## kuusoft

## The Ultimate Guide to Digital Menu Boards



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## Introduction

Digital menu boards are one of the most powerful tools a quick-service or fast casual restaurant can deploy. Attracting customers with vibrant graphics and animations, automating menu management, and driving more upsells are just some of the benefits of using a digital menu board system. Because of these advantages, most major chains and many smaller ones have adopted digital menu boards across their entire network.

# The global digital signage market size was valued at \$17.23 billion in 2018, and is projected to reach \$32.12 billion by 2026, growing at a CAGR of 8.1% from 2019 to 2026.

If it's so obvious digital menu boards are a powerful tool to drive revenue, then why hasn't every limited-service restaurant adopted them? Well, digital menu boards are fundamentally different to print. There's an array of software, hardware, and design factors that can be overwhelming to the uninitiated. That's where this guide comes in; we'll be walking you through everything related to digital menu boards, so you can get started without being swamped.

## CHAPTER ONE Planning

So, you've seen the benefits of a digital menu board system and are ready to make the leap. You sit down at you desk and get ready to plan the project out, mindful of your deliverables and budget, but where do you even start? Do you buy screens for a pilot location, start shopping for software, or should you have your interior design team sketch out what it could look like?

The initial planning stage is the most important part of this entire process. When people are tasked with leading their company's digital menu board initiative, far too many of them jump right into buying hardware or software and trying to gluing pieces together from there. **Key Actions**: Develop a solid game plan. Articulate what your objectives are, and what are needed to accomplish them while saving time and money.



#### DID YOU KNOW?

Digital menu board projects properly planned by professional's **cost 37%** less on average compared to projects executed by non-professionals without a proper plan.

### **Determine Strategic Objectives**

This one seems, obvious but taking a moment to really figure out what you need this project to accomplish will save time down the road when you're in the thick of it. Running through this process could also bring out new ideas that can dramatically improve your project.

Some projects just require a display that showcases the menu. But what if your restaurant drives revenue from seasonal products? Then you're going to need a way to highlight limited time offers. Besides broadcasting through your social media channels, have you thought about how you can promote the offers through live feeds in store?

There's a whole array of different objectives that can be accomplished through digital menu boards, and they will change the direction of your execution plan.

#### COMMON OBJECTIVES

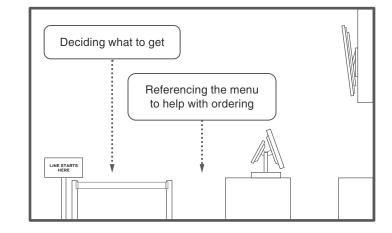
- Display the Menu
- Promote Limited Time Offers
- Branding
- Order Process Instructions
- Social Media Engagement
- Loyalty Plan Signups

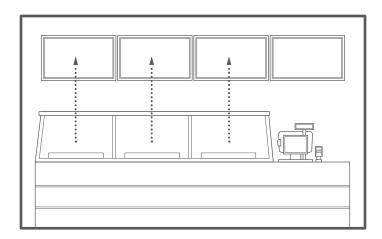
## **Display Positioning**

Ideal Viewing Position is a term you need to become familiar with. This refers to the physical location(s) in your restaurants where your customers should see the information on your digital menu boards. To ensure a high-quality customer experience, decisions on ideal viewing positions must come before deciding where your displays will be mounted.

**Physically put yourself through your customer's experience**. What information are you looking for at each stage? Mark down all stages and where you naturally look for that information. And that will be where you place your displays.

After you mark down your display location, look at how much physical space is in that area. The space constraint determines the number of displays you can use.





#### **BEWARE THE GLARE**

Every location is different and will need to be looked at individually to prevent glare from light sources, such as the Sun and interior lights. Using a cookie-cutter approach to each location may be quick but will lead to a terrible customer experience if glare affects your menu boards.

# Establish a Project Roadmap and Timeline

It's easy to go down a rabbit hole of comparing different displays or jumping ahead to graphic design specifics when you haven't even planned what software features you need. As with every project, you need to develop a plan and stick to it.

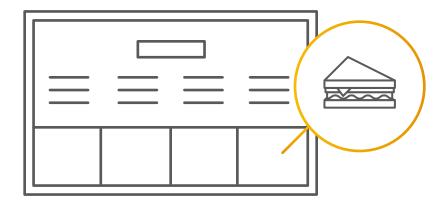
Digital menu board projects often involve several departments collaborating to minimize any conflicts. In addition to these departments, consider the availability of any contractors (electricians, A/V installers, etc.) and the time length they need to complete their work.

