



The Essential Guide to Optimizing the **PASSENGER JOURNEY**

17 Ways to Influence the Passenger Experience



INTRODUCTION

Every day, a busy airport will absorb and disgorge millions of passengers who pass through queue after queue in an array of processing rooms and hallways, all made even more complex by the demands of modern security.

The commercial aviation industry is a highly complex system that poses daunting scheduling and coordination challenges to passengers and operators alike. From the point of view of passengers, the journey begins with the arrival to the parking garage or departure terminal of one airport and ends at the exit to transportation at another. Their journey will be more or less satisfactory depending on how the airports, airlines, security personnel, and other vendors along the route have managed the transitions involved from start to finish.

Airport environments are inherently complex. But passengers don't want this complexity to dampen their increasingly high expectations for quality service and enjoyable (or at least tolerable) experiences. As airports and airlines compete more

and more heavily on the basis of the passenger experience, incentives are high to make the journey comfortable and predictable. It's important to note that success in managing the passenger's journey correlates with how the passenger spends time in the airport.

If the journey is characterized by slow-moving queues, crowds, and incomprehensible pathways from one point to another, the passenger's time will be spent in frustration. If the journey is well-managed, time may be available for a meal or shopping or just relaxing, resulting in a more positive experience.

The airport experience will affect how the passenger evaluates an airline, including which airline they choose to fly and which airports they will or will not avoid. Every major part of the commercial aviation experience—airports, airlines, security—contribute to the passenger's satisfaction and therefore to the relative success or failure of the different providers.



J.D. Power has produced an influential study of airports of different sizes based on a survey of 35,000 customers. The study examined six factors that contribute to passenger satisfaction with airports, in order of importance:

- 1 Terminal facilities: concourses, gates, lounges, restrooms, and signage**
- 2 Airport accessibility: getting to and from the airport**
- 3 Security check: TSA staffing and queues**
- 4 Baggage claim**
- 5 Check-in and baggage check**
- 6 Food, beverage, and retail**

Each of these factors affect the flow of passengers through the airport, and each can become a bottleneck if poorly designed or managed. Passengers understand that process and security control impose checkpoints and verifications, but they want these to flow predictably and smoothly. When they don't, frustration mounts, creating a negative experience.

The Importance of Queue Management

The simple act of waiting in line is possibly the most defining element of the passenger transportation experience. This is time spent waiting for something important to happen, and it's part of the price passengers pay to fly. As such, the performance of the queue will raise or lower the level of satisfaction with an experience.

Beyond the impact of queues on passenger satisfaction, the health of your queues can be a clear indicator of the overall health of your operations. When waiting lines throughout the passenger journey are well-managed and running smoothly, passengers will feel you are respecting their time. If you give them the time, customers will likely apply that extra time towards behaviors that return additional profits for airports, such as shopping or eating.

According to a JD Edwards study, passengers who are "delighted" with their airport experience spend an average of 45 percent more than do "disappointed" passengers. But passengers who are rushing to their gates after being caught up in a long, arduous security line won't have the time or desire to spend any money in the retail areas of the airport. For these reasons, queue management is extremely important to overall airport success. Moving passengers to revenue-generating areas of the airport as efficiently as possible should be a key concern for managers.

In this Guide

This guide is designed to help airports and airlines optimize the passenger journey and create a more enjoyable experience for travelers who are becoming more diverse, knowledgeable, and discerning.



INSIGHTS

Key ways to influence the passenger journey, including managing queues, empowering service agents, and optimizing passenger flow.



INFORMATION

How different aspects of the passenger journey impact the choices of travelers and the success of airports and airlines alike.



SOLUTIONS

Strategies to optimize the passenger journey and improve the overall experience.



17 WAYS TO INFLUENCE THE PASSENGER EXPERIENCE

Knowing that airports and airlines are competing more and more on the basis of a positive passenger experience, it is essential to take a holistic look at the factors that impact passengers' perceptions. First and foremost, travelers want to feel safe. But they also want to have a smooth and even enjoyable time along the way.

With a focus on queue management, safety and security, and passenger flow, here are 17 ways (and specific solutions) to influence the passenger experience.



1. Optimize Security Checkpoint Queue Management and Passenger Flow

Nowhere is the importance of queue management more obvious than in Transportation Safety Administration (TSA)-managed security checkpoints, especially in airports that were designed before security checks were required. The TSA has implemented various solutions to alleviate long wait times during security screenings with programs such as its PreCheck and Global Entry programs, but these still accommodate only a small percentage of the flying public. For the vast majority of passengers, the essential security check is the longest, most frustrating queue in the entire journey.

