

KIOSK BUYING GUIDE

Your comprehensive guide to deploying a self-service kiosk program



FRANKMAYER
KIOSKS ■ DISPLAYS

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■ Welcome!

If you're reading this, you've identified a need for self-service, researched your options, and are considering interactive kiosks.

So, what's the next step?

As an established custom kiosk designer and manufacturer, we frequently hear this question from clients as they navigate the process of deployment.

So often, in fact, we've pinpointed some of the top talking points from those initial conversations and compiled them into what you have here – a comprehensive guide to help you roll out your next self-service kiosk program.

This handbook is meant to give you an overview of the process and answer common inquiries. That being said, there's nothing we love more than talking about kiosks, so please [reach out](#) with further questions or to review your specific project needs.

Enjoy!

KIOSK PROGRAM CHECKLIST

Use this as a handy checklist of common questions we'll ask when first discussing your kiosk program needs. Click on the links for more information about specific options.



KIOSK PROGRAM CHECKLIST

General Questions

- ☐ Please describe the high-level function for your kiosks? What major pain points will your self-service program address? ⓘ
- ☐ Do you already have an existing kiosk program?

Deployment

- ☐ What does deployment look like? Will it occur in phases?
- ☐ What are your intended dates for prototype, pilot, and/or production rollouts? ⓘ

Budget

- ☐ What is your target budget for this solution? ⓘ
- ☐ Do you have a hardware budget per kiosk?

Software

- ☐ Will you be developing your own software or web app, or will you need a custom software solution? ⓘ

Hardware

- ☐ What devices will your kiosk need? ⓘ

Branding

- ☐ What kind of personalization will your kiosk need? ⓘ

Location

- ☐ What is the typical location for the kiosk deployments? (i.e. – retail store, bank, airport?)
- ☐ Will the kiosks be indoors, outdoors, or both? ⓘ
- ☐ Do you know what kind of connectivity will be required? ⓘ

KIOSK APPLICATIONS

From self-ordering to bill payment and more, kiosks are used for multiple applications across countless industries.



■ KIOSK APPLICATIONS

Here are the most common uses for self-service kiosks.

Self-Ordering

An ideal solution for QSRs, dispensaries, or retailers, self-order kiosks let customers place orders autonomously. Ordering kiosks have been shown to increase ticket order sizes by up to 20 percent thanks to cross-selling and upselling abilities.

Check-In

Popular for the healthcare, hospitality, and travel industries, guest check-in kiosks shorten wait times and save money on labor costs.

Wayfinding

Digitize the wayfinding process at malls, campuses, and theme parks with interactive maps that easily update.

Bill Payment

Bill payment kiosks extend service hours and provide a payment solution for the unbanked and underbanked communities. These kiosks can be customized to accept all forms of payment.

Ticketing

Whether it dispenses game cards at an arcade or tickets at a theater, ticketing kiosks streamline the purchasing experience for guests.

Consider how your kiosk will be used. This will drive decisions surrounding kiosk design, function, and components down the line.



■ **Further Reading:**
[5 Common Types of Self-Service Kiosks](#)

TYPES OF KIOSKS

Learn if a pre-engineered,
custom, or outdoor kiosk is right
for you.



■ TYPES OF KIOSKS

Kiosk options fall into three categories: pre-engineered, custom, and outdoor. Your objectives, budget, and location will determine which is the right fit. Discover what sets each apart.



Pre-engineered Kiosks

Pre-engineered enclosures are quick-to-market options with simple customization options for peripherals, or hardware. These kiosks save you time and money in design and engineering hours, giving your program a head start toward deployment.

Sometimes referred to as semi-custom or standard kiosks, they provide a starting point for design with a basic enclosure that can be modified to include optional hardware and personalized to your brand with colors, logos, and graphics.

Bottom Line: Begin here if you want affordable, market-ready design solutions with a range of common hardware options.



Custom Kiosks

Custom kiosks deliver the same benefits as standard units, but with design and function exclusive to your brand.

Tailored specifically to meet your requirements, industrial designers mockup distinct design renderings while engineers prototype the final look.

Bottom Line: Begin here if you require unique design or function for a large quantity kiosk deployment.



Outdoor Kiosks

Outdoor kiosks can be standard or custom and are manufactured to be placed outside. Ranging from parking kiosks to wayfinding stations – and everything in between – these kiosks are more expensive due to their outdoor-rated peripherals.

