Design Standards for
Digital Signage Content

DIGITAL SIGNAGE WHITE PAPER

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Design standards for digital signage (DS) include a large array of considerations – a lot more than just graphic design or the number of words you should have in your message.

- How can you get your message across effectively in ten-seconds?
- How can you help audiences remember the messages they see?
- How can you design content to engage a moving target (our audience)?

People are walking past our digital displays, and they have tons of other information vying for their attention: print ads, text messages, phone calls, and all manner of digital marketing. How will you get them to pay attention to your message, remember it, and act on it?

This white paper should help you create great content they can't ignore.

It's Not Print

We realize that a lot of print designers get roped into designing DS content. That's a great base to start from, but there are some important differences:

- **Think pixels not DPI.** If you're a print designer, you need to understand that designing for DS is a whole different ballgame. You need to think in pixels, RGB and big screen formats.

- **Make it move.** The main advantage DS has over printed posters is that it's dynamic. Movement draws the eye, and juxtaposing video near static communications ensures higher readership rates for messages.

- **Take advantage of dayparting.** Dayparting in content management software allows you to schedule different playlists for different time periods during a single day. This lets you add more variety to your content, and you can tailor it to different audiences at different intervals.

- **Location is everything.** Don't forget that screens may be high in the air or read from a distance. Design with this in mind. Your content won't be of any value if no one can read it.

- **Always include a call to action.** People can't carry a screen to the bookstore like they can a coupon. Each DS message should include a prompt for your viewers to do something – visit a webpage, snap a picture, etc. – something to tell you they're engaged.
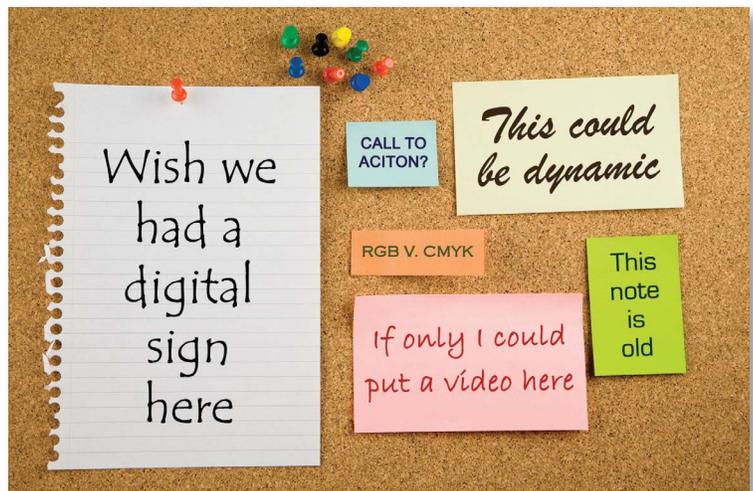
That being said, there's still just as much fun and creativity involved in designing for DS as there is for print –more, in fact, since you can include motion.

Below we cover both general communications advice and nitty-gritty design tips. But first, you need to have a bit of background in the technical stuff.

Understanding Aspect Ratios and Resolution

The first thing is to define the terms we're working with. An **aspect ratio** is an image area's width divided by its height. The most common aspect ratios are 4:3 for standard definition, and 16:9 for high definition or widescreen. You'll also come across 9:16, which is used for portrait layouts.

Then there's resolution. The **resolution** of a screen is the number of columns and rows of pixels it uses to create the image, and it's written as width by height. Some common resolutions for large-screen displays are 1280x768 and 1366x768.