The security check cannot be avoided, but resources devoted to facilitating the process can be managed if there is adequate information about passenger wait time and the ebb and flow of traffic.

Solution: Footfall Analytics and People Counting

Footfall analytics systems can offer real-time and historical data captured by powerful, accurate sensors. TSA staff and airport managers can benefit by:

-  Keeping wait times in check with real-time alerts and predictive analytics.
-  Monitoring safety and compliance by watching passenger counts and wait times within designated areas and queues.
-  Optimizing staffing and directing passenger flow to create efficiencies and balance loads across the entire system.

[Explore Qtrac iQ Analytics Solutions](#)



2. Improve Wayfinding

At an airport, finding one's way is a common aspect of every passenger experience. From the time a traveler passes the front entrance of the airport property to the time they make it to baggage claim at their final destination, there is a dizzying array of wayfinding that must be achieved.

On the part of airport and airline managers, wayfinding is the process of designing cues to help passengers navigate their way around the airport environment. Wayfinding expert, Jim Harding, a principal at the design firm Gresham, Smith and Partners, said it best, "If we do our job well, wayfinding enhances the customer experience without them knowing why or how." ([source](#))

While there are many solutions available to enhance wayfinding, sometimes it's the most basic and obvious signage solutions that have the greatest impact on the passenger experience.

Solution #1: Directrac Sign Stand

Perhaps the most recognized transportation signage systems are signage stands that can be placed on the floor and moved around where needed. Look for a system that is crafted specifically to withstand the rugged airport environment. Also look for two-sided viewing to ensure important messages are seen in high-traffic areas. Last, ensure your signage can be quickly changed out as needed and opt for wheeled stands to facilitate mobility.



[Explore Directrac Solutions](#)

Solution #2: Banner Signage

Banner signage is effective in creating a more logical, aesthetically-pleasing, and reliable wayfinding system. With tall banner signage you can get your message noticed and help improve customer flow and wayfinding in and out of the queue.



[Explore Lavi Industries Banner Solutions](#)





3. Manage Passenger Expectations

Known wait times feel shorter than unknown waits and the knowing helps reduce stress among passengers. While it may feel counterproductive to tell passengers that they're going to be waiting quite a while, the psychology of queuing has shown that people are happier knowing what kind of wait is ahead. A simple visual display can be a powerful and realistic indicator of time spent waiting for a traveler who might otherwise find their time in line excruciating and unending.

Publishing wait times throughout the facility gives passengers a sense of freedom. Knowing that it will take X amount of time to get through security, passengers can decide how to spend their precious minutes. They are in control of their time, and passenger satisfaction increases because of it.

Solution: Intelligent Queue Management

Intelligent queue management systems can use sensors or other tracking technology to capture real-time data and display average wait times on digital screens throughout the terminal so that passengers can more accurately plan their journey.

Look for a system that allows you to:



Publish wait times to keep passenger expectations in check.



Guide passengers to under-utilized queues or security checkpoints.

[Explore Qtrac iQ Analytics Solutions](#)





