



The essential guide to touchscreen experiences

In the world of the Internet of Things (IoT), connectivity is the basic requirement for all devices, regardless of device size, power, or location.



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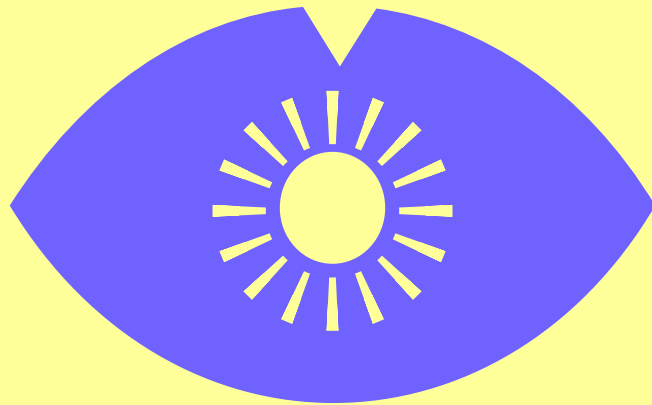


01

Why a touchscreen?

Whether you have a new product or service to showcase, a diverse portfolio to present or complex information to convey, touchscreen experiences will help you get your message across and engage with your customers in a more personalised, creative and immersive way.

W



W

WOW! your Customers

There has been an explosion of digital content and technologies in recent years.

Customers now expect to be able to interact with brands and access information in simple, intuitive and exciting ways.

Touchscreens offer all this and more.

This guide will introduce you to the benefits of touchscreen experiences, how you develop them and important things to be aware of.

We'll touch upon all the features that can be incorporated, including gamification, animation and interactive 3D modelling etc.

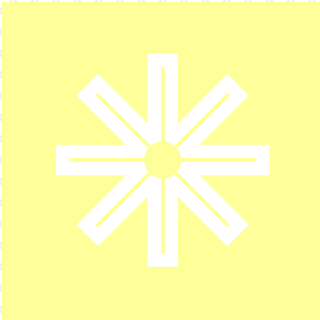
As a creative technology business and interactive experiences platform who has been developing and designing interactive experiences for over 20 years we'll give you the confidence to dream, to be innovative and to really push the boundaries for you and your customers.



Corin

Not all products are cleared by the FDA for distribution in the United States. Tap for full details.

Corin. Medical Devices. Event touchscreen 



02

How can your business benefit from a touchscreen experience?

Touchscreens can be used in a variety of settings and use cases, just a few of which he highlight here.



Exhibitions and events

Touchscreens create the WOW! that's great for attracting people to your stand and provide an eye-catching way for visitors to immerse themselves in your content, keeping them engaged for longer.



Showrooms and marketing suites

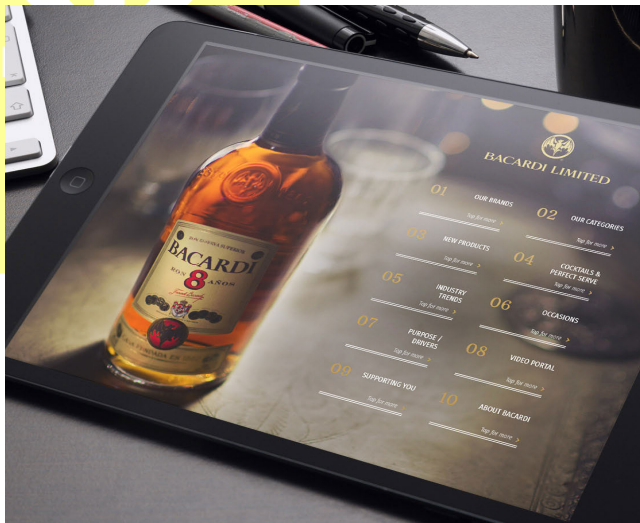
Your entire product or solutions portfolio can be explored at the touch of a button, saving space and giving customers access to information they couldn't access easily. Customers can get a simple overview or access a much deeper level of content depending on their interests. Customers can send themselves information directly from the experience and analytics will track every interaction to provide actionable data for sales and marketing.



Innovation centres

Touchscreens work well in innovation centres where you will be bringing prospective customers to get a deeper understanding of your business and solutions.