If you have multiple windows showing content on one screen, each one of those windows has its own aspect ratio and resolution. The basic rule is – design to the aspect ratio and resolution that the content will be shown at.
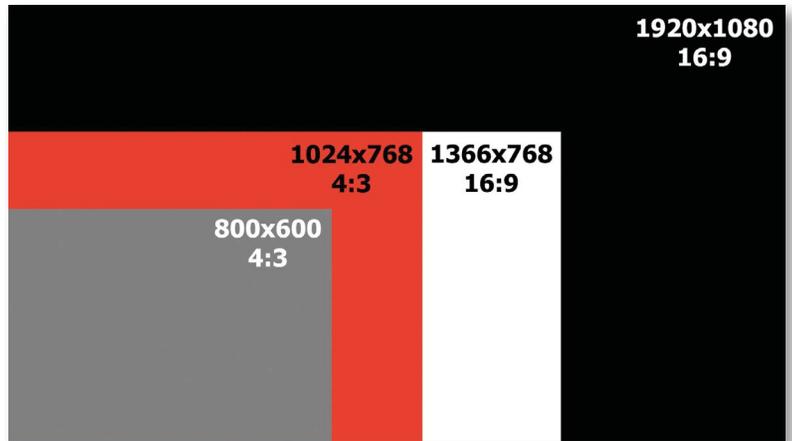
If you don't do this, your software may smash or stretch your still images to fit them into the window. You can also get bars around videos and Flash because the software will keep those images at their original size and just fill in the rest of the block with black.

The key is to make sure you look at your specs all the way through the process. Most DS software has multiple places where you have to choose an aspect ratio or set up a resolution. You need to make sure that they are set the same across the board.

Sometimes you'll even have to set these specs for your hardware (like media players), so it's important to think about the aspect ratios and resolutions you'll be using before you set up your DS system. Because displays are built with certain optimal parameters, it's usually best to run them at their native, or default, resolution whenever possible.

Lastly, if you're running a group of displays with the same content, they may not all have the same resolution - you'll have to experiment to see if your media looks good played back on each of the screens.

Now let's talk about some of the overarching topics you'll want to consider before you start to design that event promo.

Communication Through Storytelling

When designing DS content, you don't have to stick to one-off announcements. In fact, viewers often prefer a campaign or a story that relates and reinforces your message.

Just like you'd plan a new product roll-out campaign, internal contest, advertising series or any other continuous narrative, you can do the same with DS.

The Art of the Story
The traditional storytelling format usually follows this pattern:

- Normal life
- Call to adventure
- Life after the call

Your story's format needs to appeal to your audience, and either educate them or motivate them to action:

- What is going on now?
- What action should be taken to change things?
- What will things be like after taking action?

Develop Your Story
When planning DS messages as a story, work in this order:

1. Simplify the complex
2. Create a storyboard
3. Design your content

Make sure the style of each story element fits with the others. You don't have to stay with one medium – feel free to mix messages with video, graphics, QR tags leading to associated webpages, etc. – but use uniform design elements (colors, repeating images, and so on) so your audience can tell at a glance that they are all part of the same story.

Like any good story, you'll want to have a clear moral, outcome or action at the end that your audience can relate to. People care about how your communications will affect them, so be honest and personal. Although you may want to start with teasers to get people interested, you'll want to make the throughline and action items clear. Don't rely on just one message to get this across – repetition is key.

Design with ROI in Mind

To affect human behavior, a key first step is to inform. If your audience isn't aware of your goal, they can't help make it real.

Basic Messaging Objectives:

- Capture the attention of the audience
- Convey information to them
- Motivate them to act
- Encourage them to view repeatedly

We have another white paper on ROI measurement which gives you a great list of ROI tools you can build into your messages, so we won't cover most of that here. However, we cannot stress enough the importance of including a call to action in every message. It is vital to having successful communications.

Everything you publish should prompt the viewer to do something – and they can't do that unless you tell them how. Make sure your messages direct people to where they can get more information or take the action you want them to.

This will help you measure ROI for your efforts. Make this a long-term, continuous process, so you can fine-tune your messages, and become better at reaching people and getting the results you want.

