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Touchscreens for **Engagement**

The World at Your Fingertips

DIGITAL SIGNAGE WHITE PAPER



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The Modern Way

Computers are amazing inventions. Using binary code, a language of ones and zeroes, they can perform a huge range of tasks. Yet we humans need a way to interface with them using our own languages, and we're always trying to improve that user interface.

Batch interfaces that used punch cards and paper tape gave way to command-line interfaces using consoles and keyboards; then text-based interfaces came around. The graphical-user interface (GUI) really took off in the 1980s, and that paired with the computer mouse changed the way people interact with computers. Improvements and variations on the mouse were developed – track balls, joysticks, trackpoints, styluses, touchpads and other types of pointing devices tried to make it even easier to interact with a GUI.

In the future, we will probably see more gestural interfaces that track hand movements in space (like in the movie "Minority Report") and voice user interfaces, both of which are completely touchless. In fact, we are already seeing early versions of these, with Nintendo's Wii and Playstation's Move and Camera for motion; and Amazon's Echo, Google's Assistant, Apple's Siri and Microsoft's Cortana for voice. In the interim, there are touchscreens. Smartphones and tablets almost exclusively use touchscreen technologies these days, as do many laptops and computer screens. And, of course, digital displays and kiosks in public areas.

It's amazing how quickly people have become accustomed to touchscreens. Everywhere there are screens today, from trade shows and hotels to shopping centers and ATMs, you can see people walk up and start poking at them (and being a little disappointed if they aren't interactive). Each person has their own signature way of using touchscreens, and that signature will transfer to gesture and voice interfaces when those become more commonplace.

Interactive touchscreens are now practically required tech for any modern digital signage deployment. Not only do they allow people to have a more consumer-like experience, they are more familiar and comfortable when interacting with your organization (considering people use touchscreens every day on their own personal devices). And the demand is only going to increase - over half of children today use touchscreens in their very first year of life. Touchscreens are only going to get more and more popular until they become the norm instead of the exception.

Proven Benefits

Because the audience decides which things they want to view and for how long, you can offer huge amounts of information. Touchscreens free you from the constraints of limited playlists and screen real estate – put it all out there at once and let people decide what's relevant and interesting, and what isn't.

Save Time

People can interact with information faster using touchscreens. No keyboard, mouse or other pointing device to deal with, since the interface is already part of the display. The GUI language can be switched with a simple tap, so no cumbersome keyboard shortcuts are needed. Sure, all these features save mere seconds, but seconds can quickly add up to minutes. In a world where everyone is busy and mobile, speed is vital to how people perceive your organization.



Save Space

Touchscreens are an all-in-one solution, especially kiosks. Everything's all right there on one display, instead of multiple messages being shown on a series of screens – which can get cumbersome and expensive when you consider screen placement, hardware, installation and maintenance.

Save Money

Touchscreens improve efficiency, which saves time and reduces wear on the equipment. People find what they need faster and more comfortably, which leaves them with a positive impression of your organization. For example, in hotels, check-in and check-out speeds are greatly increased when people can do it themselves using a kiosk. And because they're so intuitive to use, you don't need to have staff nearby – in fact, touchscreens and kiosks can supplement staff, taking on time-consuming tasks that free them up to do other things.

No Training Needed

A well-designed touchscreen layout is easy and intuitive to use. Humans have been pointing at things they want for literally hundreds of thousands of years. Anyone, regardless of their technological proficiency, can point and tap a touchscreen. People also make fewer mistakes when using touchscreens than they do using a mouse and keyboard to search for information.

Easy Accessibility

For people with disabilities, including wheelchair-bound people, touchscreens are fantastic. Including a button that allows the font and image size to quickly increase can also help out seniors or people with eye trouble. And you can place your touchscreens and kiosks in high traffic areas, but off to the side a bit, so people can have the privacy they need to find what they want.

Low Maintenance

Touchscreens and kiosks are designed to be sturdy, and many have protective features that allow them to suffer a lot of wear and tear, and even be used outdoors. And, if you use separate software or HTML5 on the web to feed what's on screen, all of the content maintenance can be done remotely.



The Basics

A few things to consider when planning your interactive touchscreens:

Size

Small screens are great for point-of-sale info or collecting quick feedback, but not great for directories, menu boards or other extensive lists. If you want to really grab people's attention, large displays for things like wayfinding and donor boards make sense. Think about what you want your audience to be able to do, and how much screen space they'll need to do it comfortably.

