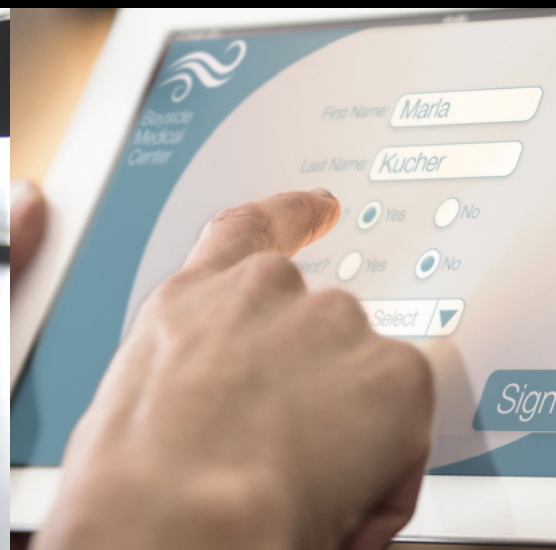
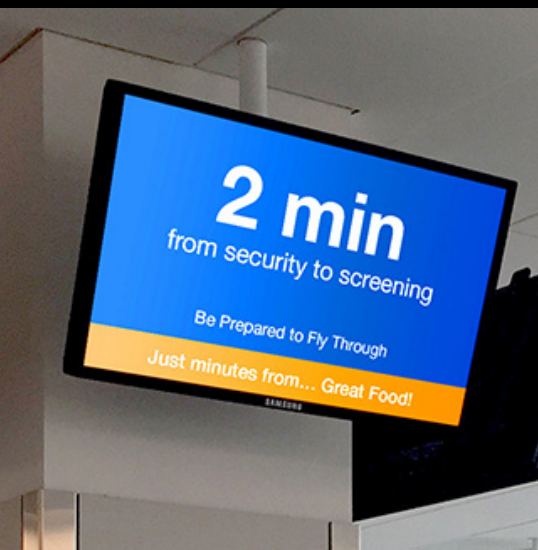


# THE QUEUING TECHNOLOGY SOLUTIONS BUYER'S GUIDE

How to Choose the Right Technologies to Optimize  
the Performance and Experience of Your Waiting Lines



# INTRODUCTION

There are many ways to approach the problems of long waiting lines, inefficiencies in the queue, and overall customer experience management. Technology has come to the rescue in so many areas of our lives and our businesses. Queue management is no exception. Today's technologies promise to cut wait times, reduce the stress of waiting in line, make the process of waiting more enjoyable, and increase business productivity and profits as a result.

This buyer's guide will give you the inside scoop on some of today's most powerful and useful queue management technology. And it will help you select the right technology for your specific business needs.

## What's Covered in this Queuing Technology Buyer's Guide?

### THE TECHNOLOGIES

Call-Forward  
Queuing

Virtual  
Queuing

Text to  
Register

Digital  
Signage

Footfall  
Analytics

Customer  
Feedback

### THE KNOW-HOW

For each of our featured technologies, you'll discover:

What is it?

What's to love?

Business problems solved

Purchase considerations

Use cases

The Lavi Solution

How to learn more

Let's get started!

## THE TECHNOLOGY:

# CALL-FORWARD QUEUING

Streamline the way you hail customers



## What is Call-Forward Queuing?

Call-forward queuing adds technology to the single-line queue by using a digital display and/or station lights to “call” customers to the next available service position. Service agents simply push a button on their wireless remote when they are ready to serve the next customer. This instantly activates audio and visual messaging on the digital screen at the head of the queue, guiding customers to the available station.

More sophisticated versions of the technology allow agents to redirect customers from one line or station to another for a more efficient service experience.

## What's to Love?



### Easy to setup

Plug-in and get to work! The technology is simple to implement and creates big impact for a smooth-running, faster-running queue immediately.



### Increases efficiency

Manage customer flow, optimize customer throughput, and streamline the way customers are called to service – especially during peak service times.



### Reduces perceived wait times

Your customers' feelings matter. And with call-forward queuing you can reduce perceived wait times by as much as 40 percent which translates to less frustration and anxiety overall.

With a digital screen in view, your waiting customers have an immediate distraction to pass the time spent waiting. Display targeted information to keep customers informed and entertained while audio cues and visual signals inform and direct the next customer in line to the next available cashier or service station.



### Integrates with in-line promotions and merchandising

In between call-to-service signals, the digital screens can be used as promotional tools for brand awareness, products, and services. Educational videos, advertisements, and in-store discounts can be presented alongside merchandising displays that prompt customers to buy now. Impulse sales can be boosted as much as 400 percent when digital displays are combined with in-queue merchandising solutions.



## Business Problems Solved with Call-Forwarding

### Reduces agent downtime

If service agents can hail customers quickly from one push of a button, what happens? They spend less time trying to get the next customer's attention and less time waiting for the customer to arrive. Instead, they spend more time actually serving customers. Your agent's "wasted" time is now productive for a more efficient and streamlined process.

### Supports a single-line queue configuration

Call-forward technology helps improve customer throughput in a single-line, multi-server queue formation — proven to be one of the most efficient waiting line configurations. By optimizing customer flow and service efficiency, call-forward technology makes a great queue configuration even better.

