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# 10 Steps to Successful Interactive Wayfinding

**DIGITAL SIGNAGE WHITE PAPER**



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We're here to help! If you have any questions about your application or our products, please contact us at **800.572.4935** or **salesteam@visix.com**.



## What is Wayfinding?

*“Wayfinding can be defined as spatial problem solving. It is knowing where you are in a building or an environment, knowing where your desired location is, and knowing how to get there from your present location... A good wayfinding system gives strong indicators of where the user is and how to get to her destination from her present location. Wayfinding problems occur when decisions cannot be executed.” ~ University of Michigan*

Effective wayfinding is essential for every organization – corporate and college campuses, healthcare facilities, government buildings, hotels and conference centers and more.

Custom interactive wayfinding maps lead your visitors through your facility and give your audience a convenient one-stop source for information.

Most interactive maps are custom builds, but some vendors offer plug-and-play solutions that either let you create within the software or use Google Maps to provide localized wayfinding.

Custom builds allow for much more flexibility and range of both design elements and interactive content specific to your needs.



## Benefits of Interactive Wayfinding

There are countless advantages to providing intuitive, convenient wayfinding. Here are just a few:

### No Staffing Burden

Interactive wayfinding is “self-service” and reduces the need for staff to help direct visitors to their location.

### Easy to Use

It offers a more positive visitor experience by reducing frustration, so visitors are more likely to return.

### People as Endpoints

With complex path mapping, you can provide options to print directions or send them to a mobile phone.

### Individualized Searching

Searching and interactive directories, instead of static lists, allow people to filter large lists of names alphabetically, by department, position, etc.



## 10 Steps to Successful Interactive Wayfinding

Every interactive wayfinding project is unique to the facility, the audience and the technology. It's important to understand that you'll save time and money by making sure to define everything the first time instead of reworking your project midway through the process.

Our 10 steps are a general outline to help you understand what to expect along the way from concept to completion.

### 1. Assess the Need

#### Goal Assessment

As in all digital signage projects, defining your goal comes first. What problem are you trying to solve? In wayfinding, your goal is to get the user from point A to point B as quickly and effortlessly as possible.

You need to think about your target audience – demographics, technology experience, physical capabilities, and what they need and will respond to. You can be creative, but don't clutter the design –you'll confuse the user.

Keep this goal in mind throughout the entire planning, implementation and testing process.

#### Display Considerations

Determine the number of displays, as well as their size, orientation and any ADA requirements.

Where will your interactive screens go? Some popular places are entrances and exits, elevator banks, and information desks – wherever your audience will need guidance.

It's important to consider the lighting, aesthetics and traffic patterns where you plan to place your displays. Will sunlight make it hard for users to view the display? Is it in a high traffic area that may benefit from more than one display?

Display size is important. A small display means a small map. Think of your screen as a canvas; you can only paint on the amount of canvas you have, and the same goes for screens. On the other hand, an extremely large display can cause users to have to step back to see what they need. Make sure you use a size that makes sense from your audience's perspective.

Your screens can be portrait or landscape, and the content should be designed to match that orientation. Sometimes the physical space determines the orientation, so you need to tailor the content to the the orientation in that case.

- Use portrait for tall maps and landscape for wide.
- Use landscape if you include directories with a lot of columns.

ADA requirements are another consideration. The ADA height recommendation is 40-inches, so you may want to put your interactive controls at the bottom of the screen, or have redundant controls at the bottom, so a shorter person or a person in a wheelchair can access all of the information.



## Personnel Requirements

Enlist key technical and creative staff early to ensure a seamless process – installers, architects, facility management, designers, developers, implementers, and so on.

- Marketing and communications will be involved in design and branding.
- Architects and facility managers will help detail the physical plant.
- IT and database managers will need to facilitate the database integration and maintenance.

Make sure everyone is involved early in the process, so you don't have to pay for expensive revisions once you get feedback. Discuss your goals, displays and any unique requirements you have, and document them as part of your scope of work for the project.