4. Capitalize on Passengers' Free Time

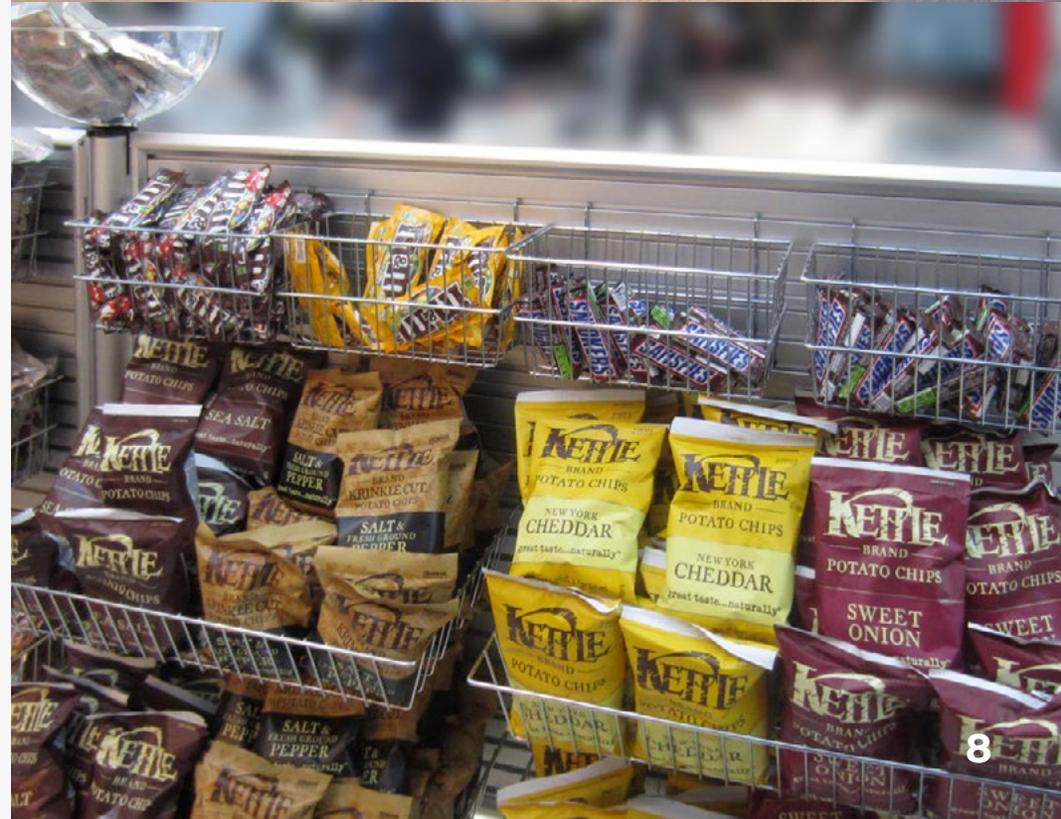
With a well-managed, efficient queue comes more free time for passengers to enjoy before boarding their flight. To pass the time, passengers will likely peruse vendors in their terminal. This is a win for airports and travelers alike: shopping can occupy passengers and make the wait more bearable, consequently driving airport sales.

Solution: In-Queue Merchandising Fixtures

Bringing merchandising into retail queues throughout the airport is easy with the right system. An ideal in-queue merchandising fixture system features:

- ✓ Simple and easy installation.
- ✓ A clear way for passengers to determine where the line is formed.
- ✓ The ability to bring merchandising into an existing queue or to create a versatile standalone merchandising unit.
- ✓ A small enough footprint to allow for both queuing and merchandising within the confines of limited space.
- ✓ Integrated signage that can be used to provide information, directions, or promotions within the queue.

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5. Maintain Cleaner Facilities

Many, if not most, passengers passing through your terminal will use the restrooms. Are they clean? Do not underestimate the importance of having a clean facility to serve passengers' needs. They will generally not have the time to seek a better option, but they will remember the experience.

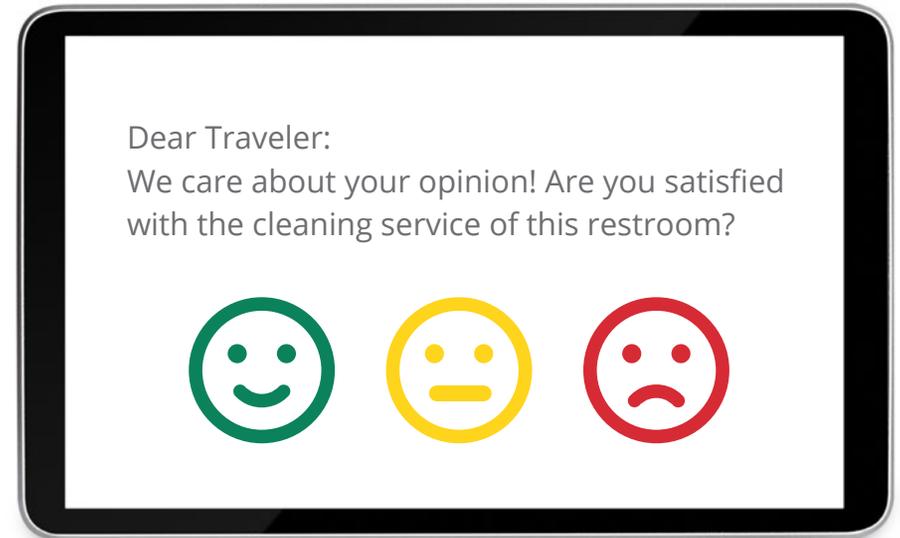
A recent Clorox survey found that two-thirds of Americans would not frequent any business with a dirty bathroom. Knowing when your restroom facilities fall out of compliance with any pre-set benchmarks can make the difference between a positive passenger experience and the start of negative word-of-mouth. Optimizing your cleaning schedule using use-based data instead of elapsed time helps you conserve resources (time, supplies, water, and money) by cleaning only as much as needed. Enhancing this with passenger feedback provides the ability to address issues before they escalate or affect a large amount of passengers.