### Better-organized service areas

Hailing customers in an orderly manner is especially important with lengthy and widespread service areas such as airport terminals and large retail outlets. These places can pose problems for customers trying to identify the next open register or service agent. Call-forward queuing technology minimizes customer confusion and maximizes call efficiency.



### Helps increase customer loyalty

Customers appreciate being in the know. Using digital screens to help convey wait time information in between calls to action helps your customers feel appreciated and that their time is respected. Additionally, they will enjoy being entertained by promotions, commercials, fun-facts, and other digital material. This combination of informative and entertaining digital media can help bring your customers back to your waiting line again and again.

## Purchase Considerations

What are you trying to accomplish for your customers? Do you need entertainment in the queue? Do you need a way to increase promotion? If you answered yes, install multiple digital displays strategically throughout the queue. If you answered, no, and are simply in need of a more efficient way to hail the next customer, you may be able to use station lights combined with a single digital display to enhance audio and visual cues for the next customer in line.

When considering call-forward technology, think simple system that your service agents can easily control as they hail customers or redirect them to other service agents. Ease-of-use is key to facilitating greater service efficiency.

## Use Cases



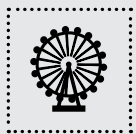
### Retail checkout environments

The checkout process in any retail store can cause frustration and stress for customers. Call-forward systems easily streamline this process by not only helping to dramatically decrease the actual time spent waiting in the queue through increased service efficiency, but also decreasing the perceived wait time as customers are entertained by digital media including promotions for new products and services or simple fun-facts and quizzes for entertainment.



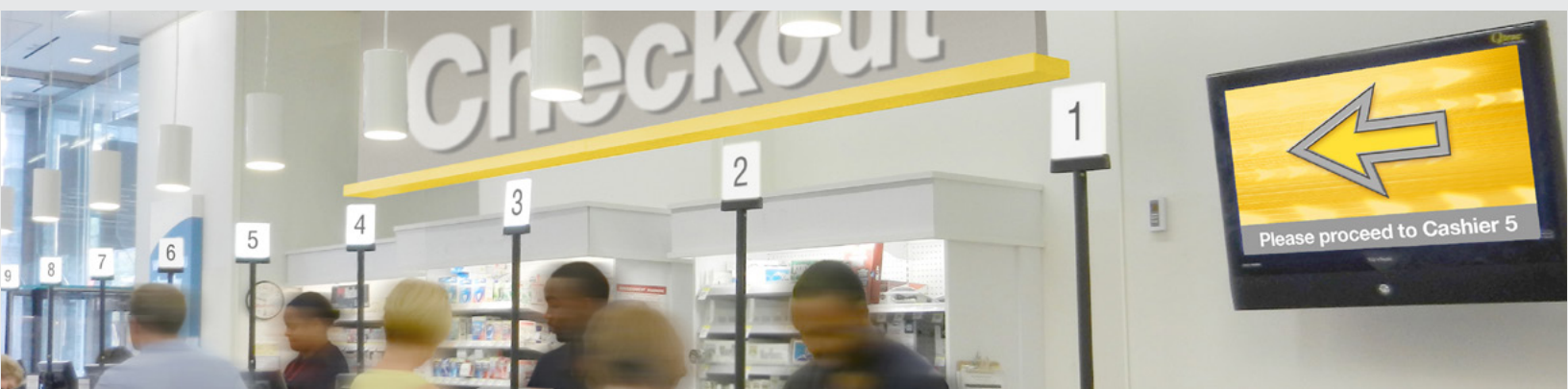
### Transportation

Disrupting a passenger's ability to make his bus or train is not acceptable in a transportation environment, especially when delays are caused by inefficient queues and/or service agents. Call-forward queuing helps keep queuing on track by directing passengers to available service agents quickly and furthering the ability for agents to perform services efficiently.



### Theme parks

When you visit a theme park there are more waiting lines than just those designed to direct patrons to their favorite rides. You have food counters, picture pick-ups, gift shops, and more. These service and retail providers can use call-forward queuing to create a more pleasurable experience for customers. Since theme parks are inherently loud and crowded with guests, organizing the multitude of queues is one of the most important goals a theme park can have.



## The Lavi Solution



For the ultimate call-forward queuing system, look no further than Qtrac Call-Forward Queuing (QtracCF). Wireless remotes equip agents with the power to effortlessly hail waiting customers and guide them to open service stations. Fast and easy installation is promoted through wireless communication - just plug it in and turn it on. And its self-contained architecture works independently from your other networks, so proprietary information is safe and secure.

### Additional QtracCF benefits:

- ✓ Increases customer satisfaction
- ✓ Engages customers with promotional stills or videos played in between queuing prompts
- ✓ Eliminates agent “down time” due to inefficient queuing processes
- ✓ Decreases average wait time by optimizing customer throughput
- ✓ Increases impulse purchases by leveraging digital signage

### Additional QtracCF features:

- ✓ Use up to 6 different interrupt modes allowing media to play in full-screen, split screen, or picture in picture
- ✓ Connect to a Qtrac LCD display or your own monitor
- ✓ Use Qtrac’s pre-installed alerts, voices, and images, or create your own
- ✓ View your configured set-up in real time before going live
- ✓ Use up to 99 wireless station remotes
- ✓ Wirelessly control numerous peripheral devices such as station lights or security doors
- ✓ Control up to 3 different queues from a single remote with a simple push of a button

### Learn more:

Learn more about the [QtracCF Electronic Queuing System](#).