They become a focal talking point and an opportunity to really WOW! customers in a controlled environment.



Trade

Help customers make more informed decisions and find solutions when they visit trade counters or third part retailers. By installing touchscreen experiences you're helping them access the right information faster and freeing up time for busy reps.



Interactive digital signage

Whether it be interactive wayfinding, educational information or something else interactive digital signage adds a new dimension to static content.



Museums and galleries

Touchscreens are the perfect window into your cultural heritage, collections and archives. Providing a deeper level of engagement by allowing visitors to explore material that has previously been locked away and inaccessible.

A visual, fun way to keep customers engaged

There are so many ways users can interact with touchscreens, from browsing interactive 3D models, product visualisations that can be pulled apart on screen, to viewing 4k videos and high-resolution imagery and product configurators, the options are endless.

Showcase complex information simply and easily

Making the complex simple is key. People don't like sifting through lots of information to find what they're looking for. A well-designed touchscreen can be simple and intuitive to use so finding the information customers want is quick, easy and enjoyable.

01 Tell unique and engaging stories

Touchscreen experiences give you the ability to tell your story in a more visually creative, innovative and compelling way making for a more meaningful and memorable experience.

Personalise the experience to the individual

Touchscreens let your customers personalise the content to their interests and the journey they want to take. No more one size fits all, making for a highly targeted and unique experience for each and every person. They can easily search, customise your products and see what they look like in situ.

Ten touchscreen benefits

03

04

Keep your content fresh

One of the biggest benefits of a great experience is that, unlike with printed materials, you can update the content instantly using either a web based content management system or one local to the experience, so it is always current.

09

Creating added connections with your customers

Touchscreens can create an opportunity to share an experience with your customer, browsing content together. Through interactive content you can deepen your connection by letting them send themselves content directly from the experience.

05

06

Support existing printed materials and physical products

There is something very visceral about being able to touch a product or flick through a brochure. Touchscreens don't have to replace this, but can act as a powerful support. Being able to touch a product and then explore it in more detail through a touchscreen experience can add a level of interaction just not possible with traditional material.

10

07

Let customers discover content their own way

Because a touchscreen is self-initiated, you can leave customers to explore your content in their own time. A well-designed experience should be intuitive and easy to use letting customers get to the content they are interested in and keeping them engaged for longer.

