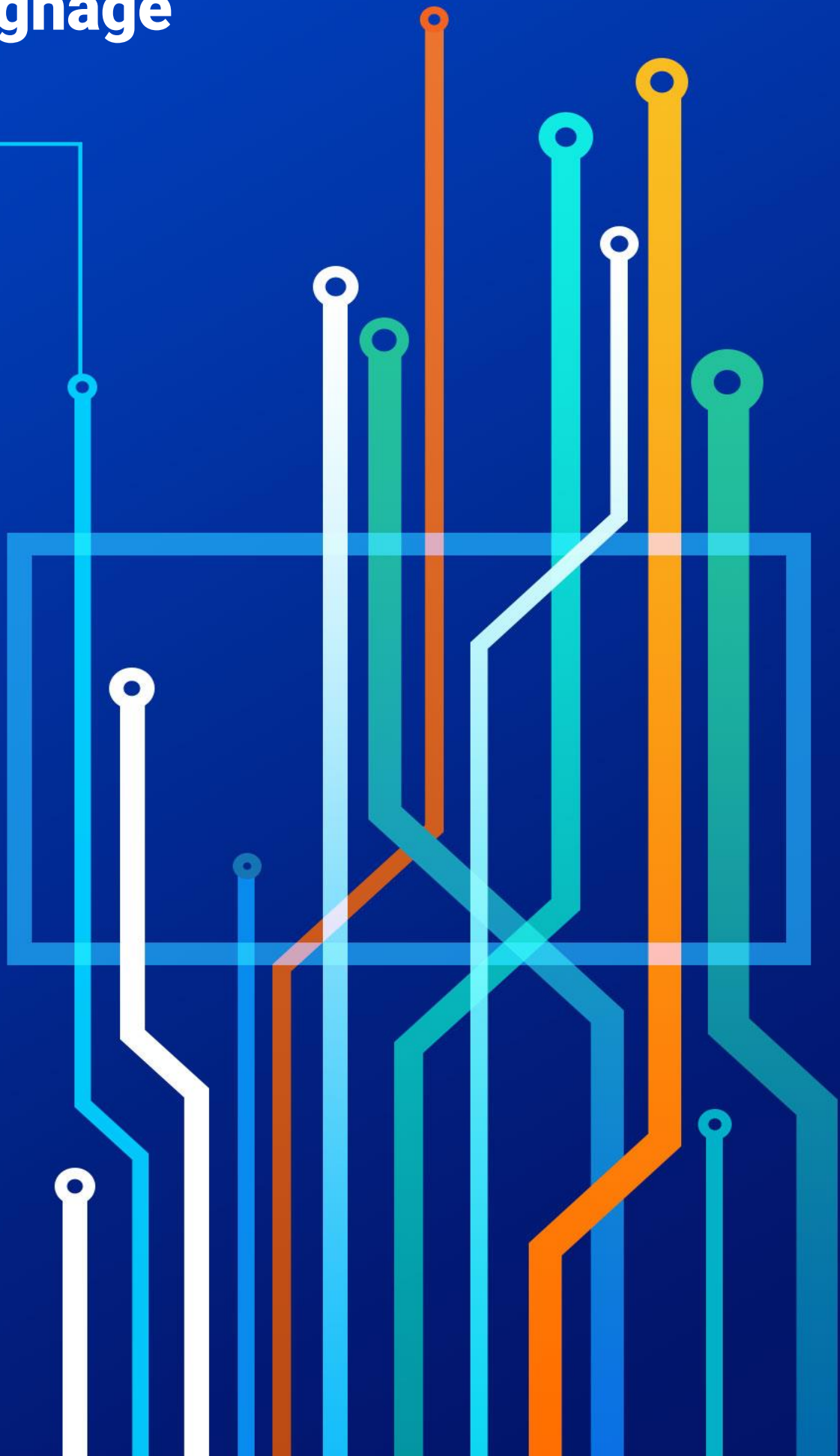# Digital Signage
Software
Guide

Chapter (1)

The Anatomy of Digital Signage

Over the past several years, digital signage has begun its transition from advertising medium to a full-fledged content management tool. According to Adobe's 2017 Digital Trends in Retail Report, fewer (13 percent) retailers described themselves as "digital-first"—meaning that their marketing is still led by traditional, brick-and-mortar strategies.