Recommended resource:  
[Automate the Wait](#)

## THE TECHNOLOGY:

# VIRTUAL QUEUING

Disperse the physical waiting line, optimize service delivery, and improve the customer experience



## What is Virtual Queuing?

Virtual queuing leverages technology to manage waits and optimize service by virtually placing customers into queues and then monitoring, managing, and optimizing wait time and service allocation; improving service delivery and the customer experience.

To start, customers register for a virtual place in an automated waiting line. Registration can occur via in-store kiosk, computer, or mobile device. Then, they are free to wait where they please - without the need for a physical waiting line.

Next, the system calls customers to be served in the proper order while monitoring and managing wait times, service allocation, and service efficiency along the way. Additionally, customers are kept informed of their place in line and when they will be called to service via digital announcements, audible cues, text messages, or a combination of alerts.

## What's to Love?



### Greater customer satisfaction

When the most frustrating part of receiving service - the waiting line - is virtually eliminated, a more pleasant environment can immediately be created. There are no crowds to battle or long physical waiting lines that customers have to stand in. With virtual queuing, customers arrive for service when the business is ready to serve them.

Additionally, virtual queuing provides multiple touchpoints and channels of communication. You can communicate via printed ticket from the registration kiosk, digital displays, or text messaging. All forms of communication offer the ability to provide estimated wait times, promotional messages, and other informative or entertaining content.



### Reduces perceived wait times

When there is no line to focus on, the perception of the line fades away. And when allowed to focus on something else - such as shopping, reading, or relaxing - the perception of how long the wait actually is also fades away. The virtual queue encourages people to stop watching the clock, and the line of people in front of them, and just relax because they know their turn is coming.



### Opportunity to boost impulse sales

In the most direct way, businesses can be made more profitable with a virtual queue. That's because when customers are not confined to a waiting line, they are free to keep shopping which can create an immediate impact on impulse sales. Plus, customers that are able to spend their waiting time doing what they want are often happier and more likely to become loyal customers. Finally, virtual queuing furthers the ability for agents to serve customers more efficiently, matching service skills with customer needs, and creating efficiencies that further improve the bottom line.



### Integrates with mobile

In today's mobile environment, you can hardly consider implementing a new technology without understanding how mobile strategies fit into the picture. Virtual queuing is no different. As you implement this technology that relieves customers of physically waiting in line, you will find it is more powerful by connecting it to the devices your customers are holding in their hands. How?

- Registering for a place in the queue is instantaneous
- Two-way text communication allows customers to wait for service almost anywhere as they can directly communicate with service agents about their place in the queue
- Personalized queue displays allow customers to track their progress through the queue

Virtual queuing with mobile connects your business to your customers more than ever showing you get their needs for convenience, productivity, and control.

## Business Problems Solved with Virtual Queuing

### Waiting crowds are dispersed

Often physical queues snake slowly around an area, dragging waiting customers along with it. This situation can create an impenetrable wall of people. Virtual queuing disperses these people opening the area up for a more orderly and comfortable waiting environment.

### Increases service efficiency

Virtual queues facilitate service agent efficiency. Downtime is minimized as customers are hailed automatically in turn. Additionally, the agent-customer engagement is constant, which keeps agents in the habit of working efficiently to keep the "line" moving.

Perhaps the greatest measure of service efficiency comes with the ability to match a particular customer to the right agent. This connection facilitates the following engagement or transaction with maximum efficiency as the customer will be served by the agent who is best qualified to handle the particular case.



### Supplies powerful analytics

Manage your queue, optimize efficiency, increase service productivity, and enhance the customer experience with a virtual queuing system's built-in analytics. Data such as customer counts, wait times, service loads, and service times are constantly collected to create useful and productive real-time dashboards, actionable alerts, and historical reports.





## Purchase Considerations

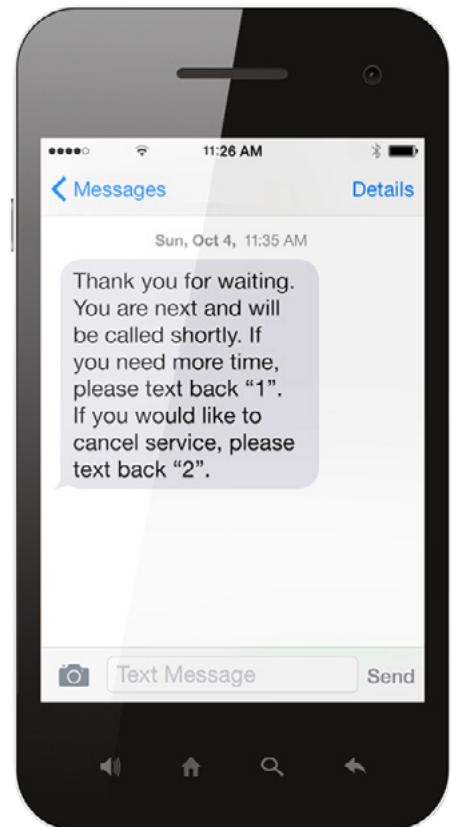
With Americans spending approximately 37 billion hours each year waiting in line, does it make sense to eliminate the physical line at your business? Will your customers be happier spending their time shopping, relaxing, or being more productive?

### Consider your customers' needs

Who is your customer? Are they more apt to register for a place in the queue via in-store touch screen kiosk or mobile device? Will they communicate via two-way text messaging? Answer these questions to determine which virtual queuing features you would like to implement.