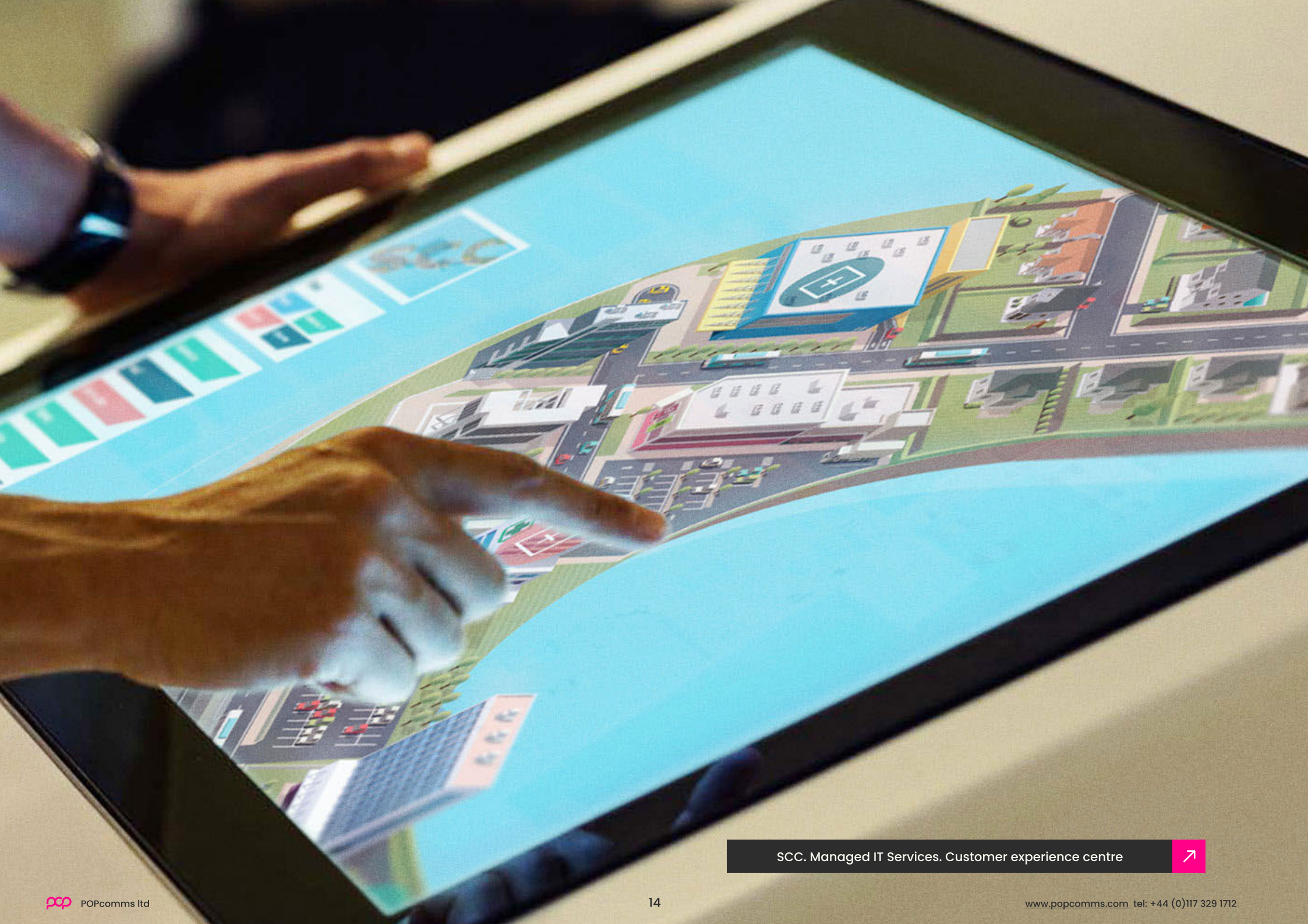
08

Touchscreens have the WOW factor making you look more innovative and forward-thinking

Touchscreens can be a great way to not only showcase products and services, but also to show that your brand is embracing the latest technologies - especially if you want to establish your reputation as an innovative, forward-thinking business that values the customer experience.

Understand what interests people with analytics

Using analytics behind your touchscreen you can see exactly what interests people and how long they are spending exploring your experience. This data can be invaluable for fine tuning your experience or understanding what products or solutions are of most interest to your audience.



SCC. Managed IT Services. Customer experience centre



03

The three parts of a touchscreen experience?

1. The hardware - this comprises not only the touchscreen, but also the PC that runs the software needed to display the content on the screen. We'll take you through the various options later in this section.

2. The visual experience - this is the content that your audience will see and interact with. It could include 3D models, video, animations, PDFs, anything that will help you engage with your visitors.

3. The creation software - this is the software required to create the visual experience as well as the software that needs to be loaded on the PC in order to run the visual experience.

Environmental Monitor

05:34

Steve

Dc

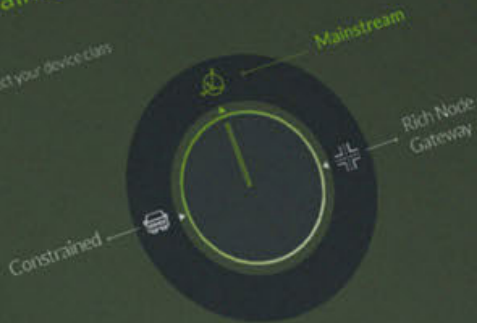
Device Class

A classification for grouping IoT devices based on their use case, application, power and security requirements.

Device types are broken into 3 main classes, which in turn inform the type of SoC you require.

Constrained, Mainstream & Rich Node IoT

3 Select your device class



Tm

Threat Model

The more we integrate embedded devices into our lives and businesses, the greater the potential effect of each security violation.

There are four main categories of security threats: communications, device, software and physical security threats.

The risk of each of these depends on your application and the usage and value of your data.

