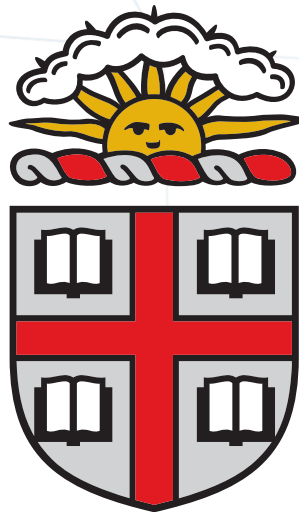


Tips for Designing and Managing Digital Signage Systems

Presented by HB Communications
in Collaboration with Brown University



BROWN



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Create



Share

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What This Document Covers

In the following sections, suggestions for how to keep the deployment and upkeep of a signage system streamlined are outlined. This covers how to organize content and your content library, creating messages and layouts that cohesively bring together the intent of the system, and other basic tips for making your system successful.

We want to ensure that digital sign administrators have at their disposal information about best practices to ensure that signs have the greatest impact and maximize engagement with their various audiences.

Digital signage (DS) presents an opportunity to enforce a sense of community. This Best Practices guide should be used alongside the Brown University Digital Signage Strategy and Protocol to ensure successful

“Digital signage presents an opportunity to enforce a sense of community.”



Design Tips – The Basics

While designing for signage can be similar in many ways to designing for other digital media-and in some cases, even print-there are a few major differences to consider. DS is a powerful medium with the ability to distribute multiple ideas and messages at once. By following some simple guidelines, your displays become a powerful source of information-sharing.

Contrast and Legibility

If the eye can't separate the words from the background due to color choice, the message is lost.

- Dark backgrounds or images should utilize light or white text, light backgrounds should utilize dark text.

3 x 5 Rule

- Don't pack the message with too much text.
- Keep the type size as large as possible, especially for headlines.
- Utilize either three lines of text with five words, or five lines with three words.

“Overall your digital signage design should be clean, succinct and relevant to the audience it is facing. Simplicity is key when designing for this medium.”

Text

- Don't use more than 2 fonts.
- Utilize easy to read fonts; avoid script unless dictated by design guide.
- Use italics sparingly as they are harder to read and fatigue the eye.

Color and Perception

- Use color for contrast and clarity.
- Don't try to use too many colors at the same time. It confuses the space.

Focus Techniques

- Guide the eye to critical information through a visual hierarchy.
- Utilize bright colors and high contrast as well as size for emphasizing the most important information.

Preview designs

- Stand back at least 6 feet from the monitor.
- Read content forward and backward to gauge how long a new viewer might take to read the message entirely.

“Remember to design with the space that the display lives within in mind. Content should be clear and legible from at LEAST 6’ away.”

Content Guidelines

Here we will explore the ideas presented in previous pages in more detail, with examples of what to avoid when creating content.

Simplicity

If there are too many elements fighting for space within the message, information is lost. Don't try to utilize too many visual elements in terms of excessive pictures, fancy fonts or colors. Make sure what you add enhances the message, not distracts from it. Learning when an element is not adding to the overall message is an important asset.

!!!THERE
ARE****TOO
MANY***THINGS
GOING ON***
HERE!!!!



“Ask yourself if every element is adding something to the message. If not, it’s time to scale back. Less is always more.”

Legibility and Readability

This is probably the most important thing to consider when creating content for DS. Make sure you know where each of the digital signs will be displayed and how far away the viewer will typically be. All designs must be created with this distance in mind, or else text may be too small, too crowded or illegible in other ways. Color, font choice, size and amount of text, as well as contrast, all play an important role in whether or not your message will read from a distance. Keep the 3x5 rule in mind!

***This Example Shows
Light Text On
A Dark Background***

***This Example Shows
Dark Text on a Light
Background***

***If There Is Too Much Text or
Low Contrast,
People will have a hard time reading
the message and will stop looking. Your
message is lost! Remember that you
can always split long messages up over
multiple slides! Don't cram in too much!***

***Be Careful When
Using Photos as
Backgrounds for
Messages.***

Information Hierarchy

The headline is the piece of information that most viewers will read first. They may not go on to read the rest of the information, so the headline should be clear, concise and accurately represent the content of the message. This text should be the largest and boldest piece of information within the message. Remember also to include a “Call to Action” for each message. What should the viewer take away from it? What would you like the result to be? Clearly communicate what the intent is every time.