### Consider your service agents' needs

How will virtual queuing make them more efficient? Do you need your system to match customers with the appropriate service agent? Do you need customers to be automatically prioritized? Or will you simply setup a first-come, first-served system?



## Use Cases



### Retail environments

Many retailers use queues for more than just the checkout process. Waiting lines form at customer service desks, return stations, and quite frequently at fitting rooms, a place customers often neglect to budget wait time for.

Smart retailers are now giving customers the option to register for a fitting room while they shop. Shoppers are then notified via text or in-store digital signage when their fitting rooms are ready. This process helps remove a source of stress, reduce perceived wait times, and increase sales. Additionally, staff can focus on serving customers instead of managing unruly crowds.



## Colleges & Universities

Registration week at colleges and universities is marked by thousands of students descending upon the administration building all at once. In this environment chaos seems inevitable. However, virtual queuing systems with mobile messaging are helping restore order and a sense of calm to the registration process. And students are finding the transformation both liberating and stress reducing.



## Hospitals and Doctors Offices

Virtual queuing has come to the aid of healthcare organizations as they strive to better manage the logistics involved in transferring patients from one treatment area to another. The virtual queuing system can check patients in as they enter the facility and then staff can use the system to automatically transfer the patient to the next step in the care process.

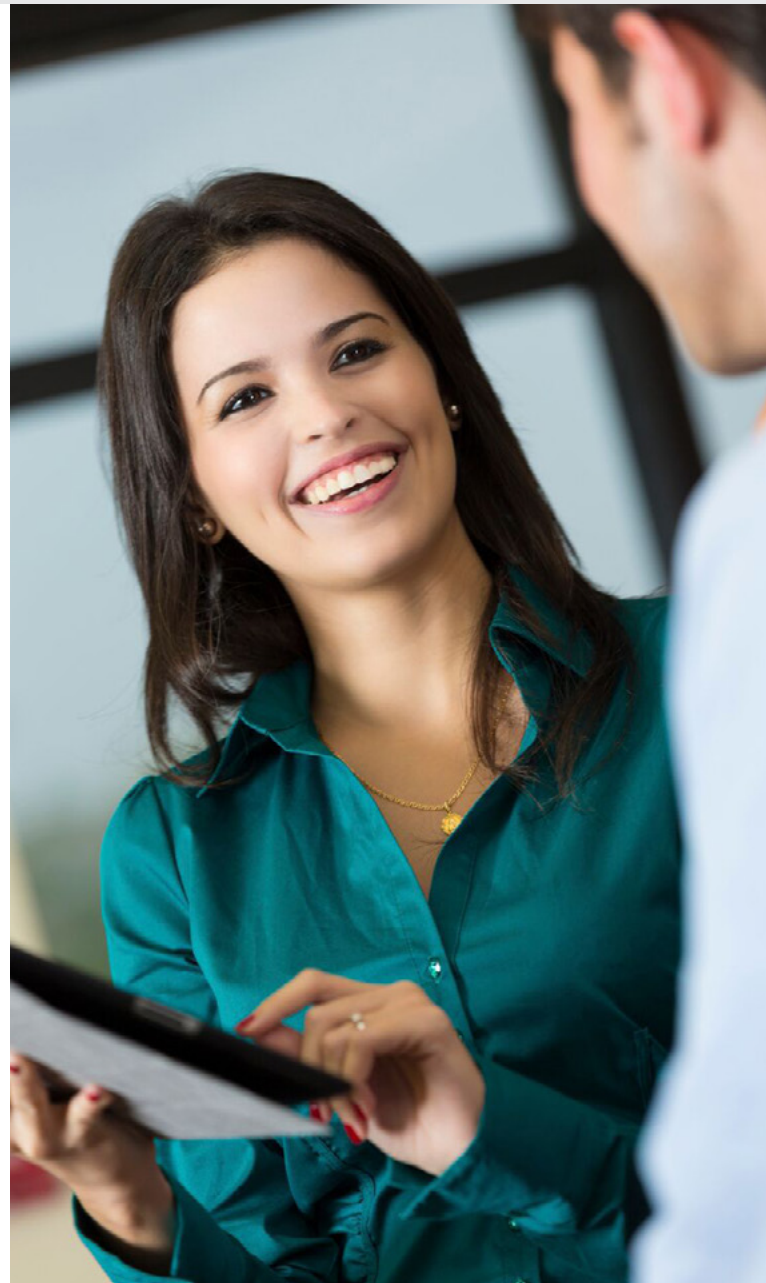
For example, the queue can start with patient admittance, move the patient to bloodwork, then to imaging, and finally to discharge. Along the way, the patient is seamlessly transferred to the right queue, provided an estimated wait time, and served in the appropriate order.

## The Lavi Solution



Lavi's Qtrac virtual queuing solution (QtracVR) works through a flexible and customizable process to:

1. Schedule appointments
2. Register customers
3. Communicate expectations directly to the customers
4. Manage queues and customers
5. Hail customers to service
6. Optimize efficiency and productivity



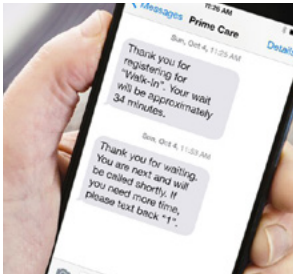
## The Details



**QtracVR and appointment scheduling** - customers make appointments for service before arriving at your place of business. The scheduling software also allows you to better manage your service workload and employee scheduling.



