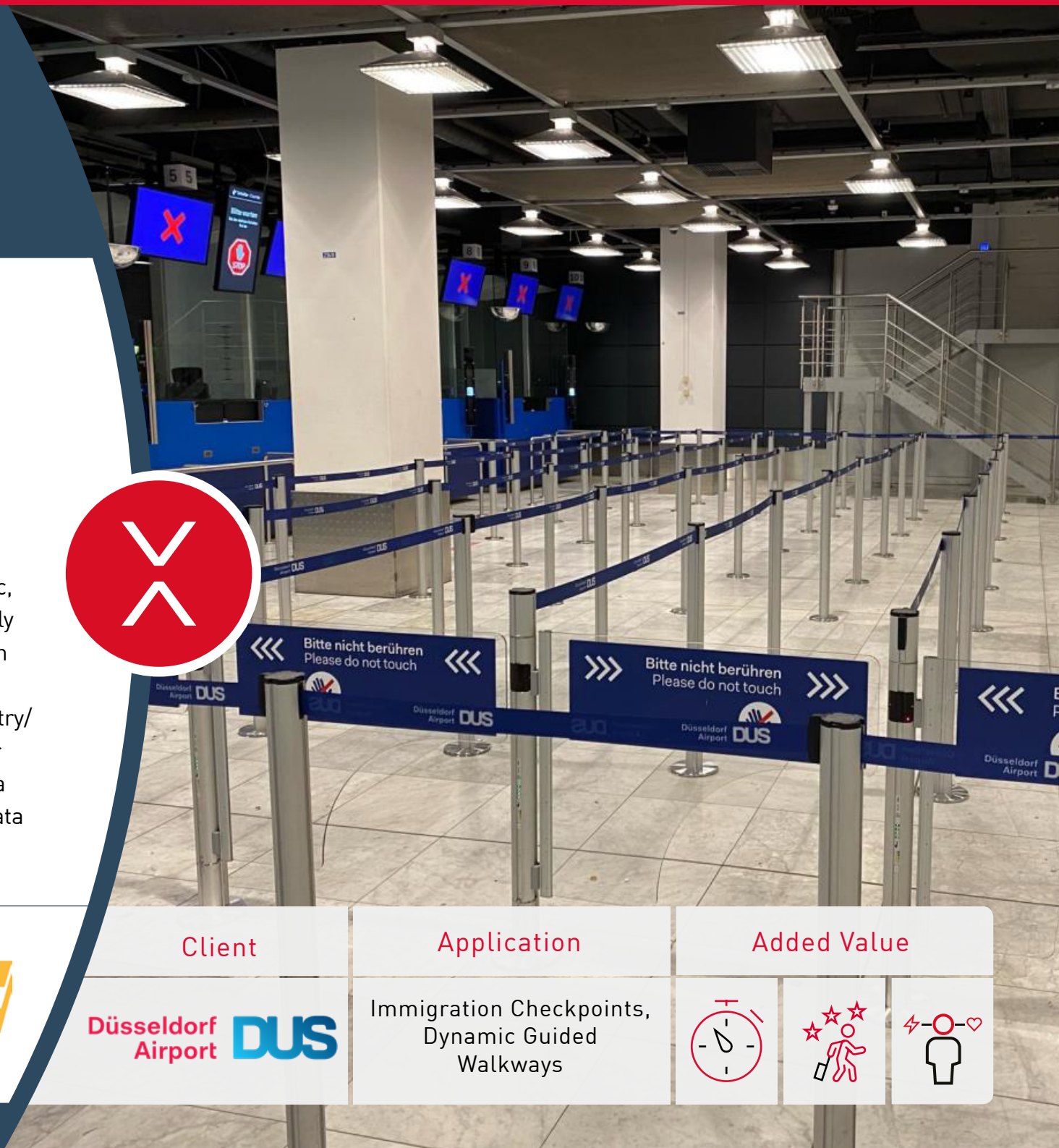
# CASE STUDY

## Dusseldorf Airport Uses Xovis-Powered Dynamic Queue Solution to Manage Immigration Flows

Dusseldorf Airport's need for a dynamic, automated solution that could effectively manage passenger flow at immigration areas, including digital checkpoints associated with the European Union's Entry/ Exit System, led the terminal operator to a dynamic guidance system from Via Guide powered by accurate, real-time data from Xovis

VIAGUIDE




| Client | Application | Added Value |
| --- | --- | --- |
| Düsseldorf Airport DUS | Immigration Checkpoints, Dynamic Guided Walkways | |

## Challenge

Designed to enhance security and improve record-keeping, the EU's Entry/ Exit System (EES) is a digital immigration/ emigration process for non-European Union nationals. EES is expected to increase passenger flow complexity by adding an additional touchpoint at airports throughout the Schengen area.

A vital passenger hub in western continental Europe and junction for some of the world's biggest trade fairs, the Dusseldorf Airport (DUS) has an established reputation as a hospitality-minded terminal. The airport, which received around 16 million passengers in 2022, wanted to maintain that reputation and keep service levels high even when EES creates additional in-terminal friction points.