This disconnect presents a ripe opportunity for organizations to get a jump on the competition by leveraging digital strategies, such as digital signage, as part of their marketing outreach.

And there's no denying the effectiveness of digital signage on customer perceptions. Research on digital media by Arbitron showed that digital media in public venues reaches 27 percent more viewers than online marketing channels, and that half of all viewers could recall the exact message displayed for up to a month after viewing.

The anatomy of a digital signage solution isn't complicated, but there are a few different components that business owners should be aware of before investing in the technology. At the minimum, your digital signage strategy will require:

Digital Display Mediums

These are the screens, video walls, or kiosks that showcase your content. These devices will be HDMI-based for simple AV integration and HD resolution, although higher end devices are capable of running Ultra HD/4k resolutions.

Media Players

Media players connect to screens and enable content to be broadcasted. These players are usually cloud-enabled and serve as the primary link between your displayed content and the software powering it.

Content Management Software(CMS)

Just like your PC or smartphone, your media player requires specific software to enable the extensive functionality it offers. CMS platforms let you install applications to expand your signage's capabilities such as video, RSS feeds, and more.

Content

Content is the consumer-facing side of your digital signage strategy and is the primary way you'll engage with your viewers.

This disconnect presents a ripe opportunity for organizations to get a jump on the competition by leveraging digital strategies, such as digital signage, as part of their marketing outreach.

In truth, the most important part of the digital signage anatomy is the software. Think of software as the "brains" of the system – it's the driving force that powers everything else. Without a CMS system, screens lack the flexibility and customization that digital signage solutions are known for, and are little more than digital versions of old-fashioned, static signage. Because of this, it's vital to choose your digital signage software carefully.

Chapter 2

Must-Have Digital Signage Software Features

No digital signage strategy will be effective without the right software features. As noted above, your CMS will determine which applications your signage can display.

But the decision doesn't just affect the content—different CMS suites offer different features that provide additional functions and tools to streamline signage deployment. For the easiest deployment and lowest maintenance upkeep, choose digital signage software with these features:

Dynamic Content Options

The best content includes apps native in their software that allow for easy integration with other developer APIs. Through these types of content, businesses can easily build out their content libraries while guaranteeing that any apps will be compatible.

Remote Management

If your digital displays are high in the air or in hard-to-reach places, updating them manually is not an option. All quality digital signage software should have remote management features that allow you to make changes to the device's display without needing to access it by hand.

Content Scheduling and Programming

Digital signage simplifies content rotation by allowing users to create schedules ahead of time. By building up a library of content and programming it into an automated rotation, users gain a diverse customer messaging system with minimal inputs required.

Network Monitoring and Reporting

Monitoring the connection status of multiple devices can be a hassle. Make sure your software can provide real-time overviews of your active connections, as well as reports that indicate periods of downtime that may have gone unnoticed.

User Access Control

Digital signage content is the face of your brand; as such, each piece of content must be vetted and approved before it goes live. Quality digital signage software will include user access controls to determine who can edit and post content.

Scalable

Of course, scalability of the solution is an important consideration, both for adding screens and adding new content. Choose a software solution that offers upward mobility for the new business your marketing efforts will bring in.

Multiple Deployment Platforms

Even small-scale digital signage integrations include multiple screens, and for maximum simplicity, you need a way to manage all of these devices from a single dashboard. Make sure your digital signage software allows you to connect each device into your hub and control it from a single point of contact.

Assess your own organization's needs to determine which features will provide the most value for your signage investment.