Location

You don't want glare on your screen at any time, so make sure it's somewhere that doesn't get washed out when the sun shines. Also, a wall-mounted touchscreen is not as inviting or easy to use as a kiosk. Even angling a medium- or large-sized display at a 30-degree angle invites people to interact with it. However, you don't want to make it totally flat and horizontal either – then people see it as a table, and they will certainly leave items on it (like drinks).

A high traffic area is ideal for location – the more people who use your interactive touchscreen, the better. But think about what you want people to use it for. Lobbies are great for directories and wayfinding, back offices are better for room signs and meeting space scheduling, and menu boards can be at locations that serve refreshments, but also in break rooms and waiting areas, so people can see what’s on offer and maybe even place their order right there at the screen, saving themselves time.

If you have multiple touchscreens in the same physical space, make sure there’s plenty of room for people to comfortably use the screens without standing on top on one another. Orientation is also something to think about – most people use a display in landscape orientation, but maybe a portrait arrangement works better for your purposes.

Interface

You want your layout to be the perfect balance between simple and thorough. Not having enough options on the screen to accomplish what someone wants is frustrating, while too much stuff on the screen is distracting and can be confusing.

Having several different content zones might be a good idea – one large one for the touchscreen’s main purpose, and then menus and buttons for navigation, and even hot spots for kiosking (switching to a completely different GUI). You might also include attractors and small value-adds like current time and weather, and even a small window that displays messages from your digital signage playlists.

Using templates or a database to feed the screen content ensures that, no matter who inputs info, the look is always the same and fits your design scheme. And consistency is also important – if there are navigation arrows, make sure they’re always in the same place in the layout. People learn a new interface quickly and will not appreciate the “rules” suddenly being changed. And always allow a person to go back a step or two, or return to the main page.

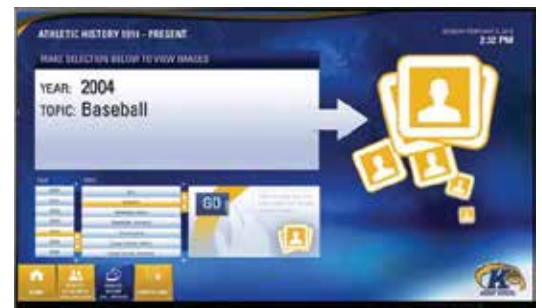
Design

Try to keep text info short – three or four words. Make sure your fonts are large enough to read easily, and your information is concise and succinct. And keep the same font throughout – don’t confuse the eye with ten different fonts at once. Experiment with both serif and sans serif fonts to see which works best in your environment for your purposes. And make sure to leave some negative space around text – don’t have writing go all the way to edge of the screen.

A simple color scheme will help draw the eye and integrate your touchscreen into your décor. It can also reinforce your brand by using your standardized color palette. Try to avoid really bright colors or massive contrast that could tire the eye if users will be looking at the screen for more than a couple minutes. Use fairly standard and easily recognizable icons whenever you can, but don’t go too overboard with these. It’s a waste of valuable screen real estate to have a bunch of cute icons that have no inherent meaning, and then a content block with a legend the user has to keep referring to.

Use images and graphics – the less actual text to sift through, the better the user experience. If you are using original photography, use high quality and well-lit images. Make sure all graphics and images are at the same resolution as the rest of the things on the display, so it all seems like one seamless whole.

Video can also be useful, but use it sparingly. And don’t have videos longer than 15 seconds – longer than that makes the user start to think they could get what they need faster somewhere else. And always leave an opt out for videos, or include a player bar where people can scroll through the video and back up to get info they didn’t catch the first time.



Include your logo to induce some brand loyalty. People will enjoy using your incredible touchscreen and automatically associate your organization with that experience. This is good for you and costs you nothing.

Test

Remember, however, that they'll also associate your brand with an unpleasant experience. So make sure to get it right. Brainstorm ideas with everyone who has buy-in on the project, rough out the idea, and put it on the touchscreens. Then have people come up and try to get specific information using real-world scenarios, and see how easy the information flow is, how intuitive the layout is, and so on. Then refine and adjust as need be.