**QtracVR and customer registration** - customers can register for service via kiosk, tablet, or mobile device, on the premises or off-site, self-service or host-assisted. The process can be as simple as entering a loyalty number or swiping a card. Or create a series of registration questions that allow you to gather the necessary information to help best serve your customers.



**QtracVR and communication** - the technology offers multiple customer touch points to set expectations, directly interact with customers, and enhance the overall customer experience. Set appointment confirmations and reminders. Provide estimated wait times and other important notices. A 2-way text-messaging feature allows customers to ask for more time if they're not quite ready for service, or ask to be removed from the queue entirely. Additionally, targeted marketing opportunities are available.



**QtracVR and management** - your service agents and managers are in control. The technology allows them to group, sort, and prioritize waiting customers. Transfer customers to other queues automatically or manually. Alerts instantly notify service agents of customers with long waits or special needs. And live dashboards help managers see what's going on in the queues right now. The system can also re-queue no-show customers, or delete repeated no-shows from the system.



**QtracVR and call for service** - Customers are hailed to service counters via text message or LCD screens displaying the customer's name or call number.



**QtracVR and optimization** - the system is always collecting data including customer counts, wait times, service loads, service times, and much more. The data is input into real-time dashboards, actionable alerts, and historical reports. Managers can react to immediate issues before they get out of hand and analyze data for trends, problems, and opportunities to help increase service productivity, optimize efficiency, and ultimately enhance the customer experience.

## Additional QtracVR benefits:

- ✓ Disperse waiting crowds
- ✓ Create a more pleasant waiting environment
- ✓ Free customers to continue shopping while they wait
- ✓ Decrease perceived wait times
- ✓ Let customers arrive for service when you are ready to serve them

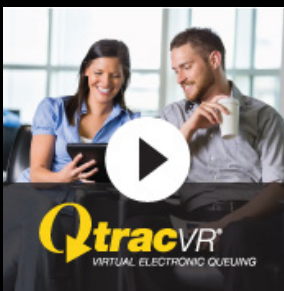
## Additional QtracVR features:

- ✓ Mobile enabled two-way text communication, personalized queue display, and mobile agent app
- ✓ Multiple customer touchpoints including mobile texting and app, internet, kiosk, and digital signage
- ✓ Appointments and scheduling so customers can reserve a service appointment or place in the queue anywhere, anytime
- ✓ A powerful service interface that allows service agents to transfer, prioritize, requeue, and edit critical customer information at any time
- ✓ Enhanced workflows through the use of customer groups and automatic transfers

## Learn more:

Learn more about virtual queuing and [QtracVR](#).

## Resources:



### Slideshow

[QtracVR: The Freedom to Wait, without Waiting in Line](#)



### Primer

[Virtual Queuing Across Industries](#)



### E-Book

[Don't Hate the Wait: How Virtual Queuing Can Transform the Customer Journey and Reshape the Way We Wait for Service](#)

## THE TECHNOLOGY:

# TEXT TO REGISTER

A convenient way for customers to register for service and track their wait.



## What is Text to Register?

A technology that allows customers to wait for service almost anywhere. Customers register for their place in line by text message. Then, they receive a web link to their personalized queue where they can view their call number, how many customers are ahead of them, and their estimated wait time.

The queue's screenshot updates in real time and the customer can cancel or re-queue themselves at any time if something comes up. A customer's personalized queue page continuously notifies them of their place in line, chiming and vibrating as they move up in the queue. They arrive at the service area right before they will be called.

## What's to Love?



### A greater sense of order and calm

Without large crowds of customers descending upon the service area, you can better manage the queue and people waiting for service. Customers who are ready to be served walk into a relaxed atmosphere where agents are focused on providing the best service possible instead of managing unruly waiting lines.



### Increased communication

Text to register allows businesses to set expectations, interact with the customer, and enhance the customer experience. Use it to enhance customer communication by providing estimated wait times, business information, service updates, and targeted marketing opportunities — all fed directly to the customer's mobile device.



### Customers feel more in control of their time

Customers can register for a place in the queue without having to set foot in the place of service. Instead, customers could be at home, running an errand, enjoying lunch, at the office, or wherever else they choose to reside during the waiting period. They can even ask for more time if they are running five minutes late or need to reschedule. Text to register gives customers options and control of when they arrive for service.



## Business Problems Solved with Text to Register

### More predictable customer flow

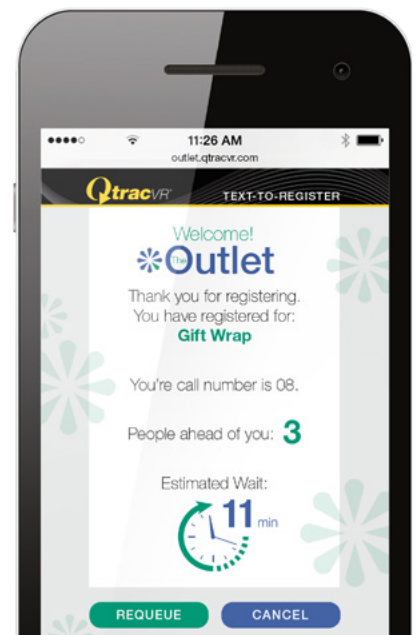
If you know what your queue looks like, you can plan your agents' workloads. What types of services are being registered for? How many customers are within each category? What agents do you need to fulfill these services? Text to register lets you plan in advance and know what is expected of your business as you progress through your waiting customers.