Small medical offices with only one or two screens will have less need for a multi-platform management solution than a large retail store with dozens of devices.

Tailor your level of deployment to the resources available to you.

Choosing the Best Content Applications

Content applications are among the best ways to customize your digital signage strategy. Apps extend your digital signage software functionality and help you reach your audience with more personalized messaging.

And, with the right digital signage software behind you, integrating these applications is easy. Software with native functionality for integrating custom apps lets you expand your messaging in numerous ways.
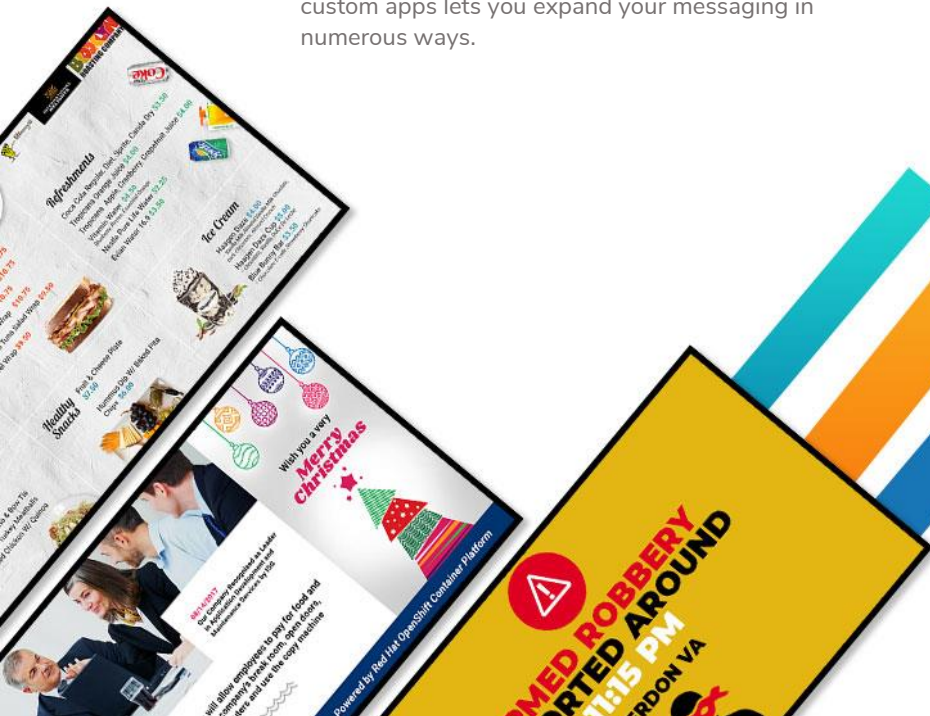
Social Media
Many of the big social channels, such as Facebook and Twitter, have apps that tie into your digital content templates and provide real-time news feeds for posts, updates, and content.

Event Listings
Keep viewers up-to-date by including local event listings into your content. Custom content templates can include space for these types of updates, and combined with video input, can be a great way to raise awareness of upcoming occasions.

Emergency and CAP Alerts
Businesses of any type can benefit from including emergency alerts into their digital signage. Specific apps can link to local and national emergency sources to provide real-time alerts across multiple devices.

Metrics and Analytic Displays
Ideal for backend performance tracking and employee evaluation, digital metric displays are a great way to track an organization's progress, project milestones, or financial health.

Workplace Posters
From motivational posters to federally mandated OSHA signage, digital screens can be adapted to suit the workplace in numerous ways.

YouTube
YouTube is a great source of free content. Create a custom playlist of pre-approved clips and link it to a video player within your content. This is a great way to simulate a live television experience but with content of your own choosing.

News
Many big name news outlets have built custom applications for their channels for use in digital apps. Outlets like Reuters News, The Canadian Press, and AP News can all be added to your digital signage strategy at the click of a button.