Download our ROI white paper from our online library here.
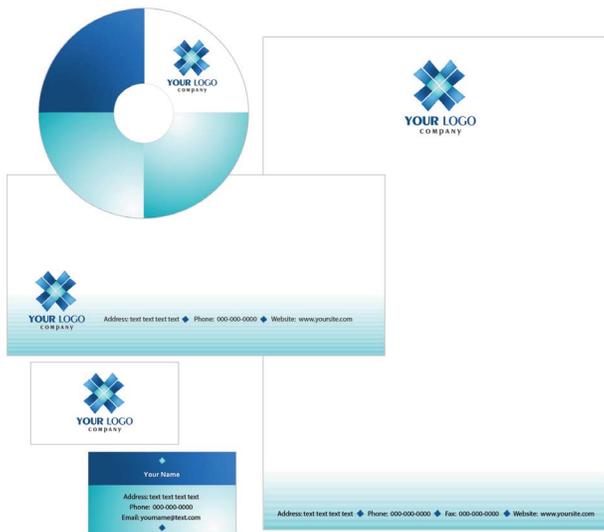
Brand Standards for Digital Signage

What is an organization's identity and why is it important to DS? Wikipedia defines "Corporate Identity" as follows:

A corporate identity is the overall image of a corporation or firm or business in the minds of diverse publics, such as customers and investors and employees. It is usually visibly manifested by way of branding and the use of trademarks. In general, this amounts to a corporate title, logo (logotype and/or logogram) and supporting devices commonly assembled within a set of guidelines. These guidelines govern how the identity is applied and confirm approved color palettes, typefaces, page layouts and other such.

In short, your organization's identity is its public face – its "look" and how people know who you are – and should be considered when you're designing content. You always want to put forward a united brand in both internal and external communications.

Your content will improve drastically in quality if you use a standardized array of colors, fonts and styles. Side-by-side presentation of your messages will automatically blend and please the eye if you choose from a predetermined set of design elements.

This doesn't mean you have to be boring or can't be creative. Bring in outside designs and graphics that complement and offset your identity components for greater impact. Play with layouts and craft interesting, effective communications while incorporating a few standard themes that reinforce your brand identity.

Many organizations publish identity guidelines that you can reference. If you don't have access to guidelines - some common sense goes a long way.

When designing DS content, consider:

Logo:
- If you need your logo, make sure you have a high-resolution copy to work with.
- If your logo has a color background, eliminate the background or design to match that color.

Standard Colors
- If you have PMS print colors defined, start with those and find their equivalent RGB colors for digital designs.
- If you don't have them already, pick six to eight colors that complement your brand colors, so you have more to work with.

Fonts
- You can still use fun fonts to make your messages exciting, but remember to incorporate approved text styles where you can.
- Don't use too many fonts in your design. No more than two fonts on a single message is a good rule.

Some organizations have an image library you can choose from, and your internet or intranet sites can be a good resource for graphics that have already been through the approval process.

If you're not sure about your organization's brand standards, your marketing, communications, or PR department should be able to help.

Using Themes and Templates

One great way to uphold your brand standards is to set up themes and templates in your DS software, so content contributors have access only to approved designs.

Themes

A theme is a set of coordinating elements that make up the overall look of your DS display:
- Layout backgrounds (wallpapers) with your logo and colors
- Message backgrounds that match your layout(s)
- Templates (fill-in the blank messages)

Some benefits to using themes:
- Because the elements are visually coordinated, themes are more pleasing to the eye than a background and content that doesn't match, or worse, clashes.
- They can enforce your organization's brand or identity.
- They can make simple content look more interesting.
- A beautiful screen commands attention for a faster grasp of information.
- Changing themes regularly captures people's interest, because they'll want to see what you do next. Remember, the goal is to get people to look at your screens often.
- By changing your theme, you can create a completely new look without burdening your content creators. They simply use the templates you provide as they always have, but your screens have had a facelift.