**There's no standard project roadmap or timeline**. Every project has different production levels, design requirements, installation restrictions, etc. Make sure all involved parties contribute and sign off on any proposed project planning.



# CHAPTER TWO

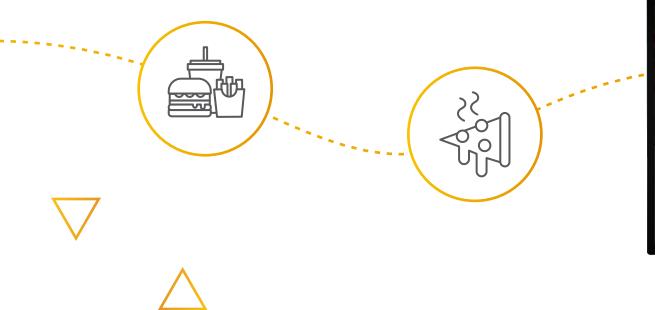
Let's talk about menus. Now, you may be thinking "I already have my menu designed, why do we need to touch on this again?" Well, displaying a menu is different with a digital system compared to printed materials, and many of our product specialists here at Kuusoft have run into situations where a project was delayed by a non-compatible menu. Additionally, with the added functionalities of digital menu boards, what you need to display in order to achieve your strategic objectives may be distinctive to what you currently have.



## Hero Menu Items

Digital menu boards stand out from printed menus for a number of reasons, and the ability to animate and add "texture" to your products is a big one. Small things like fire flames behind a spicy burger or condensation dripping from an ice-cold drink attracts customers towards those items.

This ability requires a trade-off though - these images must be prominent. So be decisive about which items need the added focus versus those that can be described simply in a menu line.





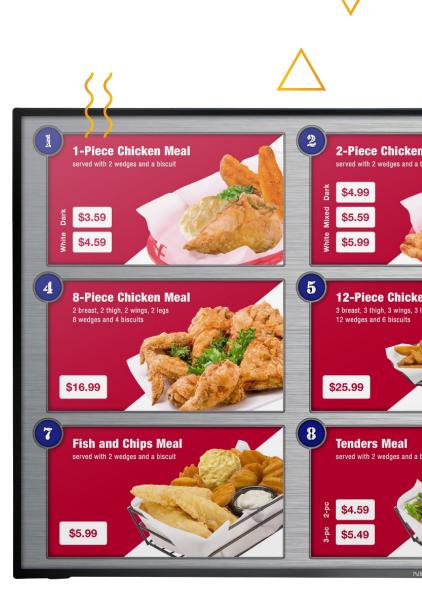
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to personalize your combo

### **Condense Options**

With digital menu boards you have to optimize your real estate as much as possible by simplifying menu items. Filling a screen with all sorts of combinations will look cluttered and extremely difficult to read.

A lot of information can be condensed to save space and make the digital menu much easier to read. For example, a main item, like a burger and its combo, does not need to take up multiple lines or images. Look at the image to the right to see how that item can be condensed to save space.



## $\triangle$

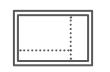
#### DID YOU KNOW?

McDonald's increased their menu size to over 140 items in 2015, but their **revenue fell by 11%** following this change. While more items don't necessarily mean more revenue, longer and more detailed descriptions **sell nearly 30% more food**.

# CHAPTER THREE Technology

Here's the part you've been looking forward to, let's talk tech! There are three separate aspects to look at here, (1) physical display panel, (2) software solution running in the background, and (3) media player that connects the two.

It is essential to matching your technology to your objectives, as well as the requirements set out in both the planning and content stages. Be thorough in choosing your vendors, making sure they understand exactly what you need and they can deliver in accordance.



Display

#### THE THREE TECH COMPONENTS



Software



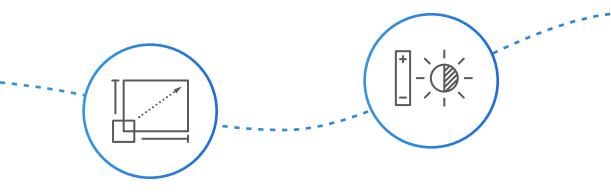
Media Player

## **Display Brightness**

Along with the physical size of the display that we determined back in Chapter 1, brightness is another important factor in choosing your screen. Measured in candela per square meter (cd/m2), screen brightness is critical to maintain your menu's sharpness, so it does not get washed out.