Creating a standardized queue management process that could respond to current and future demands without significantly expanding resource costs was a top priority for DUS. To do this, the airport sought out a solution that was:

- Automated
- Dynamic
- Accurate
- Robust

Already a frontrunner in data-driven decision-making, terminal operators at DUS wanted to leverage existing data sources in a passenger-facing way that reduced queuing and improved load balancing in real time.

## Solution

DUS has used Xovis' sensor-based Passenger Flow Management System (PFMS) to accurately measure passenger flow at multiple terminal touchpoints since 2014. Via Guide, a Germany-headquartered company with a long history of delivering innovative public guidance solutions to airports, had the dynamic, data-driven solution DUS needed to effectively manage immigration queues: its automated Smart Queue system.

Powered by the real-time data from Xovis, Via Guide's automated Smart Queue system includes the Smart Shortcut feature, which automatically adjusts barriered walkways using rotatable electronic gates, and Smart Call, an automated call forward system that directs passengers to open immigration counters.

The Smart Queue system reduces wait times and staffing needs by:

- Alerting passengers of available immigration service desks
- Keeping ramp areas free for services related to reduced-mobility passengers
- Prioritizing special queues, such as for cabin crew and reduced-mobility passengers

The Smart Queue system automates and digitizes passenger flow in real time using data captured and communicated by the Xovis PFMS. The result is a standardized and automated queue management process achieved by automatically adjusting barrier-demarcated walkways.

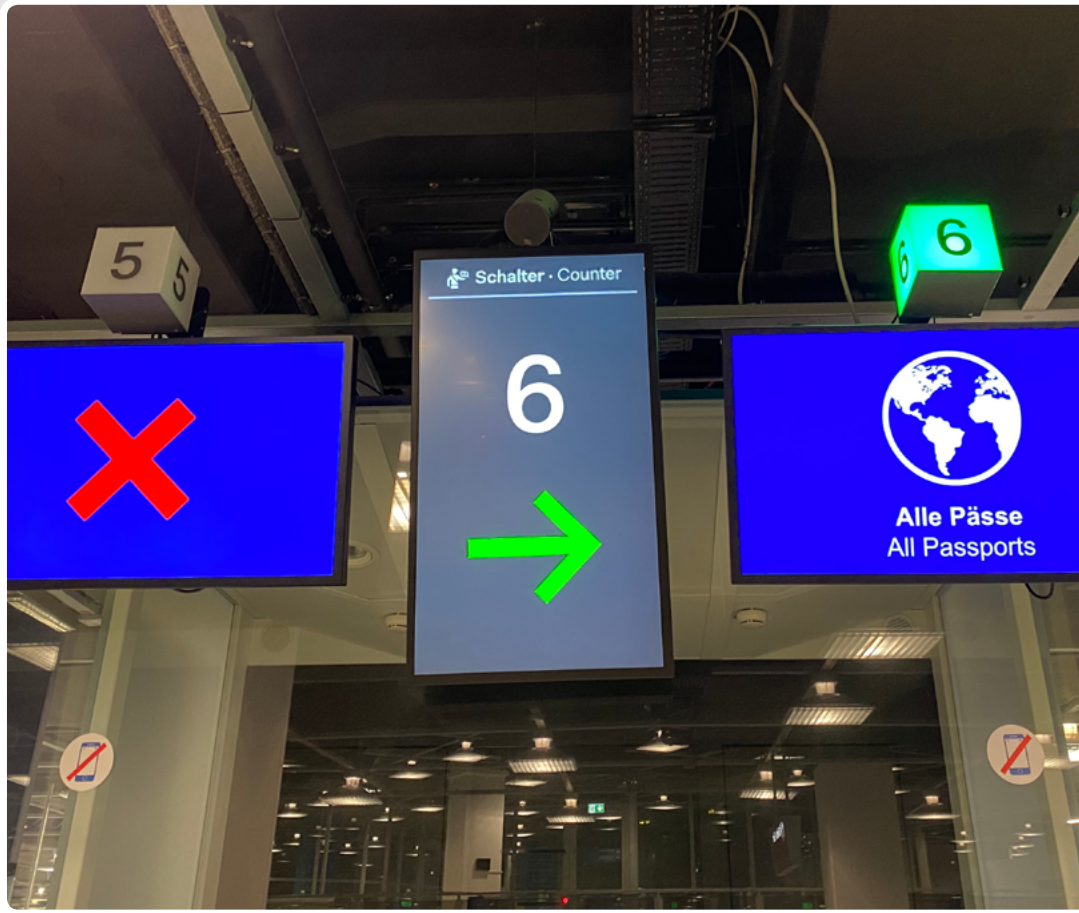
# Benefits

As with clear communication about wait times, wayfinding guidance and dynamic barriered queuing areas are critical for reducing in-terminal friction. A properly managed queuing solution can go a long way in reducing stress associated with long immigration queues, often responsible for passenger stress about missed connecting flights.

Using Xovis data, Via Guide's Smart Queue system provided DUS with significant benefits, including:

- Improved throughput
- Better passenger experience
- Reduced idle times for officers

With less time spent in the queue, transiting passengers also had more time to explore concessions at DUS, resulting in higher airside and landside revenue.




"The combination of Xovis and Via Guide is unique for us and allows us to optimally manage our passenger flows while remaining cost-effective,"

*Simone Simons,*
*DUS Airport Terminal Management Advisor*