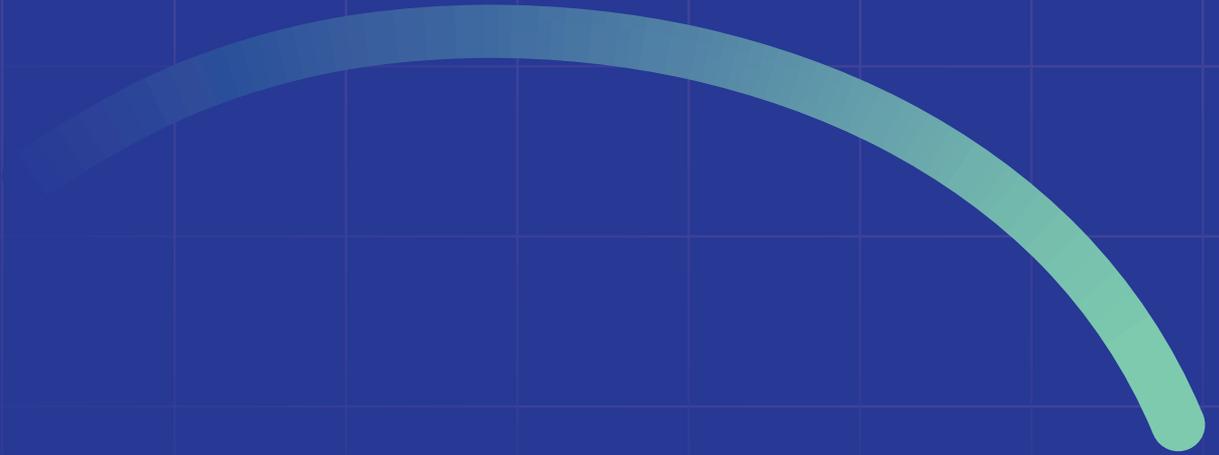




# Unlocking business transformation through data and AI

Harness data and AI to create a futuristic airport landscape



Have you heard of Nagarro? We are already making Vienna International Airport and Dublin Airport smarter, more connected, and more efficient. Why not you?

We know that airports deal with complex systems of technologies, regulations, procedures, and organizations to ensure safe and efficient air travel for passengers. Multiple systems contribute to operations, security, navigation, communication, and much more, creating a huge data repository. The colossal volume of daily unstructured data can create value for the airports.

At Nagarro, we leverage data and AI to enhance processes and boost the overall efficiency of airports. We structure and channelize the data through innovative use cases, and are helping several leading airports across the world, such as Vienna International Airport and Dublin Airport drive intelligent operations and enhance customer experience by smartly utilizing data and AI.



**Want to know more?**

**Read on**



# Enabling integrated airport operations

## Common challenges faced by airports:

### Operations

- How many passengers to expect?
- How many security lanes to open and where?
- How are the runways performing?
- How does security look like in the next 3 hours?
- How many flights are expecting delays?

### Passenger experience

- What is the shortest way to the boarding gates?
- When will the luggage arrive at the belt?
- Why long waiting queues at security?
- Why last-minute notification about gate change?
- What to do during long layover?

## Utilizing data and AI efficiently, we help airports mitigate the challenges by:

### Driving connected & intelligent operations

Building real-time operational insights for all airport processes across landside and airside, sharing data with all stakeholders, and managing airport facilities better.

### Boosting passenger experience

Making passenger journeys intuitive, personalized, and engaging by understanding evolving passenger expectations and providing services accordingly.

### Elevating airport experience with digital insights

Understanding the flow of travelers by collecting, analyzing, and interpreting a plethora of digital information for optimizing airport processes and enhancing overall airport experience.



# Driving connected & intelligent operations

Optimize airport operations with iADAP  
– our data and AI accelerator

## What is iADAP?

iADAP (intelligent airport data and analytics platform), generates real-time operational insights (descriptive, diagnostic, predictive, and prescriptive) by synchronizing and optimizing various airport processes both at the landside and airside. This leads to easy information-sharing for all stakeholders and facilitates collaborative decision-making.

iADAP utilizes data sets across various processes to build a smart narrative on major airport KPIs like wait times, throughputs, punctuality, and safety. Data from operational systems is analyzed in various ways to provide actionable insights for taking the right decisions to meet the KPIs.