Thinking ahead a bit and getting people in your organization excited in advance can make deploying good interactive touchscreens easy, fun and profitable. They look great, and more and more places are using them to improve the visitor experience. Soon, facilities without touchscreens will feel out of date and old fashioned.

Touchscreen Designs

Here are just a few ways to use the interactivity and information density that touchscreens afford you:

Top 10 Benefits of Interactive Wayfinding

Institutions of all types can take advantage of digital wayfinding to give their audiences a more modern approach to navigating their properties and getting where they need to go.

1. It's the New Normal

People expect information to be, if not wholly interactive, at least presented in a way that is similar to how they get their other information. All day long, people spend time on their computers and mobile devices, looking up everything from sports scores and discounted airline tickets to local weather and transportation schedules. Modern institutions aim to give people what's being called "a consumer-like experience". Places that are still using brass plaques and paper notices are increasingly seen as old-fashioned and out of touch.



2. It's Ecological

No more paper, printing and waste – which is not only more environmentally friendly but is also cost effective. And no one on staff has to take valuable time going around putting up and taking down notices and signs. In the long run, digital is cheaper than continuing to print out information.



3. It's Self-Service

Because interactive wayfinding is essentially self-service, it frees up staff from giving directions all day long, and gives them an opportunity to be more productive and focus on giving more personalized attention to visitors. This helps increase both visitor and employee satisfaction.

4. It Reduces Stress

Trying to find where you need to go, or who you should go see, can sometimes be a stressful situation. Because interactive wayfinding provides a guide that each person can search at their own pace, people feel more in control and therefore more relaxed. This creates a positive visitor experience for them and makes them think favorably about your institution. And because digital wayfinding is more efficient, there's less congestion in corridors and lobbies – people go to the screens or kiosks, get their information, and then head off.



5. It's Attractive

Good design is essential to any successful digital wayfinding deployment. Adding some motion can draw people's attention to the touchscreens or kiosks and get them interested in other items displayed within the layout. Imagery and color schemes can reinforce your brand. And if your design uses CSS style sheets, anyone with basic CSS knowledge can easily make design changes on the fly, as needed.

6. It's Flexible

There are many, many different ways to present information – from animated 3D maps to 2D floor plans to event listings and searchable directories. Each element can be presented in multiple ways, all accessible from a single screen. Information can be presented, sorted and searched alphabetically or by rooms, departments, people, floors or upcoming events. This lets people view the information any way they prefer, so all types of mindsets and preferences can be serviced with just a single kiosk.

7. It's Integrated

You can present things in a way that best suits the specific information on offer, and you can easily and quickly update what's on the screens. Either your database feeds your digital wayfinding (so changes made there automatically appear on your displays), or you can use a simple web-based UI that allows you to make changes quickly from any web-connected device. You can also tie in to your calendaring or event scheduling software.

8. It's Responsive

Using HTML5 to design your wayfinding allows people to take their directions with them as they go. This is a responsive format that scales to whatever screen it's displayed on, so one deployment can service any kind of screen or mobile device. Expanding to a mobile app can give turn-by-turn directions along with photos of landmarks for easy reference and can actually track where a specific person is in the facility and give them directions right from that spot.

9. It's Inclusive

With well-thought-out design and navigation options, good interactive wayfinding is ADA compliant. This means that everyone can have the same, equal access to the information you offer as a fun, modern experience, regardless of any disabilities they may have.

10. It's Deep

Digital wayfinding can present an amazing amount of information on a single screen using an easy, intuitive interface. By adding hot spots and buttons to switch to different display modes, the screen can double as extra real estate for your general digital signage messaging, social media posts, energy dashboards and more. General information, such as current date and time, weather, traffic and news, can also be part of your layout. You can even include other facility information, such as history and overall mission statement, or even menu items currently on offer in an on-site café.

Interactive Directories - A Cost-Efficient and Customizable Solution

Engraved plaques are out, digital directories are in. Digital building directories allow for more options, are easily changed and updated, and end up saving you time and money in the long run.

They look great, and the design scheme can be customized to whatever you want, making a digital directory a legacy product that will weather any and all changes to your building in the future. You can redesign and upgrade your lobby and, in just a few easy steps, alter the look of your directory to match.