The desired screen brightness depends on the environmental light for each screen. If it faces external light from windows, it will need to compete with the brightness of the sun. A screen that only has internal lighting to deal with can be significantly dimmer.

Rule of thumb: **700 cd/m2 for screens not in direct sunlight and 1,500-2,000 cd/m2 for those that are**.





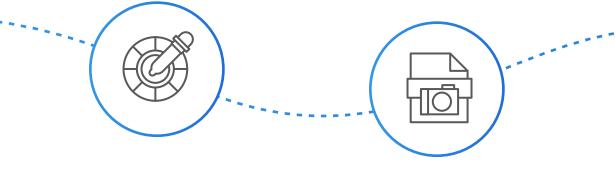
## **Display Panel Technology**

Plasma, LCD, LED, TFT, IPS... There's a whole host of display technologies available, and it gets technical. Each type distributes light and color differently, and to detail each would be an eBook on its own, so we'll only be covering the major ones.

With each of these, remember that **the best model is the one that fits your requirements**, not the most advanced or expensive.

#### PLASMA

Plasma looks absolutely stunning. The vivid image it can create beats every other type out there by miles. However, plasma degrades significantly over time and will have designs "burned into it".





## LED vs LCD

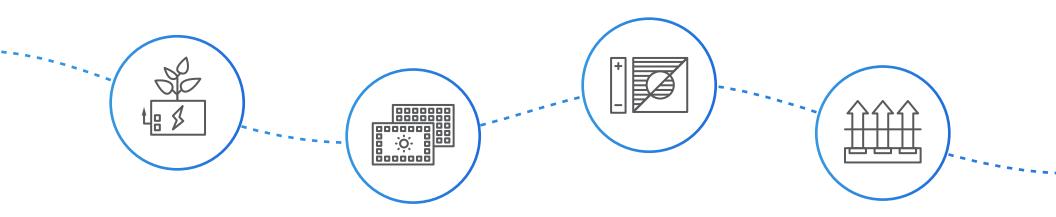
Technically, LED and LCD both use LCD screens, but LCD uses a fluorescent backlight instead of LED backlight. It can be a bit confusing, but LED displays are more energy-efficient than LCDs. LED displays can also be Edge-Lit or Full Arrays.

As the name implies Edge-Lit has lighting around the sides of the screen, which makes these screens thin and light. Full-Array, on the other hand, has the lighting behind the entirety of the panel. Although the lighting makes the display heavier, it allows for more image contrast by dimming parts of the screen.

#### OLED AND QLED

These are the newest and most premium displays on the market. OLED uses organic compounds that allow each pixel to be turned on and off individually. This gives OLED amazing contrast ratios, image quality, and allows screens to be incredibly thin (often just a few millimeters).

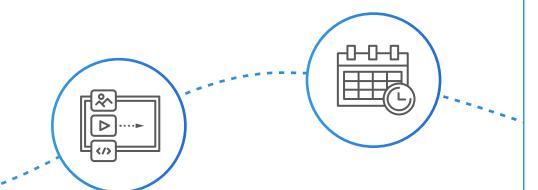
QLED is a premium line of LED/LCD displays from Samsung that use a technology called "Quantum Dot material." This technology raises power efficiency and brightness.



## **Software Functionality**

There are tons of software features from various digital signage providers, including social media feeds, dayparting, and even motivational imagery. It is at this stage where many people get lost in the weeds when talking with each potential vendor. They'll all have a host of functions that sound amazing.

At this step, look back at your strategic objectives and other requirements. Use these to gauge whether you need those features, and make sure that your must-have functions aren't locked as add-ons.



#### RELEVANT DIGITAL MENU BOARD FEATURES

#### **Media Playback**

Display images and videos.

#### Dayparting

Schedule your menu to automatically change content based on time of day. Breakfast, lunch, and evening menus for example.

#### Content Scheduling

Automatically have certain content displayed for specific date ranges.

#### **Global Content Distribution**

Have updates apply to all relevant screens (based on state, language, or content) without needing to manually select them.