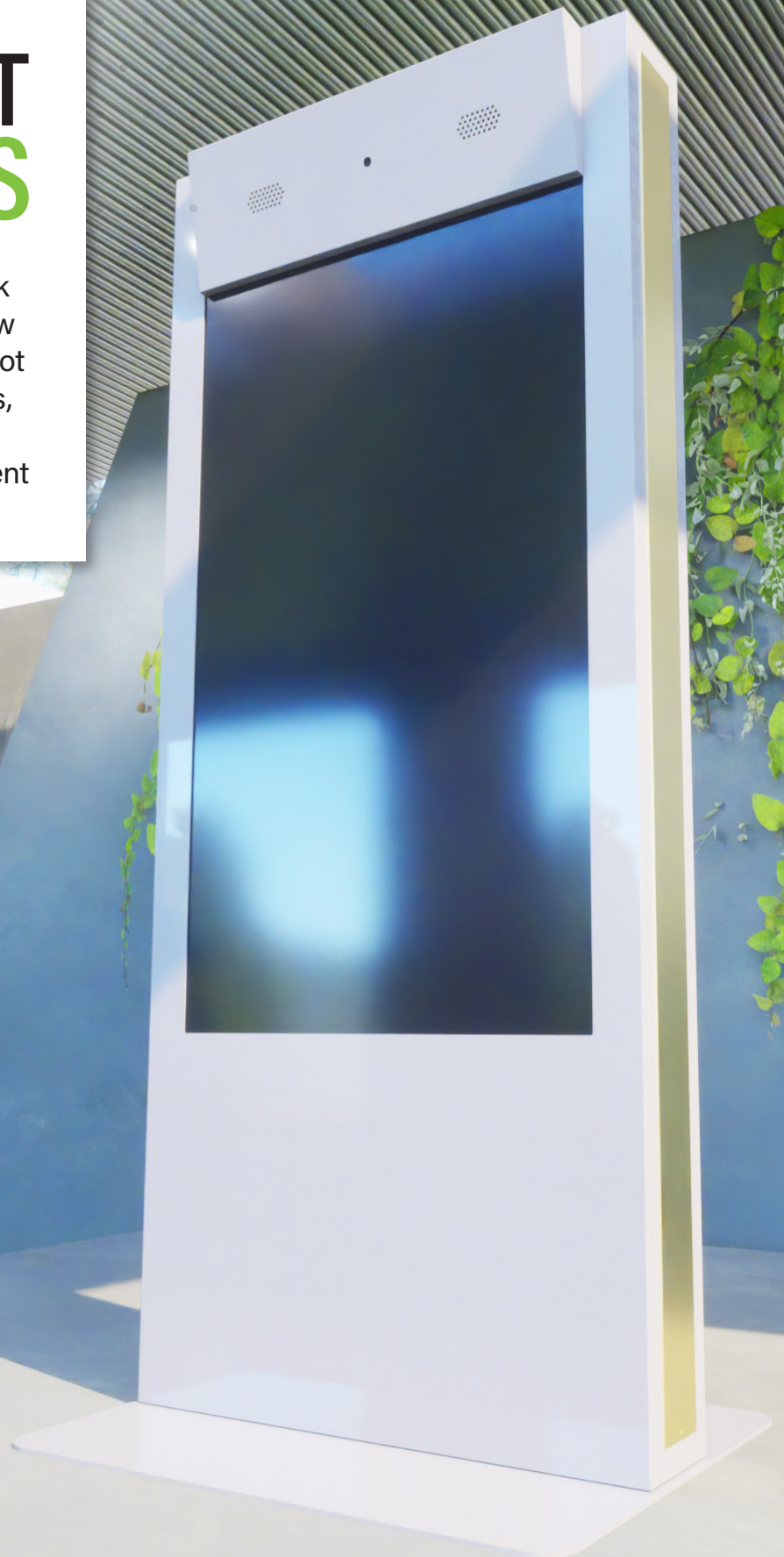
Using high brightness touchscreen monitors to reduce glare as well as heating and cooling systems to keep components at an optimal temperature, outdoor kiosks are a worthwhile investment to consistently deliver an optimal customer experience while weathering the elements.

Bottom Line: Begin here if your kiosks will be located outdoors.

Even within these categories of kiosks, you have options. [View a gallery](#) of Frank Mayer's different enclosure designs.

DEPLOYMENT OBJECTIVES

Once you've chosen the right kiosk for your needs, you'll need to review next steps, including prototypes, pilot programs, manufacturing timelines, and location requirements. These elements will impact your deployment strategy, schedule, and budget.





When planning your kiosk program, you'll want to identify specific deployment objectives at the beginning. Below are details you'll review with a kiosk expert.