And from a single computer, you can use digital signage software to manage one or even hundreds of screens, while simultaneously sending messages that target tenants and visitors alike. You can even advertise spaces for rent, if that's applicable to your organization, or sell advertising space to current tenants, increasing revenues and giving you some powerful ROI.

You want a system that's easy to use, easy to update and scalable. You're looking for a single solution you can get now that will last for a long time, and that gives you maximum flexibility. It's possible to use an out-of-the-box templated directory design, though it might be more advantageous to have a custom creative layout that exactly suits your specific needs and growth projections.

The look of the touchscreen directory is the first hook, the thing that gets people to want to use it. Make sure any text is short and concise (three or four words is usually enough), but also large enough to read easily. And don't make your interface too complicated – controls should be intuitive, and it should always be possible to go back to a previous listing with little effort.

And keep it clean – cluttering the screen with a bunch of unnecessary stuff will make using the directory seem like a burden. Older people, who maybe are not as comfortable with digital technology and touchscreen UIs, will especially appreciate a design that makes sense and is to the point. And don't forget about ADA guidelines.

Don't overburden your audience – you want options, not distractions. Having said that, you can certainly integrate your digital directory with your digital signage, including current time and weather, maybe a news ticker, and a window in your design template that display messages that are on other displays in your digital signage deployment.

Easy to use is important, as is easy to read. One thing people often fail to take into account is the lighting. You don't want glare on your screen – so make sure it's placed somewhere where sunlight doesn't render the screen unreadable part of the day. Fonts should also be easy on the eye – some digital signage providers suggest only sans serif fonts for electronic displays, while others suggest that serif fonts are better for something that might be text-heavy like a digital directory. You should test out various options, keeping your audience in mind, to see which one works best for your specific location and audience.

Consistency is vital – if you have navigation arrows for forward and backward in the lower right corner on one page, then they should be there on every page. People get used to a particular interface very quickly, provided it's internally consistent.

Accuracy is also key – people tend to trust digitally displayed information (after all, they use their smartphones and computers every day to get anything from the news and sports scores to restaurant menus and business opening hours), but everything needs to be absolutely correct. That includes spelling and grammar – just a single typo can invalidate the entire directory in some people's minds.

Get feedback from your audience from time to time so you can evaluate how effective your digital directory is. And make sure you have access to update your style sheets and data, so it's easy to make adjustments to colors, fonts and so on, and also easy to update the directory information as need be.

And you can control and update information on several different directories at different locations, even in different buildings in different cities (as long as you have access to the design and directory files) from a single computer, or even a mobile computing device that has been set up to access the UI.

All things considered, however, it really comes down to functionality. The cleaner your design, and the more consistent every bit of information provided is, the more authority your directory has, and the more pleasant it is to use. You want people to be pleased that you've switched over to a digital building directory, not pining for the good old days when your offered something that made sense to them.



Interactive Menu Boards Make Everything Easier

We all have to eat – that’s why many types of organizations have on-site facilities that offer food and drink. It might be a cafeteria or commissary for employees or students, a food court with several options available, or a café where people can relax for a few minutes while getting some refreshment. Whether someone is taking a lunch break or stopping off on their way someplace else, they have a limited amount of time. You can maximize that time by using digital menu boards. Menu boards can improve the customer experience by informing people and saving them time, and can also increase revenues while saving your organization money.

First off, you can show images of what’s on offer. A nice photograph of a sandwich or a steaming cup of coffee is far more enticing than just the word “sandwich” or “coffee”. We process images differently than we do words – seeing an image of food or drink has been shown to actually trigger certain parts of the brain, creating a desire for that thing in the viewer. Make sure that they’re high quality pictures, however. A nice, well-lit photo of a juicy burger with fresh crisp lettuce and deep red tomatoes is incredibly enticing, but a washed out picture of a burger, where the meat has a grey tinge and the toppings are washed out, has the opposite effect, actually making people less interested in food. And you also need to ensure that the image is in the correct aspect ratio – a stretched image of a sandwich is just weird and will turn people off. It’s also best if you take pictures of your actual offerings – that enticing burger picture might get them into your establishment, but they’ll be very disappointed if the burger you serve them is completely different.

You can get a lot more information across visually than with text, and including some animation or video increases the impact of the messages on your digital menu boards. By having images move some, or even just drift toward one part of the screen, you can actually get your viewers to look exactly where you want them to. Incorporating good use of negative space in your menu board design can also help guide the eye to specific areas of the display.