Threat Model

3 Select one threat model



Dd

Deployment

Once connected, IoT devices must be deployed into the field and managed to ensure security and quality of data is maintained.

Devices will need to be interacted with remotely throughout its lifecycle whilst new devices are added and others are disconnected.

Deployment and Device M

5 Select your Deployment type



6 Select your features



Connectivity

4 Select your connectivity

Wi-Fi

OFF

Bluetooth

ON

LoRaWAN

OFF

Thread

ON

LoRaWAN

OFF

NB-LoT

OFF

Cellular

OFF

Ethernet

OFF

Leader Board

1 Dc

Development

2 Dd

Full Stack

3 Dc

Basic IoT

Smart meter



Second device



03.1 Let's start with the hardware

There's a wide variety of touchscreens available; which one you choose will come down to your audience first, and what's most comfortable and engaging for them to use. Location is another factor, ask yourself; where is it going? Is there room? Does it need to be portable? How big does it need to be?

Screens come in a huge range of sizes from tablets to your standard desktop sizes of 32" up to a massive 120"+. There are also different touchscreen technologies from the cheaper, less responsive infrared screens to PCAP, which are more expensive but more responsive and much better looking! PCAP screens look a lot like giant iPads.

Important: Don't always assume that the bigger the screen the better, screens above 50" become more difficult in terms of size and weight, and much less accessible and easy for users.

Here are some of the more popular hardware options



Laurus Homes showroom experience

Wall mounted

This could be a standard touchscreen or an interactive video wall. They are good if you have limited space, but they have to be fixed into place on a solid wall and do get tiring to use if your experience takes time to explore. Imagine holding your arm up for 5 minutes! They aren't wheelchair friendly either.

Free standing

These are more comfortable to use and there is an element of privacy, as people can't really see what you're exploring. They can be easily moved and there are lots of different stand designs. The screen is the same as a wall mounted screen but it has a separate floor stand that it attaches to.

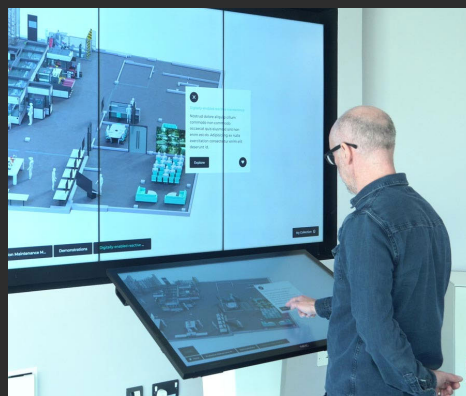


ABB touchscreen experience in an innovation centre



Ebbsfleet marketing suite experience

Touchtables

If you have space they are impressive, particularly for a shared experience as multiple people can use the experience at the same time.

The experience can be designed so it can flip round on the screen so can be used from both sides.



Interactive video walls

This can create a striking experience. By joining multiple screens together you can create a giant interactive wall where lots of people can interact at the same time.

ANTILLION



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Antillion. First Responder Communications. Event touchscreen





03.2

Screen sizes

Touchscreens come in a variety of sizes and different ways of being mounted.

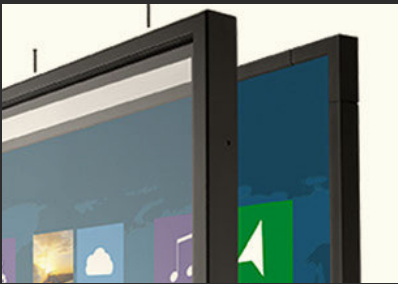
The model you choose needs to fit with your objectives, and needs to work for your audience, they are the ones that will be interacting with it.

You also need to consider where it is going and how much use it's going to get, e.g., is it public facing or for temporary event use.

Display technology

Infrared or PCAP? HD or 8k? Touchscreen resolutions and technology vary, and so can the cost. Here is what to consider when choosing which type to go with.

Infrared or PCAP?



Infrared screen

This is the technology used to recognise your finger touching the screen.

Infrared

Infrared screens use an invisible infrared mesh across the front of the screen which detects when your finger breaks the mesh. This is old tech now and the screens are less responsive but this is the technology usually used on interactive video walls.