A theme can be anything you want it to be. Some ideas for themes are:
- Branding – match your organization's identity
- Colors – have several themes based on your brand's color palette
- Holidays – get in the spirit
- Seasonal – that gives you (at least) four looks in a year
- Departmental – highlight different areas of your organization
- Decorative – match your facility's décor or artwork

Templates

A DS template is a message template that includes a background image, text and image blocks, and text styles that are set by your DS manager, so content creators just have to fill-in-the-blanks.

Why use templates?
- Maintain the look you want – no tacky content allowed!
- Enforce your brand standards
- Templates are the easiest and fastest way for people to contribute
- No creative ability required….just fill in the blanks
- User accounts can be limited to "Template User" in many software packages

Another idea is to use these same backgrounds to create PowerPoint templates for users who prefer to create their content in PowerPoint, then upload it to the content management system.

Also, don't forget about auto-updating content. If you have a weather or news feed in one of the blocks on your screen, you can set that template and just let it run. Content contributors never need to worry about that block. Because it auto-updates, content stays fresh and relevant with no added workload.
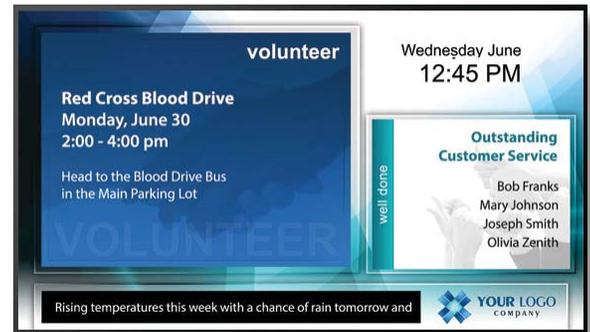
Designing Layouts for Different Viewers

We spend a lot of time talking about message design, but we also need to consider the overall layout of the screen. This is especially important if you have several different audiences you're trying to appeal to.

We find there are three main types of viewers, and each one can be engaged through different layouts that appeal to them within the viewing environment. Here are some suggestions to draw their attention:

Passing By
- Viewing time = 1-30 seconds
- Display location: in a hallway, near an entrance with no lobby, elevator bay, people walking by and not stopping, etc.
- 1-block layout with date/time stamp and/or current conditions weather. No video, no ticker, short graphic messages only.

Waiting
- Viewing time = 30-120 seconds
- Display location: short lines for cashier or reception desk, people stopping for brief periods of time, etc.
- 2-block layout with date/time or weather (maybe also ticker). No long videos, short Flash video, short graphic messages.

Lounging
- Viewing time = 2-30 minutes
- Display location: reception with seating, lounges, cafeteria, breakroom, anywhere there is seating, etc.
- 3-block layout with everything. No restriction on content types and layout complexity, add live TV for 10+ minute waiting areas.

A note to designers who are creating layout backgrounds, or wallpapers: be careful of burn-in. When you design your layouts, try not to have the content blocks or your logo in the same place all of the time. Screens can have images burn in so you see a "ghost" of the image no matter what you put on the screen. Be sure to use multiple layouts and change them several times a day.

Backgrounds Aren't Backdrops

When creating visual messages, we often concentrate our efforts on the text and select the background as an afterthought. Of course, design should always be secondary to content, but keep in mind that people often notice graphics before text.

This is especially important in DS, where the viewer is some distance away from the display, and you have only seconds to grab their attention. Many times your background may be the first thing that catches their eye.