Digital menu boards are incredibly flexible, and you can change the content easily and quickly. This makes them perfect for daily specials, or even shorter-term updates like “buy a coffee and a muffin, and get a free croissant between 9 and 11am”. When you run out of items, you can update your audience immediately, so they don’t suffer disappointment. If you get down to just a few items left and want to push them, you can create a special offer right then to sell them before they get stale.

Many people get their digital menu board software to interact with social media feeds and scheduling software. Encourage you audience to interact with your brand by taking pictures of happy customers, or people who have just taken advantage of a special offer. Putting this on both your social media and your menu boards will encourage others to get in on the act. If you know that you’ll offer a discount on the remaining morning muffins in the afternoon, you can create that message early in the day and simply schedule it to appear at the correct time.

Gamifying things gets your audience even more involved. Encourage people to take selfies and pictures of your location and post them on their own social media feeds. You can have special discounts, offers and prizes for people who correctly answer a trivia question, or who take a picture of a particular image displayed on the screen. Loyalty programs also get a boost from digital menu board messages.



Many people have particular dietary restrictions or allergies, and you can use your electronic menu boards to educate your audience. Nutritional information can be displayed, as well as if a particular item contains nuts, or gluten, or anything else that might cause problems for customers. If you have gluten-free options, then advertise that fact. People who are gluten-free will know they can get something from your facility, and even people who are not will appreciate that you offer something for everybody.

Incorporating interactive touchscreens vastly expands what your digital menu boards can do. Easy-to-use and consistent menu board templates organize the information in an intuitive way, and people can search through your menus, nutritional information, hours of operation and more at their own pace. In addition to personalized searching and detailed information, you can add in a queuing, reservation or ordering system, allowing people to choose what they want before they even get to your counter. This saves them time, and reduces real and perceived wait times.

Your beautifully thought-out and designed messages can be displayed all day and all night – advertising your offerings even when the facility is closed. And since menu boards are simply targeted digital signage, you can add in other types of messages to your playlists as well, increasing your digital signage real estate for every kind of audience.

Digital menu boards can save you money, with more people being helped because of efficiencies, and less waste from printed menus and posters. All of these options save your staff time, so they can concentrate on providing great customer service. Speaking of staff, they're a great source for menu board ideas – they work with the products and customers every day, and probably have some notions as to what people would like to see on screens.

Digital menu boards make the customer experience better, and help your staff work more efficiently. That's why more and more businesses are using them in all sorts of contexts. Installation is a one-time cost, and content is easy to create and schedule. Almost 70% of restaurants that incorporate electronic menu boards make back their investment within 18 months. Once the set-up costs are recouped, digital menu boards just keep on giving out benefits to customers, employees and your organization for no extra money spent. That's certainly an incentive to start using them today.

Interactive Donor Boards Do More Than Just Say “Thank You”

Many organizations depend on donations. Whether they're funding healthcare research or educational initiatives, supporting the arts, or supporting community programs, the generosity of your benefactors should be recognized and celebrated. Interactive donor boards are a perfect way to do it.

Display your appreciation in a modern, engaging way by using touchscreens to tell your story. Because interactive donor boards allow multiple screens and options, you can include a variety of information to promote your programs and thank those who've played a part in your success.

Interactive donor boards can be created in any format and theme that you like. Your design should be as unique as your donors. Also, recognizing donors using a dynamic, modern touchscreen will draw attention to the board, which helps out in advertising your needs and acting as a recruiting system for future donors. And it's much cheaper than updating expensive plaques or printed signs.

Using interactive touchscreens lets you put an astonishing amount of information at people's fingertips. Not just who donated what, but mission statements and bios of your benefactors. Photos and videos make the information even denser and more appealing, and web links or QR codes make accessing their websites simple. With such an information-rich delivery vehicle, you can take the time to tell your donors' stories, and what their contributions have actually done for your organization, instead of just a few quick facts.



Just make sure you have all the information you want to include in advance before building your donor board, so the project doesn't get stalled waiting for people to get back to you. And think about how people might want to view your donors – by first or last name, by category, by donation amount, etc. and build that functionality into your interactive menus.