The only real advantage is that it doesn't rely on direct contact with a finger, any object like a pencil or gloved hand can trigger the screen.



PCAP screen

PCAP

Projective Capacitive screens are more sensitive, in a good way, and better looking. They are marginally more expensive than infrared but the benefits outweigh the extra cost.

Screen resolution



Screen resolution is the number of pixels that fill the screen, in width and height dimensions. For example, a resolution of 1920 x 1080 means it is 1920 pixels wide and 1080 pixels high.

In terms of resolution, standard High Definition (HD) screens, 4k screens and even 8k screens are available. We'd always recommend going for a 4k screen as the quality of the images and text is far greater than standard HD making for a more comfortable experience. Again, they are more expensive but not by much.

Computers to power your experience

It's much simpler to work out what type of computer you'll need. It comes down to how much processing power you need and this is dependent on what features you have in your experience.

Mac or PC?

Macs don't support touch interactions, so you'll be using a PC. Whether you choose a desktop, laptop or mini PC will depend on where it will sit in relation to the screen.

Space

Space is usually tight, so a mini PC is a good option, they are significantly smaller than desktops and laptops, just as powerful and can be mounted behind a screen.

Some touchscreens come with built in PCs but these will be lower spec and only able to run simpler experiences.

Power struggles!

If you have 4k video and 3D models or complex interactive graphics, then an inbuilt PC might struggle. Our advice is always go for the most powerful PC you can afford.

Our recommendation

We always specify an Intel i7 8th/9th Gen CPU, min 16gig Ram, 250gig Solid State Drive and a decent graphics card.



 **The Royal Mint**
Established for Tomorrow



The Royal Mint. Government Mint. Event touchscreens



05



What are your software options?

Now to the exciting part, the visual experience, this is the content that people will interact with on the screen. It's this visual content that you need software to create. However, there is a wide range of software to choose from and making the right decision will make all the difference to the final experience.



Intelligence

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Explore our
New Platform
探索我们的新
平台





We've been creating interactive experiences for over twenty years, using a variety of software applications.

Here's a selection of our most recommended.



Progressive Web Apps (PWAs)

PWAs are a relatively new system for developing websites with many advantages, however, the main reason for using them is that they work offline, you don't need an internet connection for them to work. And, because it uses open source web technologies you can create almost any kind of experience you can imagine.

One disadvantage is the skill required to create experiences, you'd definitely need an experienced agency to do this for you and the time and expense involved could be prohibitive.

[PWA - Find out more](#)



Dedicated multi-touch software apps

There are quite a number of specialist apps for creating touchscreen experiences such as **Intuiface, Tumult Hype, Ventuz, Unity or Unreal**. All have advantages and disadvantages.

Ventuz, Unity and Unreal are a lot more sophisticated applications with a steep learning curve, you would have to work with a specialist agency for these apps.

Again the time and expense could be prohibitive.




POPcomms

This is our platform we developed specifically to address or customers' disparate requirements for touchscreen experiences.

Building bespoke projects for a large number of customers over the past 20 years has given us the opportunity to test a large array of applications, none of which ticked every box.

That's why we developed POP to tick all the boxes a customer could possibly need as well as providing the creative input to develop their experiences and create the WOW! for their customers.



Laurus Homes. Housing Developer. Showroom interactive 



9 screen video wall

06

What features can you include in a touchscreen?

A great touchscreen experience is immersive, drawing your audience into your world and holding their attention. One of the best things about touchscreens is that you can go as far as your imagination can take you and the list of features that can be included is endless.

When developing a touchscreen, it's important that your first consideration is to the people who'll be using it. A successful and engaging experience is user-centred, rather than feature-led, to help both you and your customers achieve their goals.

Keeping Businesses Moving



Mercedes-Benz. Automotive. Customer centre touchscreen



Touchscreen features



01. Central control of content & messaging

With a web-based Content Management System (CMS), any content can be fully controlled and updated instantly wherever the experience is located. This also means you can change any of the content in your experience without going back to the agency. Not many apps have this function.

POP does.



02. Back office systems integration

Your experience can be integrated with your CRM, PIM, DAMs and pretty much any system that you need to. This means that the experience can push information into your CRM or be kept updated via your PIM/DAM. If the system has an API you can connect to it. You'll need to check with each app developer as some do this others don't.