### Help prevent large crowds and waiting lines from forming

When customers do not show up until it is their time for service, then large crowds and long waiting lines cannot form. Use the open space that a typical physical line would occupy to expand merchandising or create a sit-down waiting area where customers can relax.

### Greater focus on serving customers

When agents and managers are relieved from the duty of managing a physical waiting line, their focus can turn to specific customer needs and serving those needs accurately and efficiently.



## Purchase Considerations

### Consider your customers' needs

How do your customers perceive their time? As important. Implementing a waiting line system that respects a customer's time enhances the customer experience and creates more loyal customers.

### Consider your service agents' needs

Select a system that increases your agents' efficiency. By knowing customer needs in advance, you can match them with qualified service agents who are prepared to meet their needs.

### Consider your managers' needs

Text to register should provide the real-time analytics managers need to optimize service delivery and customer flow.

## Use Cases



### College campuses

One of the most hectic times of the year for administration on college campuses is registration. Giving students the ability to text to reserve a registration appointment, frees up waiting room space and reduces the potential for large crowds to form. Additionally, students get the luxury of waiting in their dorm rooms, at the coffee shop, or in the library studying.



### Financial institutions

Banks and financial institutions provide a range of services to their customers. A text to register system allows these services to be reserved ahead of time giving managers ample time to match the right service agent with the customer.

## The Lavi Solution

### QtracVR with Text to Register with Personalized Mobile Queue Display

As part of the QtracVR solution, Text to Register provides a convenient and easy way to register for services. Customers can register for a service through their phone and continue to shop while waiting. A personalized queue display chimes as it updates and has a unique ring when the customer is called.



### How It Works:

1. Customers register for service via text and are provided with web link to their personalized queue.
2. Their personalized queue display shows the call number, the number of other people ahead of them and the estimated wait time. The screen updates this information in real time. With every update, the display chimes with an audio cue. The customer can cancel or re-queue themselves at any time.
3. When a service becomes available, the employee electronically hails customer via their computer or tablet browser.
4. The customer is notified via their personalized queue display with both a visual and audio cue.

### Learn more:

[QtracVR product detail](#)



Recommended resource:  
[Don't Hate the Wait Ebook](#)

## THE TECHNOLOGY:

# DIGITAL SIGNAGE

Create an effective, flexible, and highly customizable means of communication



## What is Digital Signage?

Digital displays with the inherent ability to capture attention and alter customer behavior. Digital signage systems can deliver complex, interactive media or simple static images to display on screen. And it is perhaps the most innovative way to enhance wayfinding and promote customer flow throughout the queue.

## What's to Love?



### It occupies and informs

From the moment a customer steps into the queue, digital signage works hard to occupy the time spent waiting in line. The result? The perceived time spent in the queue seems shorter. Engaging and informational videos, carefully selected advertisements, and customer testimonials all provide entertainment to pass the time.

Additionally, digital signage informs customers helping to manage expectations and better facilitate customer flow. Communicate expected wait times and other real-time announcements to keep customers in the know.



### Customizable and easy-to-change content

Have you ever tried to make a quick change to a printed sign? It doesn't work very well. Or how about when you need to change your targeted information routinely to keep your customers from getting bored in the queue? The process becomes even more challenging. Digital signage systems are ideal in situations where you want maximum flexibility and customization for your content. Tailor your messaging from day to day, hour to hour, or minute to minute.



### Centralized control system

Demographics, product mix, promotional needs, and customer flow patterns are among the many slices of information that differ from store to store (or location to location). When digital signage is used to display in-store promotional, directional, or entertaining media, it helps if you can easily alter displays to deliver the right message, to the right location, at the right time. With digital signage you can organize screens, organize media, and distribute media to customers across multiple locations from one place, a centralized control system.



### Increases customer engagement

Digital signage can be used to present engaging content that will keep customers' minds off the wait while minimizing the risk they will leave the line before they even reach the service area.



## Business Problems Solved with Digital Signage

### Communicate important information to customers

Media delivered through digital signage can be used to display open and closed registers, estimated wait times, status of arrivals or departures, and other customer flow-related details. By putting this information in front of waiting patrons you will create happier, more loyal customers that feel as if their time is respected and that you are being honest with them about the details of their wait.

### Increase product awareness

Your customers' attention is constantly being pulled in multiple directions making it easy for them to overlook the cool new product you just placed in your queue.

Digital signage can help draw awareness to this otherwise passed-over product. Here is where video content is extremely powerful. You can demonstrate how the product works and help customers quickly identify with its usefulness.

### Influence point of purchase sales

It has been proven that when combined with in-queue merchandising, digital signage sells. 4 in 5 product brands experienced increases of up to 33% in additional sales through the use of digital signage in the waiting line (DigitalSignageToday.com). And nearly 7 in 10 customers purchased a product or service because a sign caught their eye (FedEx Office study). Additionally, digital signage has a whopping 52 percent recall rate compared to the next best, television at 32 percent (Nielsen).



## Purchase Considerations

### Consider your customers' needs

When composing your digital signage system, keep your target audience in mind. How do you need to present information to them? How many displays need to be placed throughout the queue for optimal viewing? How will you mount the screens?