“What is the viewer supposed to take away from each message? What is the ‘Call to Action’?”

HEADLINE

Visual Hierarchy has Three Elements

- 1. Headline**
- 2. Body Copy**

- 3. Call To Action**

Layout Concepts and Resolution

Safe Areas

- Make sure that content is designed with enough of a buffer around the edges of the message to keep it from being lost or hard to read. While it is fine for photos and other graphic elements to bleed off the screen, if your text is too close to the edge, the impact is lost.

The white area here is where body copy and text should remain. Background images can bleed outside of this area.

“Today’s digital signage is almost always displayed on wide-screen televisions, where the aspect ratio is 16:9, or 1920x1080 pixel resolution.”

Resolutions and Aspect Ratios

- Displays for digital signage are almost always in ‘wide-screen’ format, or 16:9 aspect ratio. This translates to an image resolution of 1920x1080. If the displays are oriented in ‘Portrait’ mode, the aspect ratio is then 9:16, or 1080x1920. Less often displays are still in traditional non-wide-screen aspect ratio of 4:3, or 800x600 pixels.

Layouts designed for signage are thus created at these resolution as well.

This is 4:3
(800px X 600px)

This is 16:9
(1920px X 1080px)

“When creating content, keep in mind the aspect ratio of the content block that it will be displayed in. Design to this resolution to avoid skewing or distortion.”

When creating content areas to house the playlists with your messaging, it is helpful to also keep these aspect ratios in mind. If all content areas are created at 16:9 for example, messaging can be placed in any one without fear of distortion. Conversely, if one content area is 4:3 and the rest are 16:9, any content from the 16:9 areas will be distorted if placed into the 4:3 space. When creating messages and content for your signage, it is helpful to think of design conventions for web usage. Graphics

should be created in RGB color mode (for screen use vs print, CMYK) for color consistency. Creating templates for users and creators to employ will help ensure that these guidelines are followed.

Typography

Most of your messaging will be conveyed through the use of typography, thus making it one of the most important elements to consider when creating content. Above all, try to keep messaging simple and concise. If it takes longer than 7 seconds to read the message, revising it or splitting it up over different slides should be considered. This allows the actual size of the font to be larger, which is imperative for a medium that may be viewed from a distance. Text that is too small, even if the message is short, will make it difficult to read. Font style and choice also impact the effectiveness of your messaging. Script or other fonts with excessive flourish are difficult to read at a distance and should be avoided for signage.

The strongest options for legibility are sans-serif fonts such as Arial, which when applied with a strong line weight are bold

“Designing for DS is similar to designing graphics for web use. Keep resolution and workspace (RGB) consistent.”

and easy to see. Avoid mixing more than 2 or 3 fonts (max) within your messaging. It reduces visual clutter and creates harmony throughout the overall design.

Keeping in mind the University's brand standards and guidelines will also be important. The University's guidelines for font use on the Web can easily be adapted for digital signage, as they follow many of the same principles.

“Web standards for font choice are helpful for designers; they often follow the same rules of legibility and clarity. Check the University's Visual Identity Guide.”

**Good Rule of Thumb:
Headlines = 40 pt. Min!**

Body Text = 24 pt. Min

**This Message is
Arial Black Typeface**

What Does Too Much Text Look Like?

There is simply too much text on this slide for the reader to quickly get the message. It should be split up over a number of slides or better yet condensed!

What About Fonts?

Even with short messaging a scripty font is hard to read.

Color Use in Design

Just like with fonts, try to minimize the number of colors that are being used in each type of content. Too many will cause the viewer to lose specific focus and reduce clarity. Use color to enhance or guide the viewer's eye to the most important information or call to action within the message. Contrast and visibility are still foremost even when applying photo backgrounds and graphics to your messages.

“Make your content stand out with high contrast color and graphics. This can push your message to the next level.”



One more time, when designing for signage, make sure that you're setting yourself up for success by working in the right colormode. CMYK is intended for print, and may affect the appearance in a negative way if used for digital displays. RGB is designed for working with digital media such as screens.

A Few Additional Thoughts

Utilizing Outside Content

While much of the content used within your system might be created by dedicated members of the DS deployment, automated outside content helps minimize the amount needed to be created from scratch. This includes utilizing websites, video, RSS and ticker feeds and other data that can be displayed on the digital sign.