Solution: Intelligent Facility Maintenance

A smart facility maintenance solution will incorporate people counting, real-time customer feedback, and staff check-ins to give you the intelligence and structure you need to maintain a cleaner facility.

- ✓ Conserve resources by providing the right amount of attention.
- ✓ Optimize staff schedules.
- ✓ Respond quickly when conditions require attention.

[Explore Qtrac iM Solutions](#)





6. Improve the Pre-boarding Experience

Passengers would prefer to know before reaching the gate, whether or not their carry-on bags are compliant with airline rules and overhead capacity. Considering airlines have different rules and restrictions, it's not an easy task for passengers to know for sure whether their bag will comply. Not only does it help the passenger experience to know if they will have to check their too-big or otherwise non-compliant carry-on baggage before they arrive at the gate, it also helps facilitate a faster boarding process for all passengers.

Solution: Customizable Baggage Sizers

Baggage sizers take the guesswork out of knowing if a bag is compliant and helps make the boarding process smoother and quicker. They also help to reduce the points of conflict between passengers.

Look for:

- ✓ Regulation-sized bins for easy and intuitive sizing.
- ✓ Graphic inserts that can be printed to match airline branding.
- ✓ Wheels for easy relocation.
- ✓ An open bottom to prevent accumulation of debris and facilitate cleaning.

[Explore Lavi Industries Baggage Sizer Solutions](#)





7. Prevent Chaos at the Kiosks

Self-service kiosks provide a big boost to productivity and give travelers a good sense of control. But if there are more passengers wanting a kiosk than there are kiosks, passengers can mill about in a form of competition for the next available slot. You need to have a line, not a mob, and the excess demand has to be managed in a way that is fair to those waiting in line.

Solution: Automated Call-Forward Queuing

Automated call-forward queuing combines advanced sensor technology with the engagement of a call-forward system to give you a simple, yet powerful way to manage the passenger flow to kiosks.



Sensors monitor activity in the kiosk area.



Audio and visual messaging instantly alerts the next traveler in line and guides them to the open kiosk.



Valuable service employees can be deployed elsewhere.

[Explore Qtrac CF Solutions](#)





8. Eliminate Unnecessary Delays at Check-in

The check-in queue is one of the most common, telltale experiences of passengers. Their experience at this first juncture can set the tone for everything that follows. Any measure that can shorten the wait time is valuable.

One way to help is to get customers started on the check-in process before they reach the front of the line. Filling out bag tags is one of those time-consuming, attention-consuming processes that can slow down an entire waiting line. Not only does the passenger divert their focus from the check-in tasks at hand, if they have multiple bag tags to complete, the entire check-in process can be slowed by a minute or more.

Solution: Bag Tag Tables

Bag tag tables placed directly in the queue can eliminate a common and unnecessary delay in the check-in process: filling out a bag tag. This simple step can not only speed up the check-in process but can also make the wait feel shorter.

For an effective bag tag table:

- ✓ Let passengers complete a bag tag while still in line, before they reach the agent.
- ✓ Place tag bowls anywhere you have a stanchion.
- ✓ Accompanying in-line tables provide a convenient writing surface for passengers and are available with a built-in pen-holder.

[Explore Lavi Industries Bag Tag Table Solutions](#)