Don't think of your background as a backdrop, but as the foundation of your message. Your backgrounds should be considered in terms of what they add to your messaging strategy.
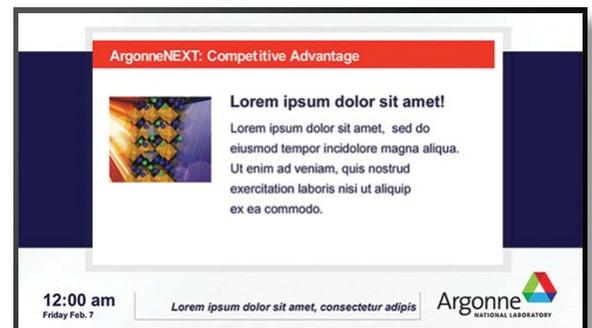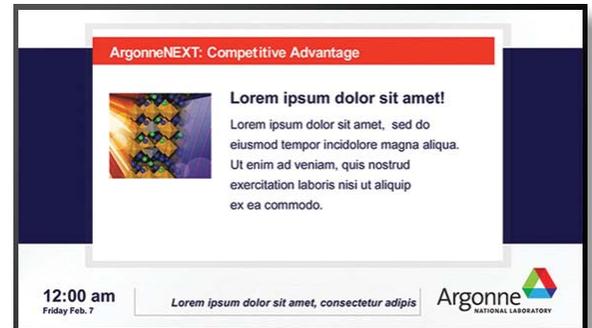
Consider these questions and suggestions when choosing your background:

- Will this background draw attention to my message?
    - Consider your audience and choose backgrounds that appeal and attract.
    - Draw your viewers in with bright colors and rich designs.

- Will my background overpower the content?
    - Keep in mind that light text should be on darker backgrounds and vice versa.
    - If your message has inserted graphics, you may want to keep the background simple.

- Will this be seen in concert with other content (other messages, videos, tickers, audio, etc.)?
    - Consider the complete visual layout and what clashes or complements.
    - Don't clutter side-by-side content with "busy" designs. Mix and match for balance.

- Does the background contain graphics that work with my message?
    - Background designs can suggest themes or moods.
    - For example - don't use a dark, somber background to announce a "Spring Fling".

- Should my message(s) follow a color scheme?
    - Use background sets that work together for quality presentation.
    - This is another time that your brand standards and themes come into play.

Keep your content fresh by periodically infusing your background library with new selections. Staying abreast of current design trends popular with your audience by referencing magazines and websites can be great for background ideas.

A good tip is to have a printed library of your backgrounds that you can reference. If possible, categorize and cross-reference them for quick and easy selection.

Top Six Graphic Design Tips

Creating content for DS is a fun, creative process that lets you experiment with design elements like color, contrast, text and arrangement. However, don't forget that the main goal is to impart information. In design – form always follows function. So, it's important to have a basic understanding of some design rules to make sure your content is readable as well as pretty.

1. Contrast and legibility
Your message will get lost if the viewer can't easily separate the elements of your design. Contrast is the primary factor for legibility – poor contrast reduces legibility, good contrast improves it. Always make sure there's plenty of contrast between your background and foreground colors, especially for text.

2. The 3 x 5 rule
Words on the screen are there to communicate a clear, concise message. Don't clutter your designs with too much text. Keep the type size large for readability at a distance, and present only the most important information. Try not to use more than three lines of text with five words each OR five lines of text with three words each.

Dark backgrounds should utilize **LIGHT** foreground colors

Light backgrounds should utilize **DARK** foreground colors

Gettysburg Address

Four score and seven years ago our fathers brought forth on this continent, a new nation, conceived in Liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure.

Gettysburg Address

. Fathers created nation
. Conceived in liberty
. Dedicated to equality
. Tested by war
. Can we endure?

3. Text styles

Unless you're duplicating a brand or logotype, keep the font simple and legible. Never use more than two fonts in a single design and use italics sparingly, as they can be hard to read from a distance. Also, large text and bold lettering can help improve readability.

A "serif" font is a typeface that has small strokes on each character, like Times New Roman. Serif fonts are better for longer texts, because they help the human eye track from one word to the next. Fonts like Arial that don't have serifs are called "sans serif" and tend to be easier to read in short messages.

4. Color and Perception

Color creates good contrast, and color choices should place your foreground elements, like text, perceptually in front of your background design

In the digital world, three basic colors are used for color mixing: red, green, and blue (RGB). All other colors are created from these three. White is a combination of all three RGB colors, and black is the absence of color. The human eye is most sensitive to green and red, and is least sensitive to blue. To improve your designs, use contrasting colors – light on dark or dark on light.