■ PROTOTYPES AND PILOT PROGRAMS

The lifecycle of a kiosk program typically involves the following phases: conceptual design, prototype, pilot program, and lastly, production run.

Within this development process, it's worth highlighting the importance of the prototype and pilot steps.

An initial version of a kiosk, a **prototype** is fully engineered and uses manufacturing processes that would be typical of production. It is intended to match the rendering or conceptual drawing the client approved. It's an essential step in the process because it lets clients fully appreciate the scale of the unit, assess its ergonomics, and review the access/serviceability of the kiosk while also assessing the software and hardware. This prototype analysis is used to confirm or improve the functionality and user experience of the

production version.

A **pilot** is an introductory small-scale kiosk deployment to select locations. Pilot programs also collect data; these results are gathered from real users in the field and help assess customer adoption of the solution. Like prototypes, pilot programs can reinforce the direction of the project as well as identify any last-minute changes needed before moving forward with a full-scale production run.

There are scenarios when a prototype or pilot run may not be necessary. Skipping the prototype generally applies when speed-to-pilot is important and when the customer has confidence in the direction of the program and in their kiosk provider. Forgoing the pilot stage suggests the customer feels secure with the prototype results and in their own analysis of the market's readiness for this kiosk.

■ MANUFACTURING TIMELINES

Many factors affect the time it takes for a kiosk project to go from the planning phase to the field. A common influence on timeline is the type of kiosk you deploy.

Because concepts and engineering are already complete on standard kiosks, much of the legwork has been taken out of the process. And while these kiosks can still be customized with hardware, and branding, the main enclosure serves as a starting point. While times can vary slightly, a typical standard enclosure takes between 8 to 10 weeks from the time a production order is placed to when the kiosk is available.

Because a custom kiosk program is more involved, these kiosks have a longer timetable. From the design and engineering phase to roll out, custom kiosk timelines can require between 18 to 24 weeks.

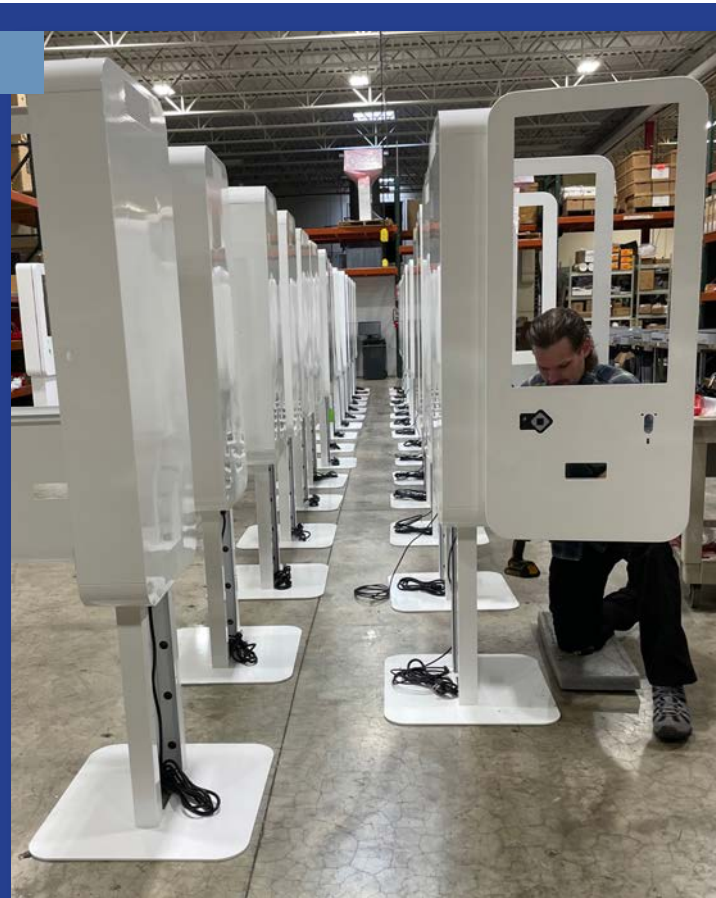
Having dates in mind for your program's rollout will help your kiosk representative present options that can meet your schedule.

■ LOCATION

Kiosk locations play a large role in the type of kiosk used as well as what features will be necessary. Here are details you'll want to be familiar with at your kiosk sites.