Infotainment
There are plenty of content apps out there designed to entertain as well as inform. Consider adding one of two of these into your content strategy; visual games, quizzes, trivia, and videos can all be effective at keeping viewers occupied during long waits.

Queue Management
Custom queue management apps are a common use of digital signage. These apps can engage customers while they wait, reduce their perceived waiting times in line, and give you another chance to advertise deals and service options.

Transit
Particularly for dense, urban areas that rely on public transit, including transit apps can be a big help to viewers. These applications provide real-time updates on ridesharing services (like Uber and Lyft), nearby taxi cabs, and schedules for buses and trains.

Flight Information
Content apps that display real-time flight information, itineraries, and cancellations are a must for airports. These applications can be set to provide as much flight information as viewers need and are easy to update when changes to the flight schedule occur.

Court Dockets
For courthouses and legal settings, court docket apps are the perfect way to display case information, provide courthouse news, inform viewers of their courtroom locations, and reduce administrative burdens on courthouse staff.

Box Office
Movie theaters must continually update their displays with new films, show times, and directions to each theater room. Consider installing box office applications that automate the delivery of titles and show times to reduce the effort needed to keep these signs current.

Chapter 4

Tips for Selecting Digital Signage Software

While selecting software with the right technical features and apps is important, they aren't the only factors. Digital signage software can vary greatly in cost, ease of use, and other technical factors. Keep the following tips in mind as you select your software:

1 Find Something Easy-to-use

Digital signage software doesn't need to be complex. Ease of use should be one of your first considerations, both for your sake and for the sake of the end users controlling the system. Opting for simpler choices reduces the learning curve that each employee will need when operating the technology.

Broadly, the digital signage software interface should be intuitive—employees shouldn't need special training to understand how to upload content and adjust layouts. The platform should also feature a comprehensive dashboard with clear navigation. Without these, software features often get lost (and forgotten about).

Above all, make sure your organization's digital signage champion is a part of the selection process. His/her technical expertise and past experience with digital technologies will determine which platforms are considered "easy" to use and which aren't.

2 Research Your Service Provider

Don't just look at the software—look at the company providing it. How long have they been around? Do they have a legacy of satisfied customers? What other services do they provide?

Ideally, you'll find a service provider in a similar niche as yours. Some companies may specialize in healthcare-based messaging; others will have a long history of retail and ecommerce-oriented digital signage deployment. This also applies to their size.

Smaller integrators who specialize in mom and pop stores likely won't have the means to install signage across multiple satellite offices or regional branches. And don't let your budgetary concerns push you into the cheapest option; get bids from several providers before making your selection. The digital signage market is increasing, so you should have no trouble finding a provider who meets your exact needs.

The software provider will have a large role in your organization, from initial software installation to ongoing support and maintenance. Make sure the provider you choose is qualified, professional, and experienced enough to handle your integration.

3 Make sure You Have Support

Does your digital signage software provider offer built-in service support or ongoing maintenance? While your installation is relatively simple, unexpected software errors and technical glitches can happen in any system. Unexpected updates can create glitches with your custom APIs, or internet connectivity issues may prevent your data from getting backed up to the cloud.

Many businesses handle these issues with in-house IT teams, but this solution is costly and isn't feasible for small businesses. If this is the case for you, you'll want your software provider on call to troubleshoot issues without charging you additional fees.

Most software providers offer automated help engines to provide step-by-step workflows for problem resolution, but the best digital signage companies will feature around the clock support offered by actual experts.

Don't assume that support is optional—all it takes is one technical error to bring your digital signage systems offline. And when your systems are down, every second counts. Think of a support agreement like an insurance policy for your signage solution.

4 Don't Get Hung up on Cost

Many businesses base their software selection primarily on cost, but in truth, cost is one of the less important criteria on this list. Quality digital signage software is worth the investment, and a low price tag for your initial purchase may mean greater costs over the software's lifecycle.