POP does.



03. Advanced analytics

Every interaction, search, product selection and content download can be automatically tracked, allowing you to see the journey users make through your experience, identifying what is popular - and what isn't. These insights can help you tailor the content to refine the customer experience.

POP does this as standard.



04. Any device, anytime

You may not have control over the type of device available for your experience, so you need to ensure it'll work whatever the device.

POP works on any screen size and any device OS such as iOS, Windows and Android as standard.



05. User data capture

Capture visitor contact details as they engage with your business and allow them to email themselves valuable content from your experience. Combine this information with data gathered when tracking the pages and products they view, to gain a powerful insight into who your customers are and where their interests lie.

POP does this as standard.



06. Object recognition

Touchscreens can now detect and identify an object either placed on the screen or near to it. Great for when people can pick up an object and want to activate more content or information, they don't even need to touch the screen.

POP does this as standard.



07. Multi-lingual

Your experience can be translated into as many languages you require.

The touchscreen experience could either host all languages and allow the visitor to self select. Or, if you're running multiple global events simultaneously, the appropriate local language could be pre-selected by the events team using the central CMS.

POP does this as standard.



11. Multiple versions

With a CMS it's possible to run multiple versions of an experience with different content and branding. Useful, if you run multiple events and need central control from one place.

POP does this as standard.



08. Offline use

This is very important as often, at tradeshows or events for example, you may not be able to guarantee a strong internet connection. Draw confidence from the knowledge that your full experience is available offline and only needs to be connected for updates.

POP does this as standard.



12. Wayfinding

Touchscreens are great for wayfinding letting visitors explore buildings, tradeshows or cities. Intelligent search and smooth animations can make for an intuitive, easy experience for people to be able to explore and quickly orientate themselves.

POP does this as standard.



09. Facial recognition and AI

Touchscreens with cameras have the capability to recognise people, including details such as their gender or age. We have used this feature to help our client's customers select and fit protective headwear and glasses as the experience can detect their gender and display appropriate equipment.



13. Interactive 3D models

This is an exciting feature where you can place fully interactive 3D models into a touchscreen. Pull them apart, manipulate them, magnify them, click on hotspots to pull up information or reconfigure them in real time. Your options are endless and limitless.

POP does this as standard.



10. Interact with the environment

A touchscreen experience can also act like a giant remote control. It can be connected to lighting, sound or other screens and projections. These can be activated from the experience like turning lights on or off or changing their colours etc.



14. Self-serve content

You can have a downloads basket so people can tag content and after entering their email address the content will be automatically emailed to them. In turn a record of this can be sent to your CRM giving you key insights into your customer's world.

POP does this as standard.



06 **When it comes to creating a touchscreen experience what do I need to consider?**

It's important to get the visual experience right. If people find it difficult, confusing or can't find what they need, they'll walk away.

We've listed the eight key considerations when creating a Touchscreen Experience.



GEA



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GEA



01. Design for different levels of engagement

You have to take into consideration that people have different attention spans. Some may want to explore and spend time engaging with your experience while others may just want to get quick snippets of information. So build this distinction in.



05. It's not a workout

If you're using a really big touchscreen like 65" or larger, try not to display buttons all over the place, otherwise, people are going to have to reach to touch them, and they'll stop interacting after a couple of goes. So keep navigation together and somewhere easy to reach.



02. Be concise

People are busy, especially at exhibitions. So be concise with your messaging; get to the point and don't over-complicate your content. You don't want to cram the screen with lots of bullet points and detailed copy.



06. Ease of use

Your experience has to be easy to use, and obvious as to what the user has to do. Minimal design is great but people really need a little extra help with large touchscreens, so make sure navigation is large, supported with text and ensure that users have an obvious way to navigate back to the beginning, so they don't get lost.



03. Don't worry too much about the technology

With a good experience, people won't notice the technology behind it, so don't get hung up on it; it's the experience that matters. Leave the technology to your developer to suggest what is appropriate for the audience and your vision.



07. Seamless design

Ugly design will put customers off. It also makes content hard to read and remember. A well-designed experience is pleasing on the eye, and draws people in; it engages and helps them to explore. As a result they'll stay longer and remember more. If it looks too whizzy or overwhelming people will be put off.