### Consider your managers' needs

How often do you need to change the information presented on your displays? Do separate screens need to display different content? Are your managers running multiple locations? Select a centralized control system that helps you accomplish these targeted goals where media can be set to change at select intervals or can manually be changed instantly.

## Use Cases



### Transportation

Digital signage can be updated in real time with data derived from an intelligent queue management system to broadcast current estimated wait times and to direct passengers to under-utilized queues.



### Retail

Distract. Distract. Distract. Digital signage greatly decreases perceived wait times by being able to provide critical queuing information, how-to videos, fun tidbits of information customers may not know about your brand, and much more. With the ability to view a range of media, customers don't have time to be bored or frustrated with the wait.



### Entertainment

Tell guests what's happening. Even if it's going to take 35 minutes until a customer can finally sit down on that new roller coaster ride, telling them how long the wait will be is far better than not telling them. Intelligent queue management makes it possible to share this information and display wait times directly on digital screens within the queue. If guests already know it's going to be a while, they can relax and just settle in – they've made the decision to be there so they remain satisfied.

## The Lavi Solution



Centrally coordinate and manage in digital signage throughout the enterprise with Qtrac media management software. The software is fully scalable. Control a single monitor or hundreds of displays across numerous regions. You have total control of your messaging.

### Qtrac Media Manager Benefits:

- ✓ Works seamlessly with Qtrac Queue Management systems
- ✓ Proven to dramatically improve impulse sales
- ✓ Reduces perceived wait times by as much as 35%
- ✓ Centralizes control and scheduling of digital messaging
- ✓ Fully scalable media control - from one display to hundreds across multiple sites and regions
- ✓ Create unlimited playlists to distribute media to individual displays or customized groups based on regions or locations



### Learn more:

Learn more about [Qtrac Media Manager](#).

## THE TECHNOLOGY:

# FOOTFALL ANALYTICS

Optimize service delivery to reduce costs and increase revenues.

## What is Footfall Analytics?

Monitor customer activity and transform it into powerful analytics with state of the art technology designed to track customer footfall, behavior, and queue analytics. Insights can be delivered to dashboards and real-time alerts can keep you in control of your queues and surrounding areas.

## What's to Love?



### Real-time, actionable data

Manage your queues, assess traffic trends, and more with customizable, real-time alerts. Act now before wait times get too long or customers get impatient. Additionally, you can use your data to keep customers in the know. For example, publish estimated wait times as known waits are proven to feel shorter than unknown waits.



### Historical data

Analyze trends with historical data. Plan how you will allocate resources and optimize service efficiency by looking at trends over specific periods of times such as hours within a day, specific months, or seasons.



## Business Problems Solved with Footfall Analytics

### Optimize staffing to meet customer demand

Accurately count customers and discover trends to determine your busiest and slowest time periods. Optimize labor scheduling and allocation accordingly. Then use real time data to align labor with actual traffic and recognize customer flow patterns that might require immediate action.

### Monitor safety and compliance, and manage unstructured areas

Assess fill area to know when a room, area, or queue has reached capacity. Understand customer behavior or service delivery throughout a space to help optimize both employee and business performance. Know when and how often customers abandon an area, and keep tabs on customer movement, direction, and dwell time to help manage unstructured queues, secure areas, or self-service spaces.

### Keep wait times and service rates on track

Accurately measure, monitor, and predict wait times and service times to increase transactions per time period, optimizing service delivery, and operational effectiveness. Monitor customer arrivals to help predict service loads and manage labor allocation. Track and monitor service rates to discover training opportunities. And automatically trigger processes or alerts based on customer flow or KPI events to help optimize performance metrics and business goals.

## Purchase Considerations

Ensure the system you choose allows your managers to access the data they need to make decisions about staffing and queue utilization. Implementing a system to capture and analyze footfall analytics must start with accurate sensors. Various types of sensors can be setup in and around the queue to conform with queue layout and traffic patterns.

Additionally, select a system that best helps your managers manage on the spot. If they can't get the information they need on a timely basis, they can't solve queuing problems on a timely basis. Look for real-time alerts and dashboards that connect to your collected footfall data.



## Use Cases



### Transportation

Track passengers in real-time. Knowing the flow of customers to specific queues at specific times will allow you to reallocate resources as needed and redirect passengers to under-utilized stations.



### Retail

Are customers getting through the waiting line at an acceptable pace? Is store traffic converting to sales? Intelligent queue management metrics provide retailers with valuable information about wait times, arrival rates, abandonment, and conversions to help increase profitability.



### Entertainment

How many people are in any queue at any moment in time? This basic measurement lets managers know whether they need more service resources to keep traffic moving. If an incident occurs within a queue, managers can be notified immediately via the queue management system, which means the issue can be handled quickly.

## The Lavi Solution



Qtrac iQ provides real-time and historical data that can improve the customer experience, optimize service delivery, and increase overall business performance. Actionable data is delivered in a way that is easy to understand and can be used to drive costs down and revenue up.

Intelligent sensors are used to capture data. The Beltrac smart post has a sensor built right into a retractable belt stanchion eliminating costly installations. Dual infrared beam break technology counts people, and senses speed and direction with over 95% accuracy. AC power is not needed and the rechargeable batteries in the post last up to one year. Ultra low power Zigbee wireless communication securely transmits queue data for uncompromised privacy.