5. Focus Techniques

Use focus techniques to guide the eye to critical information first and create a visual hierarchy in your design. Headlines, graphics, bright colors and high contrast items will pull the eye to them. Size also tells the audience the priority of design elements, as does their arrangement, angles and open space.

6. Previewing

When previewing your designs, consider where your eye goes first and adjust your design to ensure the most important elements take priority. Test readability and visibility on your own monitor before publishing out to digital signs. A good tip is to stand back from your monitor at least five feet, because this simulates your audience's perspective for viewing screens at a distance.

Emotional Triggers

So, you've written the text of your DS message, decided on the background and layout, figured out which contrasts and colors to use for readability, and even varied font size to draw the eye to certain key words you want your audience to notice. You've scheduled it to your playlist and are all set to publish the message and get it out there onto your screens.

But not so fast – this is all good stuff, the kind of thing you should be doing – but what are you forgetting? What about an emotional appeal to your audience? Knowledge of emotional triggers is another powerful tool in your design kit for creating messages that resonate and inspire people to act.

Combining your message with the appropriate emotional cues could increase your audience's receptivity and really get your message across. Consider the reaction you want from your audience – both what they may think and feel when they view it, and what you want them to take away from the experience.

Also, consider the fact that your messages will be displayed repeatedly. People are affected by emotional triggers and inspired to take action after only a single viewing, so imagine what the reaction to repeated viewings may be.

One last consideration is the impact of certain colors as emotional triggers. (We've all heard that fast-food chains often use red and yellow because they supposedly trigger appetite.) There is far too much data on this topic for us to go into here, but a Google search using "color emotions" will yield a vast array of webpages you can explore.

No matter what triggers you choose – images, color or audio – skillfully using the non-verbal language of emotion will result in your messages making a more lasting, deeper impact.

Recognition Cues

One tool you can use to help your audience quickly view and understand important announcements is color-coding.

With the barrage of visual communications your audience receives each day, it's important to make the recognition and retention of important information as easy as possible. Whether information is presented as a message or a ticker, you can change the background and foreground colors to indicate special circumstances. If you use a consistent color scheme, you can "train" your users over time to look for the information that's most relevant to them when they pass the screens.

One prime example of this is using color-coding to ensure emergency announcements are immediately recognized – something like a red message background or bright yellow ticker text.

Many organizations standardize within their approved color palette to identify messages from various sources. For example, you could have:
- HR notices on a tan background
- IT notices on a blue background
- Facility notices on a black background
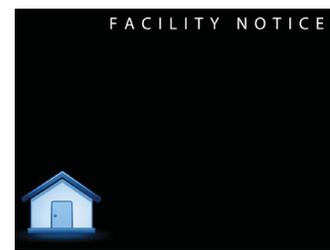
Steps to a color-coded messaging system:
1. Establish an agreed upon color system for departments, topics and/or emergencies.
2. Publish the system and keep an updated copy accessible to all employees for constant reference.
3. Be disciplined in your use of the color system, make sure messages are not inadvertently designed in the wrong color codes.
4. Test the system and get feedback from users to judge success.

Effective Copy

It's easy to say "well, all I have to do is tell people about the great INSERT EVENT HERE and they'll flock to it."

Unfortunately, you've got a lot of competition for your audience's attention, and they may not even recall your message by the time they turn the corner. So here are some practical ideas for creating effective messaging for DS:

- Keep it simple.
  - Use fewer, shorter words.
  - Use action-oriented verbs and active voice.
  - Use headline-like phrases.
  - Place only one focused message per announcement.
- Appeal to your audience.
  - Use language your audience understands.
  - Avoid corporate-speak and buzzwords/phrases.
  - Be honest and direct.
- Call people to action.
  - Strong verbs drive people to take action.
  - Tell viewers exactly what you want them to do.
  - Give time frames for taking action.