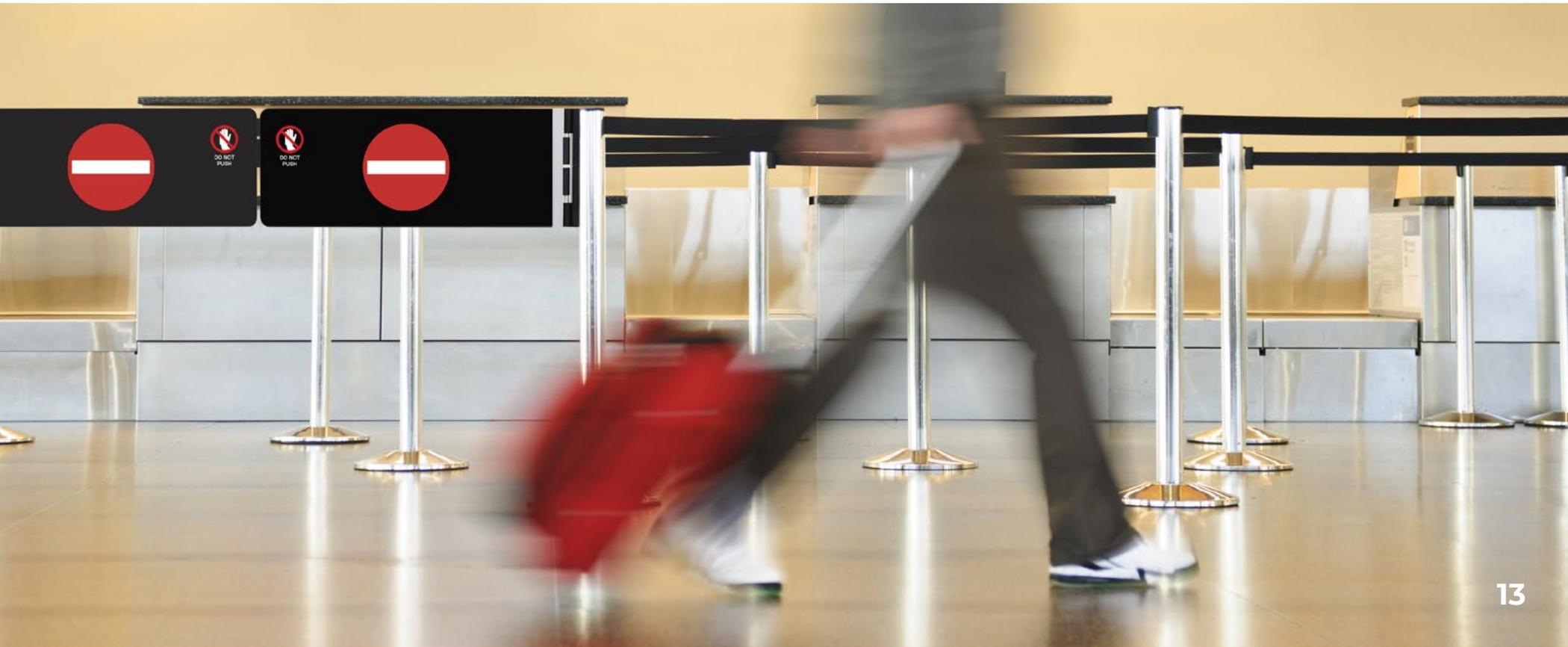
9. Maintain Order Around the Service Area

When lines are long and tensions are high, the urge to crowd around the people who can help you get to your final destination faster and easier is often too strong to resist. Passengers waiting to enter the security area or reach the customer service counter are known to crowd behind the person who is currently being helped. This can cause issues with the flow of passengers through the waiting area and can intrude upon the privacy of the person being helped. Airport and airline managers need solutions to maintain order around the service area.

Solution: Swing Gate

Self-closing swing gates can provide a visual barrier between the queue and service area and effectively prevent people from crowding the service area, enhance the privacy of those being served, and better manage the flow of passengers between areas.

[Explore Lavi Industries Swing Gate Solutions](#)





10. Enhance Access Control

Access control at airports has become one of the most important security issues of our time, impacting passengers, visitors, and employees alike. Technologically robust solutions for facility monitoring, credentialing, and access can be supported by more cost-effective solutions for partitioning off prohibited or desired areas and guiding the flow of passengers.

Solution #1: Architectural Curtain Walls and Gates

Create an aesthetically-pleasing partition wall with modular curtain walls and gates.

- ✓ Use as temporary or permanent walls or partitions.
- ✓ Choose a magnetic-base option for quick and easy installation.
- ✓ Achieve secure access control with optional locking gates.

[Explore Curtain Walls and Gates](#)

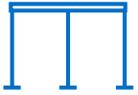


Solution #2: Post and Panel Barriers

Create permanent or temporary crowd control barriers anywhere you need to improve or control passenger flow, with the added flexibility of hinged panels.

- ✓ Partition posts provide the building blocks of post and panel walls and barriers, and can be found in a variety of heights.
- ✓ Look for hinged connectors to allow panels to angle in both directions, offering flexibility and versatility in creating barriers.
- ✓ Look for solutions that allow for signage and messaging to be integrated with the barrier.