Indoor vs. Outdoor

If your location is outside, an indoor unit will not suffice. Outdoor kiosks are built specifically to weather elements like precipitation, wind, and extreme temperatures. Unlike indoor kiosks, outdoor kiosks frequently require more robust



materials and features like stainless steel, HVACs, and high brightness touchscreens, amongst others.

A more rugged enclosure and outdoor-rated peripherals are why these kiosks are priced higher than their indoor counterparts, but the investment is necessary to ensure your self-service program operates effectively. Cutting expenses by placing indoor kiosks outside will cost you time and money in the end.

Powering the Kiosk

Knowing how your kiosk will be powered on-site is another important consideration. Below are typical options for powering different types of kiosks.

■ Indoor Kiosks

Often, components of a standard indoor kiosk plug into a surge protected power strip within the enclosure. From there, the power cord runs out a back panel at the bottom to plug into a wall or through an opening under the base to plug into a floor outlet.

When kiosks are placed against a wall or in an open area with an outlet, supplying power is straightforward. However, what options are available when a kiosk must be in an open space without existing power?

While costly, trenching, or digging up flooring to run power to a location, is an option that requires working with a contractor and an electrician on-site. Dropping power from a ceiling is another, less expensive option. However, depending on ceiling heights and aesthetics, this isn't conducive to every environment.

■ Outdoor Kiosks

Outdoor kiosks have similar internal power set-ups to indoor units but may require a dedicated





circuit depending on variables like HVAC unit size. Because these units are exposed to weather, it's common for outdoor kiosks to be plugged into a waterproof electrical box for extra safety.

It's common practice to hardwire outdoor kiosks, which would involve trenching to the kiosk location. Solar power is also a less common solution for kiosks in areas without convenient access to electricity.

- **Through Wall Kiosks**

Through wall kiosks are built into a wall, so these kiosks are most often hardwired to a power source or can be plugged in if the kiosk is inside.

When talking about powering a kiosk, the subject of certification testing can come up. Done through a nationally recognized testing lab like Underwriters Laboratories, this testing is a rigorous process of certifying a kiosk is safe for use. While these companies can test for performance, mechanics, and more, in the case of powering a kiosk, electrical safety testing is performed.

Because this requires money and time – testing can be several thousand dollars and take weeks – acquiring a certification is generally done upon client request. Fortunately, most components used within a kiosk are already certified, so it's not uncommon for customers to decide to forgo the costly process.

If powering your kiosk is more complicated than plugging it into a wall or floor outlet, talk with your kiosk manufacturer about planning a site survey to determine your best course of action.



Kiosk Networking Solutions

Getting your kiosks up and running often requires a network solution that works for your location, security, and data speed needs.

To begin, a wired Ethernet connection is always preferred. Hardwiring into a network ensures a constant, stable connection. This isn't always an option for every budget or location, though.

If an Ethernet drop is not readily available, it can cost money in material and man-hours for cables to be installed. In addition, if you plan to make your kiosk portable, running cords to the kiosk is impractical. In this case, Wi-Fi is the common default.

Wi-Fi is convenient and cost-effective but can present issues if exclusively relied upon for connectivity. Signal interference through structural walls as well as too many devices on one network can cause lag time on a weak Wi-Fi signal, and outages will force your kiosks offline. In addition, retailers and other locations often do not allow for shared use of an existing Wi-Fi connection.

Another option is mobile connectivity through a cellular modem. This solution has grown in popularity as more companies offer kiosk-specific, multi-carrier solutions for 5G. Cellular networks are also reputed to be reliable and secure.

Simply put, the ideal network connection for your kiosk is an Ethernet connection with Wi-Fi or cellular as a backup. This guarantees there's always a standby to keep your kiosks operating.

Take a moment to evaluate your kiosk's networking needs and make a decision on the best solution for your business. Other factors to discuss with your kiosk partner are: scalability, bandwidth requirements, compliance and regulations, cost, and more.

KIOSK BUDGET

Learn what factors go into a kiosk's price tag along with what to expect and how to keep costs at bay.





Further Reading:

For a deeper dive into pricing, read our popular article ["How Much Does a Self-Service Kiosk Cost?"](#)

BUDGET

Pricing out a kiosk involves many variables. The cost for each program is based on the type of kiosk as well as what hardware and software is needed.

While each kiosk program make up is unique, there are some general price ranges to help set realistic expectations.

A typical price range for a standard enclosure kiosk runs between \$2,000 to \$5,000. Kiosks at the low end of this price range offer basic functions like wayfinding or check-in and tend to be more compact in size. As more performance is needed, robust internal components and additional hardware like credit card readers, printers, barcode scanners, and more can add to the cost.