Chunking Information

For those of you who are unfamiliar with the term, "chunking" is a way of grouping similar information that helps people to remember it. The concept of chunking is based on a paper published by a Harvard Professor, George Miller in 1956. In his paper, Miller says the maximum number of items most people can remember in a short period of time is five to nine.

An example of chunking is the way we communicate telephone numbers, particularly here in the US. If someone asks you for your telephone number you don't say or write7704461416. What you say or write is 770 446 1416. We group the numbers into smaller sets of information to make it easier to retain in short-term memory.

You can use this concept in your messages by arranging your copy into similar little "chunks" of information. So, instead of memorizing a bunch of distinct items, the mind can group them together to facilitate memorization.

Take full advantage of the few seconds of attention you may have from your viewers:

1. Pre-order items in your list (which is already concise, right?) and group the key phrases/concepts.
2. Use those grouped ideas in distinct areas of the screen and/or in distinct playlists.
3. Use alliteration, rhyme, and meter, and the rule of three (people remember groups of three easily). Most viewers are already familiar with these communications techniques, so their brains will quickly perceive and retain the information.

Consider Context

Another key element for getting viewers to pay attention and act on your communication is context.

Context has to do with how the viewer perceives the message you've created. Two different people, depending on their psychological make-up, may see the same image and think of two completely different things. It's like the difference between cultural cues from one place to another.

Using the index and middle fingers to make a V means peace in the U.S. but can be offensive in the UK, New Zealand and Australia. The thumbs up sign, which is a sign of approval in the US, can be viewed as highly offensive in some Middle Eastern countries. And, the OK sign which is just fine to do here in the US can be construed as worthless in France or as a threat in some Arab nations.

Ways to avoid context issues:
1. Know your audience.
2. Tailor your messaging to your audience.

An audience of college students will have a completely different frame of reference than an audience of corporate or government employees. (We see this when we run into someone significantly younger than we are who has no idea of some old TV show reference we use, right?) Imagine how this can throw your messaging off.

It's important to consider your audience's background, culture, knowledge-base and preferences, so you can create good content they will like and understand.

Avoid Clutter

Avoiding clutter is another important way to make sure your message gets through to your audience.

What do we mean by clutter? Surprisingly, those very elements we use to create an attractive message can sometimes draw attention away from the message itself.

There are some images we are hardwired to notice, and these can take away from the message itself if improperly used. Sometimes we'll find what we think is the perfect image to put with a message, but when it's up on the display, it either counteracts or distracts from our messaging.

Test the images you're using by creating the message and putting it on a display. Walk past the message a few times to see how it appears to a moving audience.

If you notice the image before the message, or the text is too hard to read against that image, look for another image or dump it altogether. Sometimes just the words are enough.

Audio or No Audio?

Many of our clients ask us about using audio with DS. A lot has been written about retail environments, but what about DS audio for organizational communications?

As in all things, there are pros and cons to using audio with your messages. The success of using sound will depend on three things: your message, your audience and your environment.
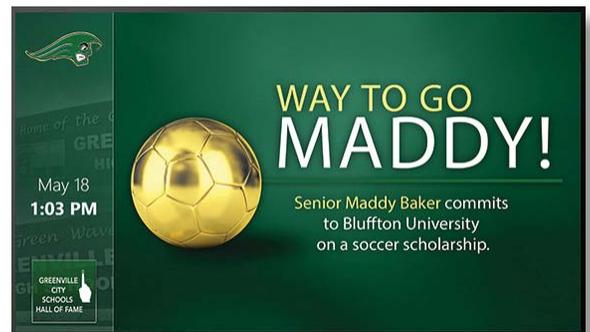
If you're showing a TV channel or some type of "talking head" video, audio will obviously help your audience understand the content being shown. Audio that repeats the essential information in a message can also be helpful to visually impaired audience members, and reinforces the message by engaging two senses at once.