[Explore Post and Panel Barriers](#)



11. Achieve the Right Balance of Security and Access

People converge at many points throughout the airport journey, potentially forming crowds without order. For example, in waiting areas serving multiple gates, passengers can form haphazard lines—or non-lines—that impede access to adjacent gates. Crowded security areas may need a more permanent, secure perimeter while still maintaining some flexibility. Since these effects might vary by time of day, you need a flexible way to manage crowds that can adapt to the changing environment.

Solution #1: Retractable Belt Stanchions

Retractable belt stanchions are the preferred choice of the world's largest airports for waiting lines, crowd control, and queuing systems. The retractable belt mechanism allows for flexibility in queue configuration, making it easy to extend a queue or open up a shortcut to meet the ebbs and flows of passenger traffic.

[Explore Lavi Industries Stanchion Solutions](#)



Solution #2: Magnetic Base Stanchions

When you need a more secure barrier and control over your queues —while maintaining flexibility and responsiveness —magnetic base stanchions can offer the perfect solution, without core drilling.



- ✓ Floor plates attach to the floor with permanent adhesive—no core drilling required.
- ✓ Magnetic base stanchions instantly connect to steel plates to keep your queue strong and firmly in place.
- ✓ Easily remove stanchion from floor plate for cleaning or queue reconfiguration.

[Explore Magnetic Base Stanchions](#)

Solution #3: Rigid Rail Queue Barriers

Aluminum rigid rails create an effective barrier for crowd control and queuing, while providing an opportunity for branding, marketing, and wayfinding.



- ✓ Provides a modern structural barrier for passenger queues.
- ✓ Graceful curves can add a modern twist to turns and switchbacks in queues and crowd control barriers.
- ✓ Integrated signage for advertising or informational signage.

[Explore Lavi Industries Rigid Rail Barriers](#)



12. Optimize Passenger Flow to Available Service Points

“I can help you over here!” “Next customer!” “Yoohoo!” Whatever verbal method a service agent uses to hail the next passenger in line, even if it’s a polite holler and hand-wave, is hardly an ideal way to facilitate the flow of passengers through a service queue. It’s embarrassing to the person at the head of the line who is not really paying attention. It’s frustrating to the people further back in line who are wondering why that person hasn’t yet noticed that there’s an open station. And it’s frustrating to the agent who has to sit there waving and shouting at the next person in line.

If you’re an airport or airline manager watching the productivity these delays are costing, you can easily see the impact.



Solution #1: Call-Forward Queuing

Call forward queuing systems use digital signage and station lights to streamline the way agents call passengers to service.

- ✓ Audio and visual messaging instantly alerts the next passenger in line.
- ✓ Alerts can be triggered through wireless remote, POS transaction, or auto sensor.
- ✓ Auto-controlled station lights efficiently guide passengers to an open station.

[Explore Qtrac CF Solutions](#)



Solution #2: Station Lights

Station lights offer the universal symbol of “open station” and help to ensure all service points, even those positioned further away, are utilized. Station lights help optimize passenger flow by guiding customers to an available service point so there is no confusion for the passenger or unnecessary down time for the agent.

- ✓ Offers important guidance to open service points, even self-service kiosks.
- ✓ Integrates seamlessly with your call-forward queuing system.

[Explore Lavi Industries Station Lights](#)





13. Make the Boarding Process More Efficient

Modern airlines use a number of different methods to sort passengers by boarding priority. These processes should be described and reinforced in the way queues are setup and identified. Each airline's customized signage and queue plans will help smooth out the boarding process, during what can be a tense time for passengers.

Solution: Custom Gate Signage Systems

Use custom gate signage to make it easier for passengers to identify where they should line up and reduce the chaos, confusion, and frustration of boarding queues. Customize the signage you choose to fit your boarding process and priorities.

[Explore Signage Solutions](#)





14. Address Your Most Challenging Queues with Automation

Notoriously challenging queue environments, such as a long line of passengers at Customs, require a more advanced queue management approach. Seconds saved add up to greater agent productivity, less wait time for passengers, and a more desirable airport brand. Automation can come to the rescue of busy agents and stressed out travelers by guiding passengers to open service stations and distributing the workload evenly among agents.

Solution: Automated Call Forward Electronic Queuing

Ensure an orderly queue to customs agents or customer service stations by combining the advanced technology of footfall analytics with the passenger engagement of call forward queuing.