A custom kiosk can be more expensive, with design and engineering costs for an exclusive unit adding to the overall price tag.

As is common, ordering larger quantities results in a lower cost per standard or custom kiosk due to the economies of scale.

When budgeting for your kiosk program, keep in mind software will add to your costs as well. Software options can run the gamut depending on the level of customization needed, so consult with your kiosk manufacturer for software provider recommendations.

In addition, site surveys, installation, and servicing contracts can also add dollars to the final price tag.

In the end, launching a kiosk program is a worthwhile investment. While upfront costs are high, these initial expenses are often recovered in reduced labor costs and increased revenue from larger ticket orders.

KIOSK COMPONENTS

Without the electronic hardware inside, a kiosk would be nothing but a metal enclosure. In this section, we cover everything you need to know about kiosk PCs, operating systems, touchscreens, and more.





KIOSK PCS

There are two main types of kiosk PCs: all-in-ones and small form factors. Below, you'll learn the difference between each.

All-In-Ones

All-in-one PCs combine a computer and monitor into one unit, saving space for smaller kiosk enclosures. These PCs are compact, require less cable management, and are easy to install and replace if necessary.

All-in-ones can be customized to your needs, including a variety of screen sizes, processor type, and storage capacity. These are a nice, sleek option if you need a simple, indoor kiosk without many kiosk peripherals.

Small Form Factors

Small format PCs plug into a touchscreen and can provide more capabilities for software or other kiosk electronics.

This option is typically found in outdoor kiosks or kiosks that need more flexibility on PC specs like RAM, SSD, and more.

Your kiosk manufacturer will make recommendations for the right kiosk PC based on your needs.



Further Reading:

Will your kiosks need a small form factor PC? Learn more about "[The Best Mini PCs for Small Business.](#)"

■ OPERATING SYSTEMS

Operating systems (or OS) provide the underlying framework on which kiosk PCs run. Kiosk software is built on these platforms to run applications and facilitate integration with hardware devices through drivers – or the components that make devices perform their function, like print a receipt or scan a barcode. Because different operating systems have specific drivers, one operating system might be better suited for your needs than another. Often, however, many hardware devices are designed to be compatible with multiple operating systems. Below are common operating systems used in kiosk deployments.

Windows

Microsoft Windows is a common OS used for kiosk applications across industries. Some pros of a Windows operating system include:

- Many options for deploying in large volume
- A broad range of hardware and software compatibility, allowing for flexibility when choosing both
- Development tools and resources to create and customize kiosk software solutions

A main drawback to using a Windows OS is a one-time Windows licensing fee. Because this fee is per kiosk, it can add to the overall cost of your program and be a significant expense for larger-scale deployments.

Android

A popular mobile operating system, Android can also be used for kiosks. Some advantages of this OS are the following:

- Android systems do not have licensing fees, keeping costs down for a large kiosk rollout.
- Because it's designed with touchscreens in mind, Android operating systems are well-suited for interactive, touch-based experiences.
- Integration with Google Services like Google Maps, Google Pay, and more