## 2. Collect and Validate Assets

### Logos and Style Guides

You may want to match the brand standards of your organization or blend into the aesthetics of the environment where the displays will be. Are the hallways or doors in your building painted with a specific color so users know they are on a particular floor or in a particular area? If so, that should be mimicked on the map.

Make sure you have a written style guide for the wayfinding designer to follow. This should include details about approved fonts, colors and logo usage.

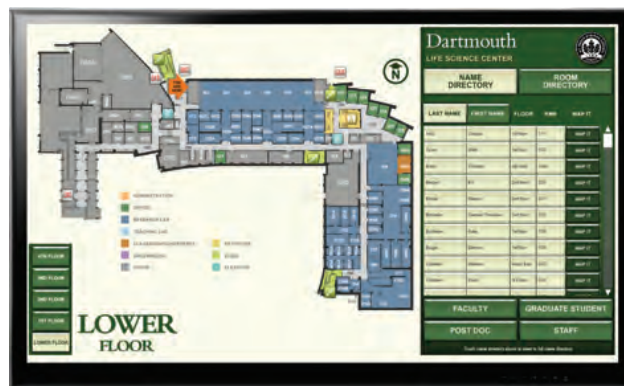
Your logo will need to be in a scalable vector format (such as EPS) in a high resolution with a transparent background. Make sure you have access to the original artwork in case color, size or tagline changes are needed.

### First Impressions

When a visitor approaches the screen, what information do they know already, what do they need to find out, and how much time should they spend finding this information?

You need to envision what will be on the screen when someone approaches the display. Do they immediately see the interactive map or directory? Are there buttons on screen where they can choose to see either the map or the directory first? Should there be an image slideshow or animation that prompts people to touch the screen? The first impression should be based on the goal and maximizing the user experience.

You should also think about a timeout screen. You don't want image burn-in and your screen should draw people to it, so you may want to go back to a "home screen" (whatever you've decided from the previous paragraph) if no one has touched the screen for some amount of time.



## Count the Numbers

Next, you need to tally the number of buildings, floors, destinations and directories that will be included in the wayfinding project. It's EXTREMELY important to know the quantity of your assets. If you don't have these correct at the beginning, you could later need a complete redesign, which can be expensive.

Do you want to show directories for people, faculty, staff, events or rooms? If so, you need to know those totals as well.

What kind of information do your users already have when they walk in, and what will they need to get where they need to go? For example, if they know the name of who they need to find, but not where they are located on campus, you'll need a personnel directory. If they are there for an event, but don't know where it's being held, you'll want an event directory.

Make a list of all locations being mapped like classrooms, cafés, bus stops, conference rooms, etc. What common meeting points or resources are in the actual environments that people use regularly or need to know? If people often gather at a fountain in the center of the building or campus, perhaps it should be on the map.

Landmarks like restrooms, elevators, fire exits, ATMs, etc. should usually be left out of directories and shown using common icons so your viewer doesn't have to scroll through a list to find them.

It's also important to standardize how you'll label your destinations. How are your rooms or buildings labeled on site? Don't cause confusion by labeling a room as "210" within a directory and on the map if the actual sign outside of room 210 in your building is labeled "Executive Conference Room." Also, think about how people refer to rooms. If a room is labeled "Mail Room", but is commonly referred to as the "Fed Ex Dropbox", you may want to include both instances in the directory.

## Databases and External Feeds

Identify database feeds or external data that you'll want to pull on to the screens – things like directories, weather, RSS feeds, or date and time.

Also, consider who will be responsible for maintaining an accurate database. Will this person be comfortable with updating a spreadsheet of information, or should the updates be made through a web interface for ease?

Answer these questions:

- Where is the information for your directory coming from?
- Can you use an existing database to feed the screens?
- Can you access it easily to integrate with the display?
- Are there any IT issues, like getting around a firewall?
- Can you update it easily and automatically? It's important to be able to make quick and easy updates, so your wayfinding is always up-to-date.

It's important to know where your project is going to live once it's finished. You need to know this before you get started because it affects a lot of the technical design aspects. For example, it will probably live on a web server if it's designed in HTML5, and your IT experts will need to plan for this in advance.