- ✓ Footfall analytics sensors monitor passenger activity in the queuing area.
- ✓ Audio and visual messaging instantly alerts the next passenger in line and guides them to the available customs agent.
- ✓ Agent efficiency and passenger flow are optimized.

[Explore Qtrac CF Solutions](#)





15. Quickly Address Safety Throughout the Airport Environment

In aviation, safety is job one. Sometimes that means normally open areas have to be cordoned off from passenger access, or perhaps a specific route needs to be delineated for safety. For these circumstances, a barrier system that is easy to deploy, customize, and move is an essential tool in crowd management.

Solution #1: Portable Safety Barriers with Retractable Belts

Portable safety barriers make it quick and easy to block off large areas, enhance tarmac or terminal safety, and extend security queues during peak periods with extra-long retractable belts. Whether creating a boarding path on the tarmac or extending a security checkpoint queue during peak periods, mobile, extra-long retractable barriers allow a single person to get the job done quickly and efficiently.

Look for options that can allow an employee to instantly block off areas as long as 130 feet with two 65-foot-long retractable belts on a single, mobile unit.

[Explore Lavi Industries Safety Solutions](#)



Solution #2: Wall Mounted Retractable Belt Safety Barriers

Wall-mounted retractable belt barriers can be discreetly mounted at locations such as aisleways, doorways, or corridors so they are out of the way when not in use. When needed, staff members can quickly pull out the belt and slide it into a belt receptacle on an opposing wall to mark an area as “closed.”

[Explore the JetTrac Wall Mount Safety Barrier](#)



16. Free Passengers to Relax While Waiting for Customer Service

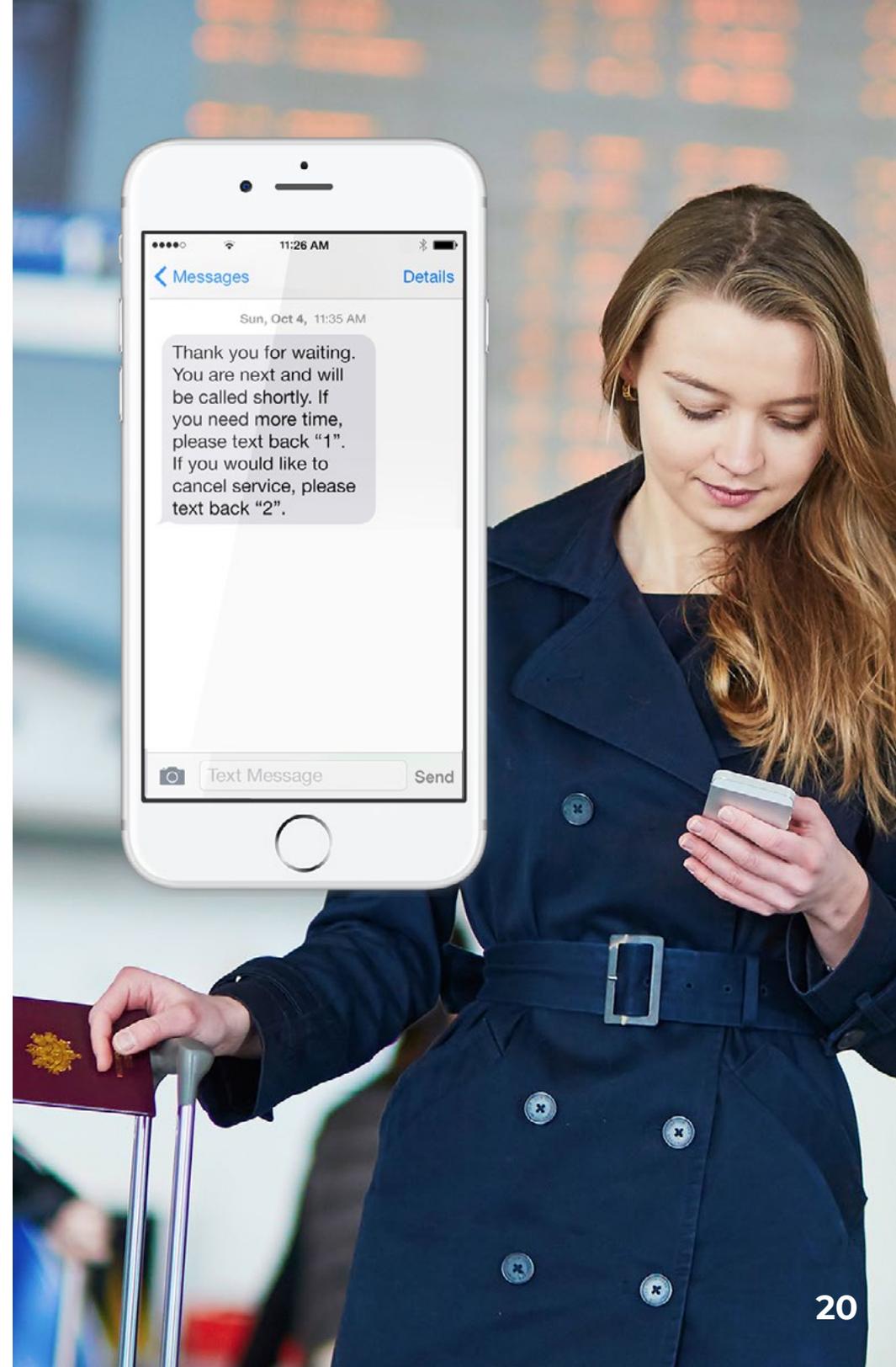
Flight delays and cancellations place a high burden on airline customer service operations. Passengers in these situations are generally frustrated, stressed, tired, and wanting answers. Customer service agents are equally pressed to find solutions and keep customers happy. Forcing these customers to stand in a long arduous waiting line can be the last straw in terms of their patience and satisfaction.