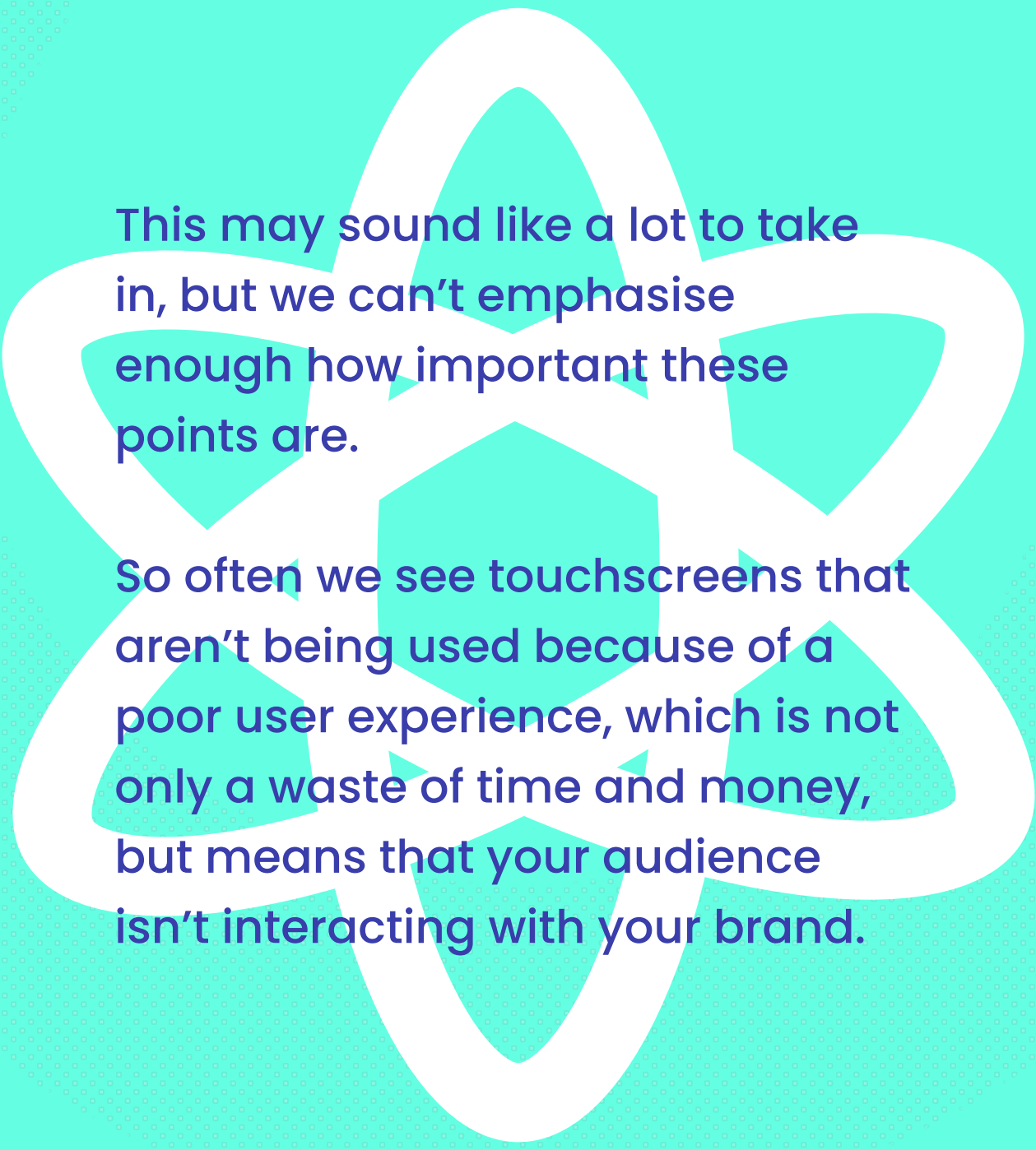
04. Big obvious buttons & navigation

The bigger the screen, the bigger the buttons and content needs to be. If the buttons are too small on a big screen, people don't notice them, and interacting with the experience becomes confusing. Although we're all familiar with using smartphones when people are in front of a large touchscreen all this knowledge goes out the window.