#### HTML5 Content

Allow web based HTML5 content to be displayed.

**Social Media Integration** Display content from your social media profiles on screen.

**Screen Segmentation** Split the screen into separate areas that each has different content.

Web Based Management Use a cloud-based system to manage your network.

Seamless Loops Does not show a black screen or play bar when videos loop.

#### **Order Status**

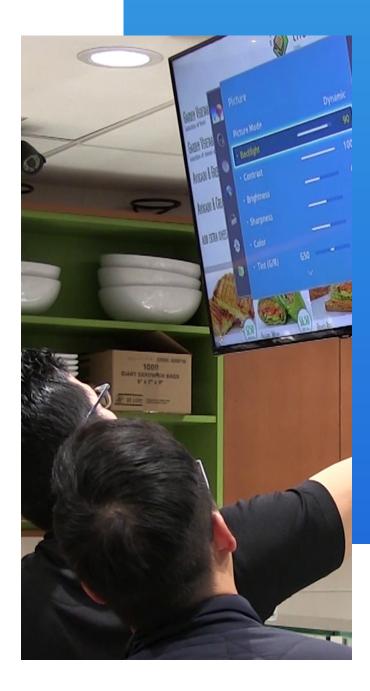
Let customers know how long their order will take with either timerbased countdowns or status updates when the order is ready.

## **Scalability and Growth**

You've now laid out what you need for your digital menu boards, but how will these change in the upcoming years? Locking into a software solution that does not evolve is a major risk, especially when your organization decides new functions are needed.

Software becomes obsolete every 3-4 months as new features are released, so **partnering with a solution provider that isn't actively updating and upgrading could require a transition to a whole new provider**. This new provider's solution could have new requirements, leading to added expenses

Hardware must also be taken into consideration, especially for larger chains. If you want to implement intelligent functions, such as dayparting, network content updates, and weather-based conditions (e.g., featuring hot drinks on a cold day), a USB solution won't cut it. Another major consideration: ease of installation. Are media players plug and play, do they require complex wiring for each screen, or would they require a full-blown computer?



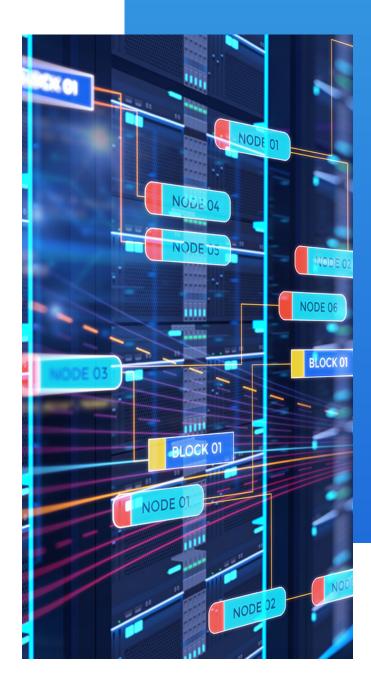
## **Data Security**

All software lives in a constant state of an arms race. Hackers are constantly getting better and creating new programs while software companies are creating more intricate and sophisticated security to stop them. There's a number of worst-case scenarios, from uploading and displaying malicious videos or images across your network to stealing data.

Ensure your provider has at least 1024-bit AES security (equivalent to modern banking) and provide frequent security updates to limit vulnerabilities.

#### DID YOU KNOW?

Over 90% of software contains a security vulnerability, but **only 12% of companies will proactively release updates** to ensure software is up to date to reduce vulnerabilities.



## Visual Design

This is what each previous step has been building towards; the end product that your customers will see and use. You probably already have ideas on how to make your design stand out, and you can refer to them as you each of those in mind as you go through this chapter.

Visual design is one of the most difficult stages in the digital menu board process. Unlike other stages where the need of features or physical constraints can be objectively determined, design is a creative process wanting evaluation standards. Yes, it's easy to tell a bad design from a good one, but judging nuanced changes like font size or color shades isn't. This is where an excellent design team is an absolute necessity and worth their weight in gold.

#### A TYPICAL DESIGN PROCESS

**Concept Development**: The "big picture" of the design is determined and illustrated using a wireframe design. There are no specific details, but any animations need a storyboard created.

**Low Fidelity Prototype**: Aspects like colors, content, and typographical style will be added to the approved wireframe design.