Such attractive presentation will encourage others to give as well, especially if you include some messages in your digital signage playlists reminding people how they can contribute, what some of your fundraising goals are, or about annual giving campaigns. If you like, you can even build in a contribution/payment system into the screen that includes a digital thank you note for those who donate right on the spot.

Once your donors see how much you do for them on your donor board, they will be more likely to give again. And when other people and organizations see how you spotlight donors, they will be encouraged to donate themselves.

Your interactive donor board can be as small as a single content zone, or as large as a touchscreen video wall. You can incorporate it into a standard digital signage layout with an interactive playlist or use a hot spot to launch a full-screen presentation. You can also build a completely custom design. (Most interactive donor boards are custom built to match the brand and goals of the facility.)

Using a database to feed your donor board makes things even easier. It can be as simple as an Excel spreadsheet or XML file, or you can use a customized web interface. This lets you access your data without getting into the code of the touchscreen project, so you can quickly update information on all screens at once.

With a well-thought-out donor board deployment, you can create a comprehensive directory of who has contributed, who they are, what they donated, what their donation went toward, and how others can participate as well. You then have a dynamic, attractive, modern way to thank generous patrons and encourage giving.

Interactive Surveys and Training

Gamification gets people actively involved in what your digital signage is showing, enticing them to take your call to action by offering fund and tangible rewards. Interactive touchscreens let people interact right there, with no intermediate step. Let's say you have a quiz - people can input their answers by simply pushing on-screen buttons and immediately see how they did. A quiz could be anything – text questions, picture identification, short videos or survey questions – you name it.

Touchscreens and kiosks are ideal for microlearning, and you can use them to augment your training efforts. People can take a quick quiz, then immediately see refresher videos for questions they missed. Training packages and modules can be embedded in the layers of information, letting people get a little quick training while standing right there. You can gamify things like this as well, offering prizes to people who compete a short series of videos or training sections.

Interactive Events and Space Booking

When you hold an event, touchscreens can greatly complement and add to the visitor experience. You can feature new digital products and services, like websites, apps and videos, on large touchscreens that let people essentially browse your entire catalogue at their own pace. And gamifying content at events is a sure-fire way to get people interested and engaged while also promoting your brand.

Self-service kiosks can dole out any amount of information you choose to give them access to, from details about participating vendors, breakout sessions or meeting schedules, to where the snack bar is and where visitors can go for dinner after the event closes for the day.

Digital isn't paper, and strategically placed kiosks can allow paperless registration for visitors and vendors alike, to the event itself or to sub-events that happen throughout the day. You can also sync participant codes and email addresses into a cloud-based database, making lead capture ridiculously easy. No more badge swipes.

When it comes to space booking and room management, room boards can show people at a glance what space are open and even let them book available locations right at the screen. This is as true at an event as any other time – from meeting rooms or common areas to available workstations, room boards make it a simple matter to find and secure the space a visitor needs.

Adaptable to Any Environment

We've only covered the most common applications for touchscreens. Because interactive designs can be customized, there's no limit to what you use to engage your audience – social networks, 3D models, interactive timelines, energy dashboards and more.

Regardless of the size or the type of organization, touchscreens are invaluable for everyone – from internal staff to visitors from outside. Many universities now use them, and more and more corporate facilities and incorporating them into their digital signage.

Healthcare facilities use them to answer common questions, help people navigate the building, keep children entertained, and alleviate stress by integrating touchscreens with queuing management systems.

Libraries can use them to not only make huge amount of information available and help people find what they need, but can even allow self-check out and return of books, freeing up librarians to give more personalized attention to visitors.

Hotels can show room directories, have check-in and check-out options and wayfinding. They can also promote on-site facilities like spas and cafes, loyalty programs and more. They can even offer local information such as nearby transportation, or the ability to book a taxi or tickets to a show. A couple of interactive screens of kiosks can really take the burden off a concierge, again allowing them to spend more time on specialty services.

Conclusion

No other technology can make so much and so many types of information available to your audience in one place. In many ways, touchscreens allow you to fully realize the power and potential of your digital signage.

By offering a more consumer-like experience – one that people use everyday on their phones and tablets – you can provide more options in more modern format, attract more attention and engage viewers in a way that static screens can't. The question isn't "Why use touchscreens?" The question is "Why wouldn't you?"