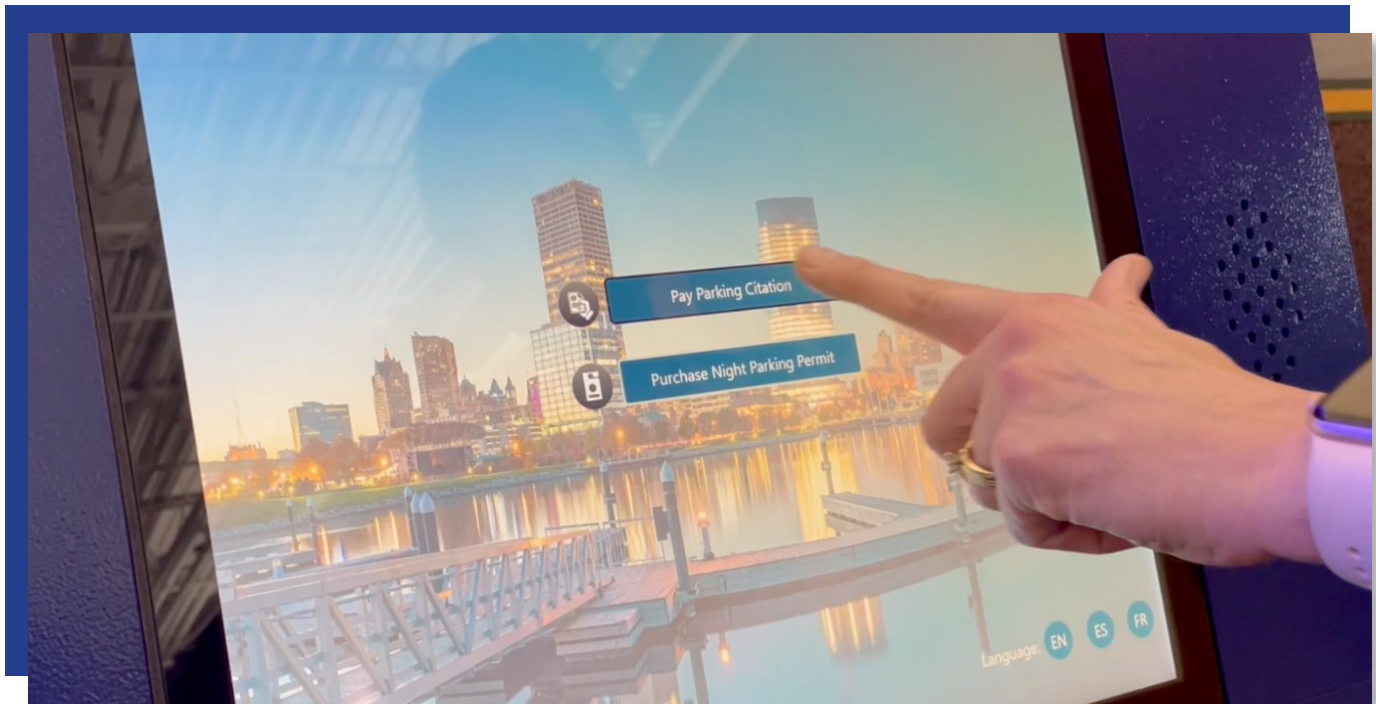
One disadvantage to using an Android system is its limited compatibility. For example, when it comes to selecting a printer or other device, almost all models will have a Windows compatible driver, while there are fewer options that can work with an Android.

Linux

A free, open-source operating system, Linux is popular for a number of reasons, including:

- The OS offers a high degree of customization, allowing you to tailor the user interface and functionality to your needs.
- With no licensing fees, it's cost-effective.
- It has a good reputation for its strong security and is less susceptible to viruses and malware.

When considering Linux, though, be aware that it often requires more technical expertise to set up and manage versus the other two operating systems.



■ KIOSK SOFTWARE

Arguably the most important part of a self-service program, software enables the kiosk to function as intended. This includes everything from displaying the user interface and managing interactions to integrating with external systems and remote management.

Because kiosk software ranges in complexity, customization, and cost, it's impossible to cover every scenario. However, here are some essential points to understand.

Purpose and Function

Being clear about your kiosks' objectives will drive what functionalities and features are needed in the software.

User Interface and Experience

UI and UX work together to shape the overall usability and satisfaction for the kiosk user through elements like design and visual components as well as navigation flow.

Security

Many kiosks handle sensitive user information and perform transactions, so security is an important consideration. Security measures can include things like data encryption for secure payment processing, and more. Additionally, if your kiosk uses a web browser or web app, lockdown software is necessary to provide added security and restrict access to system files and the internet.

Branding

Deliver a consistent customer experience across channels by customizing software to match brand aesthetics.

Integration

Will your kiosk need to integrate with other systems, like databases, APIs, or third-party applications? Make sure these capabilities are possible in your software platform.

Remote Management and Monitoring

Some kiosk solutions provide built-in remote management and monitoring to enable software updates, oversee performance, and troubleshoot issues. Remote login software allows businesses to manually access and control a kiosk. Mobile device management does the same, but with further capacities, including the ability to send notifications if there are problems with a kiosk.

Analytics and Reporting

Consider software that provides information on kiosk usage, user behavior, and performance metrics to optimize future changes.

Cost

Costs can vary greatly based on the complexity of the software and scope of the project as well as development expenses like licensing fees, subscription plans, and more.

Support and Training

Look for software providers that offer technical support and resources to assist in your kiosk program deployment.

Bottom Line

Often, larger companies have a team within their IT department that handles software development. In that case, they'll be familiar with the points above. However, if your company needs help customizing software, work with your manufacturer for kiosk software provider recommendations based on your requirements.





KIOSK HARDWARE

From common peripherals to unique devices, there's a diverse landscape of hardware options available when configuring your kiosk. Here we discuss various components essential to a kiosk's function.