## 3. Locations Please

### Key Assets

Maps delivered as CAD or vector files are easy to size and work with. This means no one has to draw your facility from scratch, which saves time and money.

When you format your map files for the wayfinding designer, make sure you turn off unneeded layers like furniture, air ducts or plumbing. Again, keep the design as clean as possible and present only the information your user is interested in.

### Map Design

There are multiple options for how your maps can look on the screen - flat, 2D, 3D, color-coded, etc. See examples from your vendor before you commit to any design style.

3D design has been the rage for the past several years, but it's not appropriate for every project. If you have a simple map, 3D may be an eye-catching treatment to make your design look great. However, if you have a lot of rooms on your map, 3D design can make it less intuitive and harder for the user to see the rooms clearly. Also, depending on your map, you may need to "tilt" the map on an axis so users can see everything, especially when you're stacking several floors on top of each other.

Flat design, like the Apple iOS7, is a very popular trend right now. It's also a very straightforward way to present your map, buttons and other information. Again, the wayfinding is the goal, not the design, so most often flat design is the way to go.

### Beyond the Sign

What happens when people walk away from the display? You can include a QR tag or an SMS prompt to give them something to take with them.

- A QR code on the screen could work like this – a user takes a picture of the QR tag and it directs them to the same map (either interactive or static) that's hosted on your website.



They could also download a PDF of a map or directory - anything you can deliver via the web that would work well on a smartphone or tablet.

- You can include a prompt for users to enter their email address to have a PDF or map emailed to them, or another one for users to enter their phone number, and then the system sends them an SMS text message with the directions they've just requested.
- Keep in mind that QR, email and SMS tags are also a great way to collect some ROI data on how many people are using your wayfinding kiosks.

## 4. Map It

### Point A to Point B

Now that your user has looked at the screen, and found where they are and where they want to go, how do they get there?

- Are you showing the path or simply an indicator?
- Are you showing every room or general sections of the floor?
- Does an animated line path light up and show them the way to their destination?
- Does the room where they're going light up or flash or show an icon?

Don't forget the goal! Aim for the easiest and most intuitive design for your user to understand and follow. Users may be distracted or in a hurry, so simplicity and clarity are key to communicating your information to them.



### Changing Floors

What if the user has to change floors? Some people like to have the starting floor and the destination floor on the same screen, where the design allows. Others show the visual path up to stairs or an elevator that flashes for a couple of seconds, then the map switches to the new floor and the path continues to the destination. Choose whatever is best for your facility and your audience.

Take the time to walk through common paths to make sure you're sending people the most efficient way in practice, and not just looking for the shortest line on the map.

### Consistent Detail

Will you show every room or just general sections? If you have an office building with departments, do you just need to direct users to a section (Accounting Offices) or do you need to show them detailed rooms (Conference Room A)?

If you're showing campus wayfinding in concert with building and/or floor maps, make sure to keep your design and directional mapping consistent. Remember that you are training your users. The more consistency they encounter, the faster they'll learn how the system works, and the more enjoyable the experience will be for them.





## 5. Design It

### Scope of Work

This is a great time to revisit the scope of work and make sure you're staying within the parameters you've outlined. We find that when people start creating their paths, they tend to want to add things (like an ad for coffee because people will be going past the café). Don't get distracted, go back to the goal. Remember that the design should enhance the wayfinding experience, not distract from it.

### Resolution

It's very important to determine a common display resolution if you're only paying for one design. If the wayfinding isn't designed at the same resolution as your displays, the image can be jumpy, grainy, pixelated or stretched. One thing to consider is an HTML5 responsive design, which scales to the display it's shown on, whether a big screen or a smartphone.

### Screen Comps

Create a composite ("comp") of each screen to show functionality and navigation. Your design doesn't have to be polished at this point, but you should be able to see all of the elements and where they'll be on the screen – map, directory, icons, legend, etc. It won't be working and interactive, but you can get a good feeling for how the design flows and if the components are in the best places.