Copyright Conditions

With all assets gathered from outside sources, please consult the sections within the protocol document detailing copyright rules. Make sure that all messages meet the University's standards in relation to its adherence to copyright.

“Digital Signage is a powerful way to communicate thoughts, ideas and information. With the proper work flow and engaging content and messaging, it can evolve communications by promoting more active engagement with the audience.”



Message Scheduling

Best overall tip to remember: More frequent exposure to messaging is better than LONGER exposure.

- By repeating messages more frequently in a rotation, the audience is more likely to internalize the topic or call to action.

Message Duration

- Typically from 5 to 12 seconds.
- This depends first and foremost on where the signage is being displayed.
- If this is in a high traffic area with lots of foot traffic, the duration will most likely be less, perhaps 5 seconds only.
- Messages displayed in areas with a 'captive' audience (waiting rooms, lobbies, in front of elevators, etc.) can be displayed longer, or have more complex elements (animations, longer descriptions, etc.)
- Read your message forward and backward.
 - Reading the message backward gives you an idea of how long it will take someone seeing it for the first time to read it in its entirety.
- More repetitions, shorter duration.
 - The average rule is that a viewer needs to see the message 7 times before internalizing it.
 - Changing where the message is displayed, changing the composition of the message, colors, images utilized, etc. will help reinforce it.

If you're utilizing QR tags or other elements that encourage viewers to interact with their mobile devices:

- Make sure to allow enough duration time of the message so that the user can actually capture the information being shared.
- Allow at LEAST 10-20 seconds for these types of messages.

Playlist and Layout Scheduling

Playlists and layouts should be managed to enhance content, and to make sure that audiences see and remember the communications on them.

Playlists

- Playlists should have 7-10 messages in busy areas with lots of foot traffic.
- With each message at around 7 seconds each, this causes the content to loop roughly once per minute. This increases exposure.

It is recommended that one item on the screen remain constant.

- This avoids too many moving parts on the screen, making it appear cluttered and disorganized.
- Good options are the date/time and weather for this.
- Having your content contained within a branded layout will also help avoid the feeling of over-stimulation.
- Consider using themes (branding, seasonal, holiday, etc.) to tie your messaging together.

To make sure your signs don't become irrelevant:

- Change content daily or every couple of days.
- Change the design and background every 6-12 months.

(This will give your signage a completely new look/feel)

Encouraging Community

Digital signage presents an opportunity to engender a sense of community. Sign content should acknowledge that the units administering the signs are part of the overall campus community during campus-wide celebration events, including Reunion, Commencement, and institution-wide anniversary celebrations. For instance, signs during Reunion should welcome alumni to campus and Commencement signs should congratulate the graduates.

Available University Content Resources

The Office of University Communications will maintain a library of slides available to signage administrators to include on their signs at the administrators' discretion. This is offered as an optional resource. Such slides will include the following: campus beauty shots; items highlighting prominent news; data points and "pride points" for the institution; informational slides about sustainability, dining improvements, new construction and other operational initiatives; and slides welcoming various groups to campus ("Welcome Class of 20XX," "Welcome back alumni," etc.), among other topics of general interest.

Common Mistakes with Digital Signage – What to Avoid

1. Mounting the screens too high
 - This limits the visibility and legibility of your messaging.
 - It will also discourage people from looking for any length of time.
 - People may miss the signage entirely.
 - The displays should be visible from many different angles.
 - *ADA compliance for any screens with touch capability needs to be observed. Please refer to the Digital Signage Protocol for specific information and requirements.
2. Trying to put too much on screens
 - Not every feature or option within the software needs to be shown at one time.
 - Things can be displayed between multiple layouts and at different times of the day. Not only does this keep your signage from looking cluttered, it also reinforces the relevance of the information on the screen and keeps viewers engaged.
3. Letting messaging get stale
 - If you've forgotten what is on your signage, it's likely your viewers have as well.
 - Make sure to update content at the very least every couple of days.
 - After time, stale content can turn your sign into background noise. Once you lose your viewers,

it can be difficult to get them back.

4. Not updating software and hardware

- While the technical manager of the system will likely address this aspect, it is important to keep in mind on all levels. New features are constantly being added to the software that runs your signage.
- If software and hardware don't get updated regularly, this may impact performance of the system as a whole.