Common Hardware Devices

Standard devices used for kiosks include touchscreens or display monitors, barcode scanners, card readers, cash recyclers, printers, cameras, and speakers. These components can be found on a typical kiosk system, enabling user interaction, data input and output, and transactions.

The advantages of using common hardware devices are they're readily available and come from a variety of manufacturers. They have standardized interfaces and protocols to simplify the development and maintenance of a kiosk.

Unique Hardware Devices

Sometimes a kiosk is designed to perform more complicated tasks. In that case, unique hardware devices like biometric scanners, document scanners, and temperature sensors are needed.

Devices like these allow the kiosks to perform specialized jobs, but keep in mind they might be more expensive and can pose potential integration challenges.



Further Reading:

Launching a parking kiosk program? Read about the hardware commonly used on these kiosks: "[Parking Kiosk Hardware Options](#)"

KIOSK BRANDING

Whether you need a simple monitor on a stand or an involved design to match your aesthetics, kiosks can easily be customized to extend your brand's look.



■ KIOSK BRANDING

Custom kiosks come in every shape, size, and color. But did you know, standard enclosures have customization options as well?

Whether the kiosks are manufactured to your brand colors or designed with a header graphic, special lighting, or magnetic panels, there are many options to ensure standard kiosks reflect your look and style.

Here's what to consider about each customization option:

Colors

Powder coating your kiosk with color is an easy way to update a standard enclosure. Custom colors can be mixed to your specific brand colors. If you don't need an exact match, there are stock powder coats in every color that offer a less expensive option.

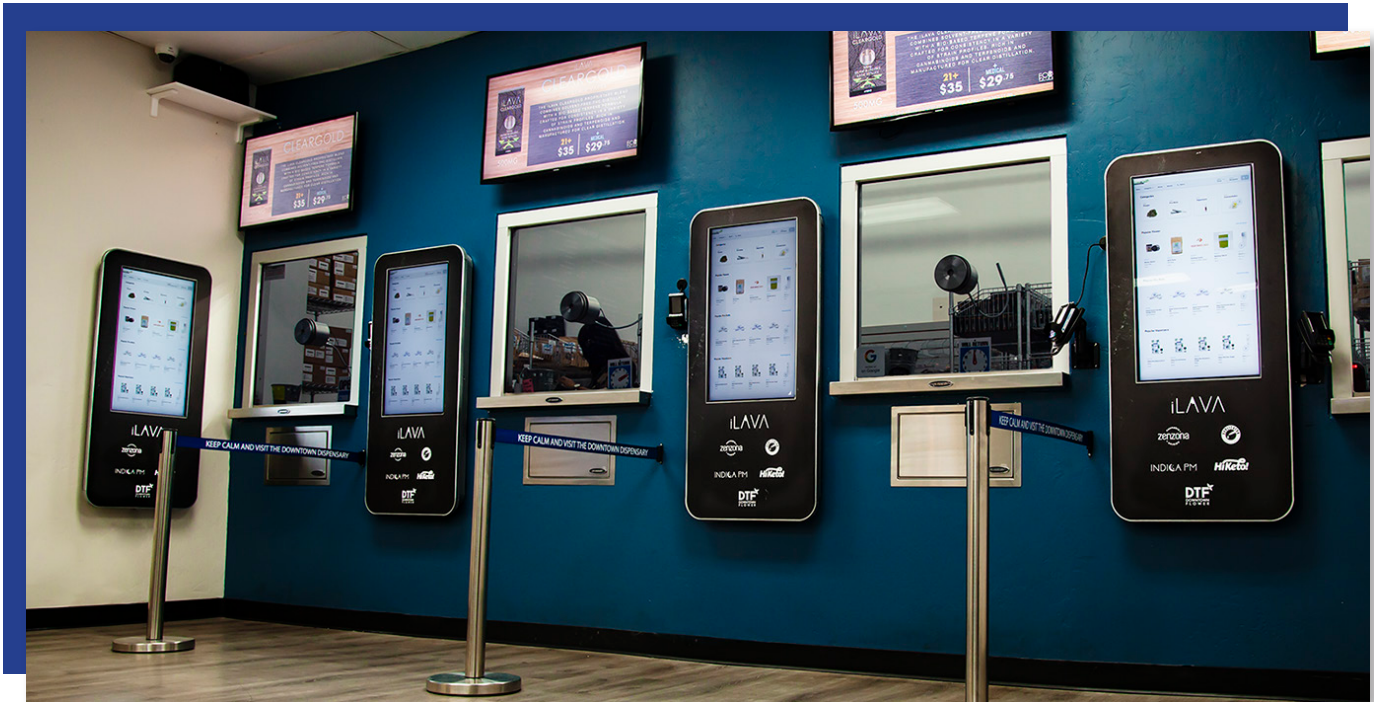
Finish

Kiosks can come in a variety of sheens including matte, glossy, or semi-gloss as well as finishes like smooth or textured. If considering a glossy kiosk, note they often show fingerprints or capture dust more than a kiosk with a textured finish. Depending on where your kiosk is placed, this could be a determining factor of what finish you choose.