- Consider ADA requirements, indicators, icons and colors.
- Entice the user to want to touch the display.

Task flows and wire frames are useful for keeping the project goal and scope on track. A great way to do this is to produce your comps in grayscale or wireframe, so you focus on functionality instead of design. Show each page like this, then add in the branded, colorful design to the comp after functionality has been set.

### Testing Comps

Test your design on a display of the same size and resolution. Take that non-interactive JPG and put it on the display that will show the final wayfinding. This will give you a real-world experience of the design.

- Check for wasted space or graphics that are too large or small, and colors that don't contrast enough.
- If you're showing your wayfinding on a video wall, make sure you take the bezel into account, so you don't have a line running through a button or an important area of the map.



## 6. Build It

The look and feel, and functionality, should have been approved at this stage. You've probably been through several revisions of wireframes, or had adjustments to the color palette, but that should all be finalized and signed off on before you start the build.

### Development

The project is now turned over to a developer and the wayfinding can come to life.

Connect with developers early in the process (Step 1) because they may have ideas about how the project should be designed. Get their input early. Remember back in Step 2 when we talked about where your files will live? Your developer will need full access to that storage space now.

Allow enough time to ensure all the components work together. A build can take quite a while. Your developer needs time to:

- Create every single graphic element (screens, maps, icons, and buttons)
- Ensure data is pulling correctly from your database
- Make it all work together. Do buttons actually connect correctly?
- Do paths correctly map from floor-to-floor?

Don't confuse this with a graphic design project, like a catalog or a standard DS layout. Although there's a lot of graphic design involved, this is a development project.

## 7. Test, Test and Test Some More

Once development is done, test the interactivity, data connections and feeds. If the project isn't being built on the network, mimic that network as closely as possible.

Allow plenty of time for testing. You really have to test every single button and path. If you have a directory with 200 people, you need to push the "Find" button on every one of them to make sure what's supposed to be happening is actually happening.

Run through all destinations to make sure every required location is mapping. You'll also need to test all of your ADA controls, icons and the general navigation on the screen to make sure it's intuitive and easy to use.

Make sure your visual paths are taking people the right way. Is there only one elevator that people can take to the basement level? Is there an open space on the map that is actually a study zone where you don't want a lot of traffic? Some areas may be restricted, or you may not want people walking through quiet zones. This is why a walkthrough in Step 4 is a good idea.

## 8. Implement It

Once you've tested thoroughly, you're ready to implement.

The designer or developer should clean up the files and use easily-understood naming conventions so that anyone looking at the files can tell what is what. Remember that your personnel may change, so you want the files to be intuitive to find and understand.

It's also a good idea to have your designer give your implementers screenshots of what each screen should look like because you may not be around at time of setup. Give detailed instructions on how the digital wayfinding is to function once it's implemented.

Be prepared to do this again – you'll almost certainly need to make adjustments.



## 9. Make Adjustments

Now that the system is up and running, you should gather feedback from the end users and make the necessary adjustments.

The end user is the audience using the interactive wayfinding, not the team who decided to purchase it. Make sure it's a good user experience and walk through all of the aspects, positive and negative, so you know what's working and what needs adjustment.

In addition to a survey or interviews, watch people through the whole process. Don't just watch them play with the screens. Watch them enter the building, find the display, query their information, and then proceed from there. You need to consider the entire process and adjust the design to make it the best experience possible. Using good wayfinding is like wearing a good suit – after a short time, it should be comfortable and taken for granted.

People lose faith in a wayfinding system that doesn't work well, or gives inaccurate information, and stop using it. You don't want to waste all your hard work, time and money.

## 10. Test It Again

Now that you've made adjustments, you need to test it again. If any design or code changes have been made, we strongly suggest going back to Step 7 and doing detailed testing again. Any change in code could affect an area you didn't expect it to, so test it thoroughly each and every time a change is made.

Put simply, the more you consider up front, the better the entire experience will be for your managers, designers, developers, implementers and users. Spend more time up front to spend less money overall.



Want to learn more? Contact us at [salesteam@visix.com](mailto:salesteam@visix.com).