Qtrac iQ also uses ceiling-mountable LiDAR sensors - a technology that counts and tracks people with 99.5% accuracy. The light/radar technology does not put privacy at risk like video, WiFi, and Bluetooth can. Shape recognition can differentiate between objects and people, and can even recognize family groups. Employees wearing Qtrac tags bypass data collection altogether.

## Qtrac iQ footfall analytics benefits:

- ✓ Count customers with 99.5% accuracy even in areas with changing light or temperature
- ✓ Discover traffic trends and know your busiest (and slowest) hours, days, and seasons to help optimize labor scheduling and allocation
- ✓ Utilize actionable real-time data to align labor with actual traffic, optimizing service efficiency while improving the customer experience
- ✓ Recognize customer flow patterns and events such as a long queue, traffic blockage, or a customer surge and act immediately

## Qtrac iQ footfall analytics features:

- ✓ Powerful, customized reports and dashboards provide simple to understand, actionable data and forecasts for optimizing service and customer flow
- ✓ Expected wait times can be published to help manage customer expectations and balance service loads through directing customers to the best service areas
- ✓ Actionable, real-time alerts allow managers to head off problems before they escalate. Text-based or email alerts can be customized for any KPI
- ✓ Sensors are 95% to 99.5% accurate, even in areas with changing light and temperature
- ✓ Individual sensor data can be stitched together to create a complete story of the customer flow in large or irregular-shaped environments
- ✓ Accuracy even in complex physical structures such as those with extremely high (or low) ceilings or structural impediments
- ✓ Easy integration with other Qtrac solutions, allowing for a holistic, automated customer flow **solution**

## Learn more:

Learn more about [Qtrac iQ and footfall analytics](#).

## Resources:



### Guide [Intelligent Queue Management](#)



### Case Study [DFW Takes the Passenger Experience to New Heights](#)

## THE TECHNOLOGY:

# CUSTOMER FEEDBACK

Ask the questions -  
deliver a better customer experience.

## What is customer feedback technology?

A way to capture customer feedback in real-time. The technology can support mobile-enabled surveys or touchscreen surveys that can be placed directly in the queue or wherever you need to capture feedback.

## What's to Love?



### Real-time feedback

Plug-in and get to work! The technology is simple-to-implement and creates big impact. Are your queue management efforts working? Are your customers satisfied with wait times? Are they happy in the queue? You don't know if you don't ask. The advantage of adding real-time customer feedback is that you capture opinions on the spot. Easily identify issues and gauge responses to queue management efforts.



### Feedback options

Construct your surveys to meet your needs. You can create a simple list of features to rank or a more complex hierarchical question structure. Do you need a multilingual setting? Customized surveys let you ask for the relevant information you need while making sure the process is easy for your customers.

## Business Problems Solved with a Customer Feedback Mechanism

### Improve management decision-making

Set your thresholds and when they are exceeded, text or email-based alerts will notify you of issues. For example, if five customers in a row say the wait is way too long, you can act now and fix the situation before more customers have the same opinion. Likewise, use historical data to improve staffing and queuing decisions today and into the future.

### Data analysis and reporting

Compile feedback into easy-to-use reports. Know where your strong points are and where your weaknesses are so you can improve your queue management from the customer's perspective.

### Flexible mounting options

Not every queue is the same so how you install your feedback mechanism shouldn't be one size fits all either. Consider a free standing unit, wall-mounted, or a simple attachment to a stanchion.



## Purchase Considerations

### Consider your customers' needs

How will you receive the most feedback from your customers? Are they more likely to respond via in-line touch screen or through their mobile device?

### Consider your managers' needs

How do your managers need to receive feedback data? They can't implement changes to the queue or know what they are doing right if the survey information doesn't reach them accurately and on a timely basis. Consider your managers' needs for multiple surveys, real-time alerts, and historical reporting.

## Use Cases



### Airports

Traveling can be stressful. Airports realize this and want to create the best customer experience possible. The check-in process and bag drop are perhaps one of the most anxiety-ridden parts of the airport as customers are juggling luggage, passports, and confirmation papers. Airports are improving these processes by capturing what their customers feel about their service. Was service timely allowing customers to get to security on time? Were service agents efficient? Was the waiting line easy to navigate?



### Retail environments

Tracking the customer experience within a retail environment is very important as happy customers become loyal customers. Discovering the feelings of customers in real-time is also important, as real-time feedback is usually more accurate and useful than feedback after a customer has left the scene.



# The Lavi Solution

## Customer Feedback Post

Customer feedback with Lavi provides a real-time solution backed by internet uplink (WiFi or GSM) that optimizes service design and delivery. Best of all, it's mounted to the Beltrac(R) stanchions you already know and love.

### Features:

- ✓ Survey options that include hierarchical question structure and multilingual settings
- ✓ Real-time alerts via text or email
- ✓ Rich data analyses
- ✓ Mounting options such as wall-mounted, freestanding, and built-in unit



## Your 'Go-To' Source for Queue Management Technologies

The right queuing technology can facilitate agent productivity, improve the customer experience, and boost your impulse sales and profits. Lavi Industries is the leader in queue management and here to help match your queue with the technologies that will help your business excel.

**Let us help plan your approach.**

Contact a Lavi Expert

[www.lavi.com](http://www.lavi.com) | (888) 285-8605