Headers

Header graphics can add visual impact, advertising a brand name or communicating a kiosk's function. These can be as extensive as illuminated plastic headers that require additional engineering to simple printed signs mounted with grip strips or adhered to the unit.





Specialty Lighting

Lighting is an easy way to create interest at your kiosk without adding significant cost. Simple RGB LED strips can be positioned to illuminate the border of your kiosk or cast a glow onto a wall or floor.

Magnetic Graphic Panels

The main point of impact on a kiosk is the front, so a magnetic graphic panel can be a great option for brands looking to showcase their logo, a lot of copy, or large graphics. If a client has a small logo or simple lettering, transfer die cut decals or weeded graphics are also an option to add branding to the kiosk without the need for a full graphic panel.

A kiosk representative will go over your preferences to determine what customization options are right for you on your standard kiosk. Depending on what options you choose, you might be asked to supply Pantone colors, font files, logos, and any images or icons.

IN THE FIELD

Design, engineering, and production is done, and your kiosks are now heading to their final destinations. Learn more about common topics you'll cover when discussing deployment.





■ SHIPPING KIOSKS

Due to the complexity of the electronics involved, extra emphasis is placed on packaging and securing kiosks for delivery. This includes bolting the kiosk to a pallet to prevent any movement as well as adding “air space” around a kiosk along with inner pack to protect more vulnerable areas.

There are many freight options available to ship kiosks, from an LTL carrier that ships one at a time to securing full truckloads that can ship to a client’s distribution center. In addition, you can also specify a dedicated truck to deliver one or more kiosks. When a dedicated truck delivers multiple kiosks along a specific route, it’s called a milk run. Often, this option provides the additional service of “white glove” delivery into the building and directly to the kiosk’s final location.

Each option for shipping has their merits and can be tailored to your requirements.

■ INSTALLATION

Once kiosks arrive to their locations, you’ll need an installation plan. For “plug and play” kiosks, the install process can be as simple as plugging it in and turning it on. Many times, an on-site employee can handle this task.

For wall or counter kiosks that require mounting, your kiosk manufacturer can offer detailed instructions on how to do this or can provide the service through an installation company partner. Any physical work at a location will often require a “site survey” performed in advance so the installation group will have all the tools, hardware, and information necessary to complete the task.

Outdoor kiosks are required to be physically mounted to the ground, so surveying a site is an important step and can be included in the detailed scope of work from your kiosk manufacturer.

■ REMOTE MONITORING

After investing in self-service, the last thing you want is a kiosk to be “down.” When these tools aren’t operating, you’re losing revenue, sacrificing a quality experience for customers, and making a statement about your brand.

Fortunately, remote management services are available to monitor kiosks for hardware function, recognize paper jams or shortages, detect error messages from the PC, and much more.

Because of this, the service provider can quickly triage the situation remotely or by scheduling a technician to service the kiosk.

In addition, a remote management service can also assist in updating software. This can be a blanket update across all kiosks, or it can be regionalized.

■ WARRANTIES

Frank Mayer’s kiosk enclosures come with a one-year warranty against manufacturer’s defects. For the electronics and peripherals, the OEM’s warranty applies.





■ About Frank Mayer

Your Brand. Our Experience.

Whether manufacturing pre-engineered enclosures or designing fully customized kiosks, our longstanding insight into the self-service industry means we've become the go-to name in delivering excellence and unsurpassed quality in the interactive kiosk market.

Our self-service line marries smart design with multiple size options and offers an array of customization choices and brand personalization – all to ensure your kiosk program offers the form, function, and aesthetics to match your needs.

We're an end-to-end solution provider with onsite services that include design and industrial engineering, prototyping, production, integration and fulfillment, warehousing, and distribution. This means we're well-versed to help you through the kiosk buying process and offer the right tools and talent to not only meet, but exceed your expectations.

To learn more about our kiosk programs or talk to a kiosk expert, contact us below:

Frank Mayer and Associates, Inc.
1975 Wisconsin Ave.
Grafton, WI 53024
(262) 377-4700

info@frankmayer.com