However, if you're just piping general music or background audio from displays, it isn't adding anything to your message and may be considered intrusive by those who have to sit near the screens for any length of time. And a short audio loop that plays over and over and over is a bad idea.

Also keep in mind the environment where the displays are placed. Audio isn't good in quiet spaces, like libraries, or very noisy places where it will just get lost in the clutter. Just like your messages, audio needs to be varied and used for impact, not droning or repetitive, which can discourage viewers from going near your screens.

Here are a few best practices for using audio with your digital signs:

• **Don't rely on audio to deliver your message:** Digital signage is a VISUAL medium. Viewers may not be able to hear the audio due to background noise or their distance from the screen. Make sure all of the relevant information is delivered in the visual content. If the message doesn't make sense with the audio turned off – rework the visual design.

• **Use audio sparingly to attract attention:** The less you use audio, the more impact it will have. Make sure the audio complements the visual message and doesn't override or confuse what you're trying to present visually.

• **Don't "stack" audio clips:** Make sure you never have more than one audio track scheduled at one time. Remember that video overlay audio may override background and message audio in your software.

• **Never loop short audio clips:** We don't recommend using your DS to deliver general background sound. But if you do, make sure you're not looping a 2-minute sound clip for 8 hours. If you're trying to create atmosphere, don't make it an annoying one.

Our general advice is to start without audio and to add it in gradually if you see a clear benefit. Like all communications, you should be monitoring these experiments to see what works and what doesn't.
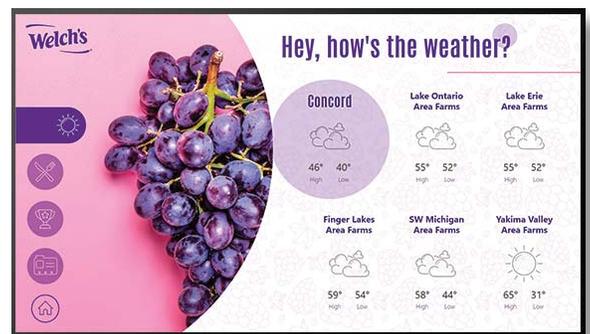
Keeping Content Fresh

Now that you've created perfect screen layouts and content, you need to make sure to keep that momentum.

It's easy to get into a rut by using the same formulaic backgrounds, fonts and graphics for messages, but without periodic updates your messages can get a bit stale. Make sure you set aside time at least once per quarter to take stock of your DS strategy, and to refresh and redirect your efforts.

The first step is to review your communications goals. If you don't have a formalized plan, consider performance against the same basic objectives you use when thinking about ROI:

- Capture the attention of the audience
- Convey information to the audience
- Motivate action by the audience
- Encourage repeat viewing by the audience

Choose a representative month of messages to examine. (Make sure it is within the last 90 days.) Examine the content you published during one day, one week and then the entire month.

Ask yourself the following questions:

Message Design
- Do our individual messages communicate information succinctly and stylishly?
- Are we using good visual rules when designing messages?
- Do message colors, fonts, and graphics all look good together?

Overall Presentation
- Is there a visual continuity to our communications – any apparent discernible themes or identity?
- Do messages look good together when grouped in multiple-window layouts?
- Is there appropriate variety in our messages to grab audience attention?

Effectiveness
- Are audiences paying regular attention to our visual communications?
- Are they responding by taking the requested action noted in messages?
- Are we measuring the success of our messages?

If you answer "no" to any of these questions, you're content may need a cleanup. Don't confuse stale messages for continuity in communications or corporate identity. People today are used to dynamic content that is constantly changing and updating. Even your standardized themes need to be examined and refreshed periodically.

Remember – getting your audience's attention is only the first step. Keeping their attention is a constant challenge that you have to work hard to meet. And that is why you practice good design standards for digital signage.

Want to learn more? Contact us at **salesteam@visix.com**.