Solution: Virtual Queuing for Customer Service Centers

Virtual queuing technology can eliminate the unsightly waiting line at customer service areas and free passengers to wait in a more relaxed way—sitting, shopping, or even eating—rather than standing in a long line. Passengers can join the virtual queue by scanning a ticket, ID, or typing in their information on a kiosk or mobile app. They can then receive updates on their place in line and estimated wait times and can even participate in two-way text communication to track their wait or request more time.

Since passengers receive a ticket or case number upon registering with the virtual queuing system, the entire process can be managed, monitored, and tracked. Multi-tier service structures can easily be accommodated and appear seamless to the passenger as they move from one process to another. When delays cause an overnight or extended delay, passengers can be scheduled for appropriate service the following day, allowing them to leave and return refreshed and ready to be served at their allotted time.

[Explore Qtrac VR Solutions](#)





17. Monitor and Manage Occupancy and Fill Levels in Airline Lounges

Airline lounges and clubs offer passengers an oasis of calm and delight in the midst of a chaotic, constantly changing airport environment. But even these tranquil spaces fill up with customers, causing operators to turn away expectant passengers. Monitoring and managing the occupancy and fill levels of these spaces is important to meet the terms of service agreements, adhere to codes and regulations, and to meet passenger expectations for service delivery.

Solution: Occupancy and Fill Level Monitoring System

Sensor-based technology reporting to a cloud-based platform can monitor and track occupancy and fill levels 24/7. Dashboards and real-time alerts can also help you manage service delivery and access control as fill levels reach preset thresholds.

- ✓ Know when a room or area has reached a specific occupancy level and trigger an alert or action to prevent safety hazards or service issues.
- ✓ Understand passenger behavior or service delivery throughout a space or in specific areas to help optimize both employee and business performance.
- ✓ Count passengers with 99.5% accuracy, limiting “error creep” and ensuring accurate data, even in areas with changing light or temperature.
- ✓ Discover trends and know your busiest (and slowest) hours, days, and seasons to help optimize labor scheduling and allocation.
- ✓ Monitor passenger arrivals to help predict service loads and manage labor allocation.

[Explore Qtrac iQ Analytics](#)



CONCLUSION

Airports and airlines are under increasing pressure and held to higher-than-ever expectations from passengers. To succeed in winning the loyalty and preference of travelers, airports and airlines must work together. Passengers want to spend less time waiting and more time enjoying their time at home or at their travel destination. Airports and airlines want to boost revenue, reduce costs, and simply do more with less.

As you've learned in this guide, the passenger journey offers many points to meet the goals of passengers and airports/airlines simultaneously. Increasing productivity and efficiency in the queue naturally leads to lower costs and greater passenger satisfaction. Meanwhile, solutions to improve safety, security, and facility management, have similar results.

By combining today's queue management technology with quality crowd control, security, and queuing products, you can more easily manage passenger flow, decrease wait times, and improve the passenger journey.



Let's plan your approach.

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CASE STUDY:

The Airport of the Future

DFW Airport Partners with Lavi Industries to Take the Passenger Experience to New Heights

[Read the Case Study](#)