**Planning**



**Check-In & Bag Drop**



**Security**



**Immigration**



**Gates & Stands**



**Runway**



**Baggage Reclaim**



**Maintenance**



# What iADAP offers

## iADAP ingests data from various structured and unstructured data sources and provides:

- Live situational dashboards (live queue times, throughputs, live departures, passenger distribution overview, expected delays, etc.)
- Planned vs. actual passenger presentation across all airport processes
- Real-time monitoring of critical airport assets (Runways, aerobridges, terminal buildings, baggage systems, security lanes, etc.)
- Key recommendations to prioritize processes as per identified gaps and improve overall throughput
- Historical performance comparison (for tactical & strategic planning)

## Benefits

- Interoperability with connected airport process
- Data sharing to enable better stakeholder collaboration
- Data-driven decision-making and situation handling
- Better visibility on airport needs for capacity planning
- Robust planning with advanced forecasting models
- Improved customer experience



# Boosting passenger experience

Enhance passenger experience with an intelligent, personalized, and engaging airport mobile companion

**The airport digital platform utilizes data and AI via our customer genome capabilities to assist passengers at all stages:**

## **After arrival at the airport**

Travelers are greeted when they arrive, learn where they are, and what all they can do.

## **Navigating the airport**

Travelers know where they are at all times, can navigate through the airport and facilities with ease, get updates on flight changes, avail retailing help, and get virtual assistance in just a click.

## **Departing from the airport**

Travelers can seamlessly connect to their other flights after scanning their boarding pass.

**Passengers gain control over their journey via the smart mobility solution.**

- Prebooked parking slots
- Exploring/navigating point of interest
- Reduced wait times via virtual queuing
- Digital retailing
- Subscription to baggage services
- Virtual assistance
- Real-time flight updates



# What our Customer Genome platform offers

Our customer genome platform built on the principles of data science technologies like AI & ML, helps in creating unique and personalized customer experiences. You can target the right customer segment with the right offers at the right time through the best-suited package.

## Benefits

Boost revenue with significant profit margins

Yield higher customer satisfaction with relevant and cost-effective offerings

Gain higher control on ancillary sales

Provide engaging customer experience

### Customer Genome:



Data Assimilation



AI & ML Ops



Personalised experience



# Elevate the airport travel experience with Digital Insights

Harness the potential of digital insights to redesign your airport's landscape.

**With Digital Insights, we understand and anticipate passengers':**



Needs



Preferences



Behaviors



Emotions



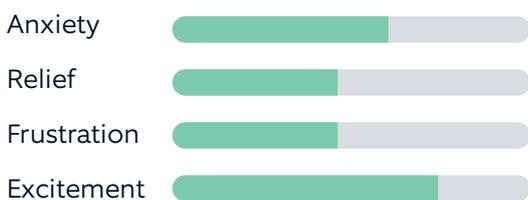
Drivers

**Coupled with our in-house AI accelerator we are able to:**

- structure high amounts of data based on its level or relevancy to improve overall data management
- refine keyword differentiation to enhance accuracy of linguistic mapping

## Configuration of demographic segmentation at each individual stage of the journey

### Top Sentiments during pre-boarding



### Top Sentiments during TSA





# Success stories



## Vienna International Airport (VIE)

After over 34 years, VIE wanted to modernize its AODB which has integration with over 30 airport systems. Nagarro played a crucial role in the testing of VIE's core systems with no impact on the day of operations. Our automation framework helped to reduce maintenance by 87% vs. traditional test automation and made test cycle execution 60% faster.



## Dublin Airport (daa)

Nagarro is developing a modern data platform that enables daa to generate multidimensional actionable insights across various airport processes. With this, stakeholders can take a decision in real time. The data platform will optimize several airport processes as well such as departures, gate management, passenger and baggage flows, and airside operations, including pavement and terminal management.

# About Nagarro

We are shaping the company of tomorrow

Nagarro is a global digital engineering leader with a full-service offering, including digital product engineering, digital commerce, customer experience, AI and ML-based solutions, and CRM, SAP, CMS, ERP, and Salesforce capabilities. We help our clients become innovative, digital-first companies through our entrepreneurial and agile mindset, and we deliver on our promise of thinking breakthroughs.

We have a broad and long-standing international customer base, primarily in Europe and North America. This includes many global blue-chip companies, key airports, leading independent software vendors (ISVs), other market and industry leaders, and public sector clients.

Today, we are over 19,500 experts across 35 countries, forming a Nation of Nagarrians, ready to help our customers succeed.

**Connect with our aviation experts at**  
[tnl@nagarro.com](mailto:tnl@nagarro.com)



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*Scan to download our digital assets*