Perform a basic cost analysis of your potential software by comparing your available budget against the features offered. Keep in mind that your organization, clinic, or venue may not need every single feature included a software suite—meaning that many organizations will get by fine with less expensive platforms that have limited functions.

On the other hand, you'll want to make sure you purchase software that provides the functionality you need, both right now and as your organization scales. Needing to continually switch signage software vendors as you grow can get pricy. Group each feature of your proposed software suite into "must have" and "future requirements" categories to help visualize which features you'll need.

5 Have Security in Place

Depending on how you're applying your digital signage, you may be responsible for important and sensitive data—medical patient details, customer information, scheduling notes, and more. For medical clinics that must comply with government HIPAA regulations and retail stores that collect customer information within their systems, security is a must.

At the minimum, make sure the software includes password protection, multiple user profiles with different authorization levels, and built-in detection tools that monitor remote attempts to hack the system.

For additional security, consider encrypting your data with AES 128 or 256 bit protocols and using supplementary data backup services to guarantee that customer information remains safe. Many companies outsource their data security to third-party firms who specialize in corporate protection; if your organization handles large volumes of customer information, this type of security will both protect your customers and your own organization from legal liability should a breach occur.

Chapter 5

Defining Your Content Strategy

Now that we've covered the technical considerations of your digital signage software choice and the multitude of content apps at your disposal, we can get down to the fun part: Designing your content strategy.

Identify Your Signage Goals

The first step here is to identify your goals:

- Are you a medical clinic wanting to educate patients in the waiting room?
- Does your upscale retail boutique want to create a visual experience for customers as they shop?
- Are you a restaurateur with constantly changing specials and promotions?

Understanding your goals is how you create signage that speaks to your viewers. Of course, the software chosen has a role to play here—if you've invested in digital signage software that can integrate with native applications, you'll have plenty of options for generating specific and interactive content.

Start Building Your Content Library

As part of your content strategy, map out each of your digital signage devices, their locations, and what type of messaging should be included on each. Then, work on developing content slides that meet these specifications:

- **Keep the text short and sweet** – Most viewers won't want to read a paragraph of text, no matter how engaging your display is. This is particularly true for storefront signage and signage meant to address those walking.

- **Create narratives** – Rotating digital displays give business owners a unique opportunity: Creating guided narratives within their messaging. This means using sets of content slides in conjunction with one another to provide a step-by-step argument or informational update. Examples of this include asking a trivia question in one slide and answering it in the next, or using a series of slides to create an in-depth discussion of a product's benefits.

- **Maintain consistency** – More than anything else, your digital content is just another part of your marketing strategy. The appearance of each slide should work to reinforce your brand with messaging that viewers can recognize at a glance.

Integrate Custom Applications

Consider also how content apps can reinforce the value of your messaging. For example, a doctor's office can keep the majority of its content educational and fact-based while intercutting interesting videos from YouTube and social media in between. Along those lines, signage on display in banks can integrate apps that display stock tickers, financial information, and relevant market news that enhances a visitor's experience in the branch.

There are many ways to approach your digital signage strategy with no one right answer. Make sure that each piece of content is specifically tailored to the device and location where it will be displayed, and include a variety of material to keep things interesting.

Chapter 6

Leverage the Ongoing Value of Digital Signage

Digital signage adoption is on the rise. Arbitron's research from 2010 showed that nearly two-thirds of American adults had seen a digital venue screen in a public venue in the past month. Today, that number is certainly higher.

But the value isn't just in the exposure; it's in the ability of digital signage to motivate and spur consumers into action. Arbitron's data also revealed that 19 percent of those who noticed digital video advertisements ended up making unplanned purchases of the item featured on the screen.

But these results don't come from just any implementation of digital signage. These impressive results come from the coordinated efforts of businesses and digital signage vendors who know how to leverage digital displays, content, and software to improve their marketing outreach.

Any one of these elements on its own won't do the job—but when combined with a little creativity and support from digital signage industry experts, there's no limit to the value that you'll find from your digital signage software investment.