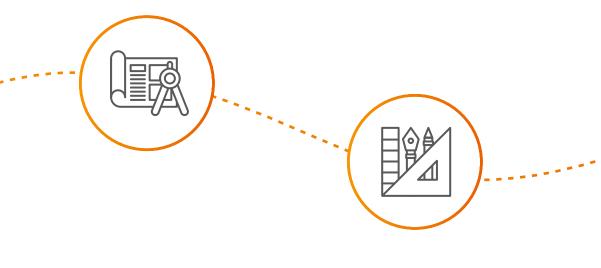
**High Fidelity Prototype**: Small touches and details are added. This is the final "good copy" before animations are added.

**Production Stage**: The final design with all aspects integrated.

## Theme and Style

It is critical to set out a centralized theme and style for your digital menu boards. **Visual consistency across every display is essential**, as inconsistency increases the difficulty of understanding your menu for your clients. The starting point for any type of design is to review your brand identity guidelines.

From there you'll work with graphic designers (internal or external) to develop the overall theme of your menu design by working off of your strategic objectives and menu content.





## **Determine Complexity of Animations**

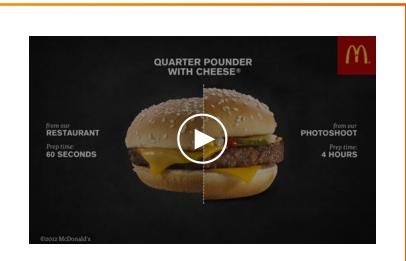
The ability to use animations to add extra "texture" to images is one of the big differentiators for digital menus, but it's not the key to success. In fact, animation must be used conservatively. **Menus become confusing and an eyesore if the amount of animation is even slightly too much**.

The key to a successful digital menu board is its readability and comprehensiveness with slight animated accents for attention. Remember that customer experience is king, and every animation, or the lack thereof, must serve this end goal. 

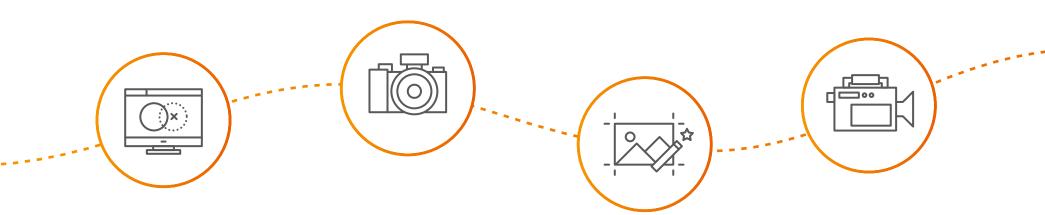
### **Identify Media Assets**

Animations and illustrations can all be done by a good design team, but it's essential that any product photos or videos be captured professionally. Using stock photos or even images taken from a cell phone will look terrible when displayed on a menu board.

A professional photographer or videographer will ensure high quality media, which have consistent lighting and are retouched to look as appetizing as possible. If it's not possible to bring a professional photographer onboard, it's recommended to have a digital menu board without any creative. **Bad media will always underperform a menu board than those without any**.



Watch this video from McDonald's Canada on the process that goes behind shooting creative for the Quarter Pounder.



## **Color Selection and Accessibility**

It's likely you already have your primary colors set out by your brand guidelines, but let's touch on other considerations to the colors you'll use. **Remember that the key goal of every digital menu board project is to deliver a great customer experience**, so no color should be so intense as to make the board distracting or hard to read.

Accessibility is incredibly important and color vision is one area not often thought of. There are several types of color blindness that perceive colors and shades differently. Do your best to and have your design team minimize the difficulty anyone may have understanding your menu.

#### DID YOU KNOW?

Colors between 430Hz-480Hz on LCD displays will **increase customers' heart rates** and result in increased food consumption.





# CHAPTER FIVE

Woo! We've knocked down software, figured out screens, and got our design planned out. Everything is ready to go, right? Well, before you pull the trigger, we need to touch on customer and technical support. These services are an essential part of choosing any digital menu board solution provider.

Once brought online, a digital menu board system is going to be a part of your core operations, should the system fail, you will need it fixed fast. The longer your provider takes to both respond and resolve your situation, the greater your losses will be.



DID YOU KNOW?

48% of businesses believe downtime negatively impacts their brand and reputation and44% believe IT downtime can damage staff morale.

## **Support Team Capabilities**

With the large number of companies that can provide digital signage solutions, it's critical to ensure that their support team can resolve any issues you might have. Most support teams are run out of call centers with non-technical staff. Resolving issues through this method can be time consuming and frustrating. A support team based in a head office with technical backgrounds will resolve any issue much faster.

Another factor to consider is whether they provide root level support or not. Root level indicates that the support team is providing assistance on solutions that their company actually develops. If the company you've brought onboard is a system integrator, getting a resolution to any issues is exponentially longer since they now need to contact the company whose solution they use.



## **Support Team Responsiveness**

The other side of the support coin is how quickly you can have them respond. **Gatekeeping a support team is how some digital signage companies generate revenue**, sometimes even going to the point of charging \$100+ for just a call back. Obviously, this system isn't helpful when you need an immediate fix to your menus and it's 30 minutes to lunch rush!

Since emergency support is so important, a few companies, including Kuusoft, offer 24-hour assistance. With this system, it doesn't matter what time of day it is or where the support team is based, any emergency call will immediately be routed.



## CHAPTER SIX Maintenance

With every solution or product there will be ongoing maintenance and routine support. With digital menu boards, maintenance varies from security updates to hardware lifetimes. **This is an often-overlooked area in onboarding a digital menu board solution and can turn what looked like a great deal into a massive financial burden**.



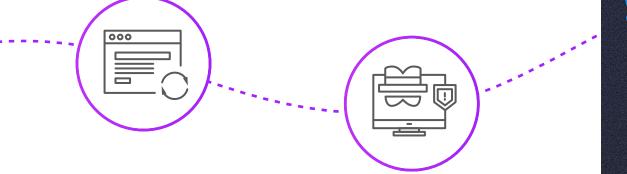
#### DID YOU KNOW?

Buyout solutions with a pay-per-incident model have a **350%-1500% larger maintenance cost** compared to Software as a Service (SaaS) models. The unexpected cost of a buyout model is the number one reason restaurants abandon digital menu boards after installation.

## Continuous Feature and Security Updates

Technology solutions are always advancing and offering new features. As these new features become more prevalent, customers come to expecting them, and companies look to using them to drive more revenue. **If a company isn't continuously developing their product and have no plans to make products future-proofed, you will find your system soon out-of-date**.

As we touched on in Chapter 3, security vulnerabilities can lead to massive costs – both financially and to your brand. There are new cyber-security threats created every minute and your software provider must be working constantly to reduce their networks vulnerabilities.



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## Hardware Lifetimes and Ease of Replacement

Every piece of hardware will eventually die, how long it lasts varies greatly. When you bring on your digital menu board solution, the media player provided may seem great, but you have to consider how long it will last in your establishment. **Include environmental factors like heat and steam into your calculations**, as not all devices perform well in those conditions.

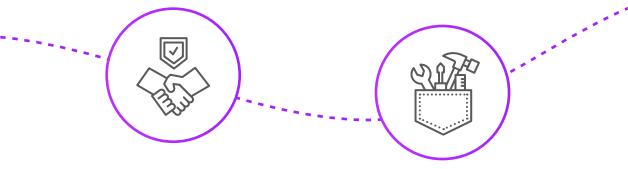
If you need to replace hardware because it's broken, or if you want to upgrade to the latest version, consider how easy it will be. Are there lots of wires running from a central hub to each screen, or is it a plug and play system?



## Warranty Details

As a commercial entity, you will be running your digital menu boards for all hours that you are operating. With that in mind, consider warranties on displays. Consumer grade TV warranties only cover around four hours of use per day, for five days per week, and are not supposed to be used in commercial operations. Meanwhile, commercial grade displays cover much more time and day activity.

Should you need any hardware aspect repaired or replaced, these warranties will become important for saving both cost and time. Any kind of commercial warranty will guarantee faster response and replacement and usually includes on-site repair. **Weaker warranties may require bringing the display into a store to process the repair or replacement**. Keep this in mind when choosing your hardware and consider the potential downtime.







## Conclusion

We hope you have found this guide useful and that it has helped answer some of the questions you have about digital menu boards!

If you'd like to learn more, our digital signage experts would love to provide a free consultation for you. Just visit us at **nexsigns.com** or call **1-866-546-8838**.