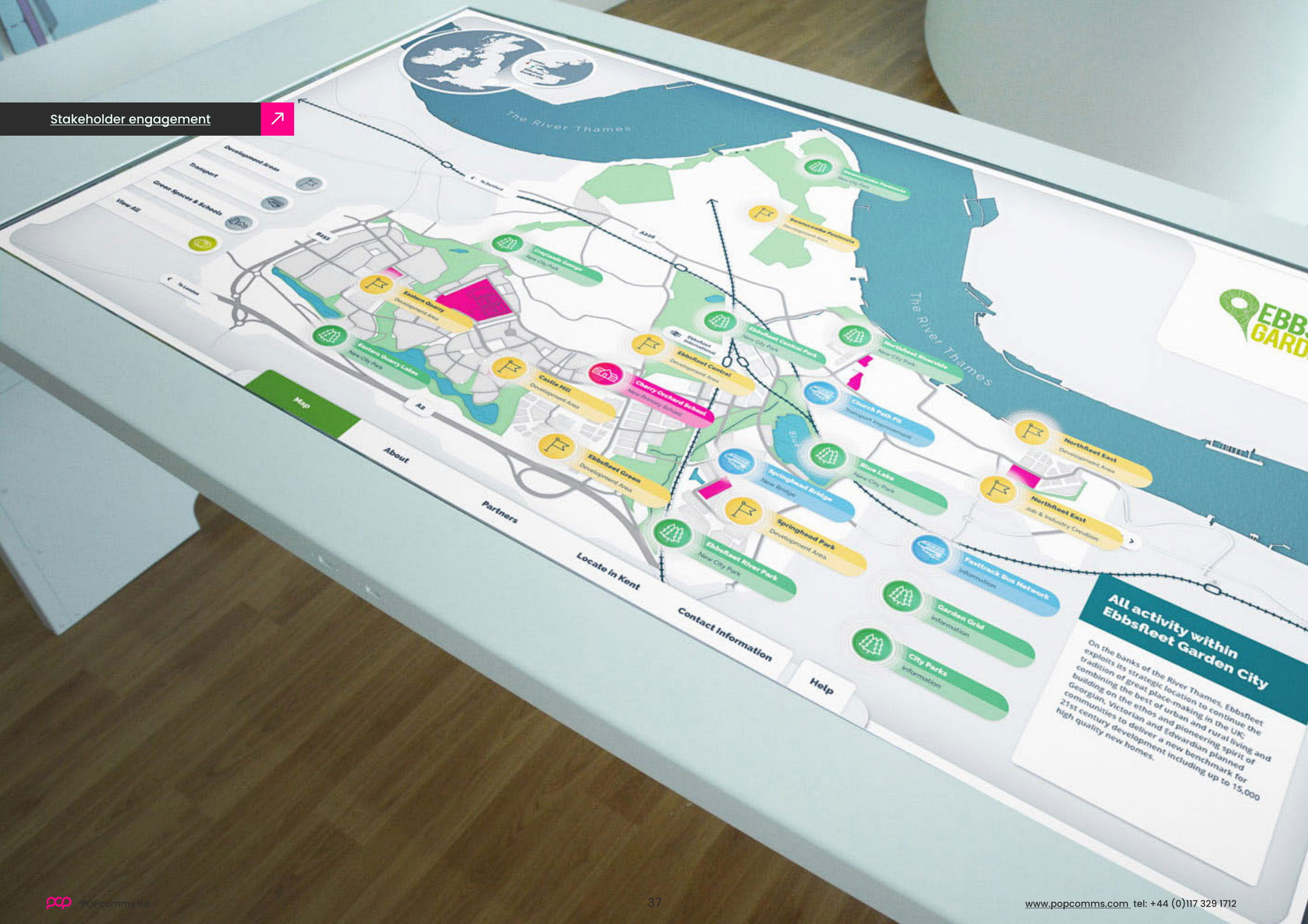
08. Clean and simple

Don't make people think too hard, or give them too many choices; clutter on the screen is confusing and will put people off. Keep it simple.



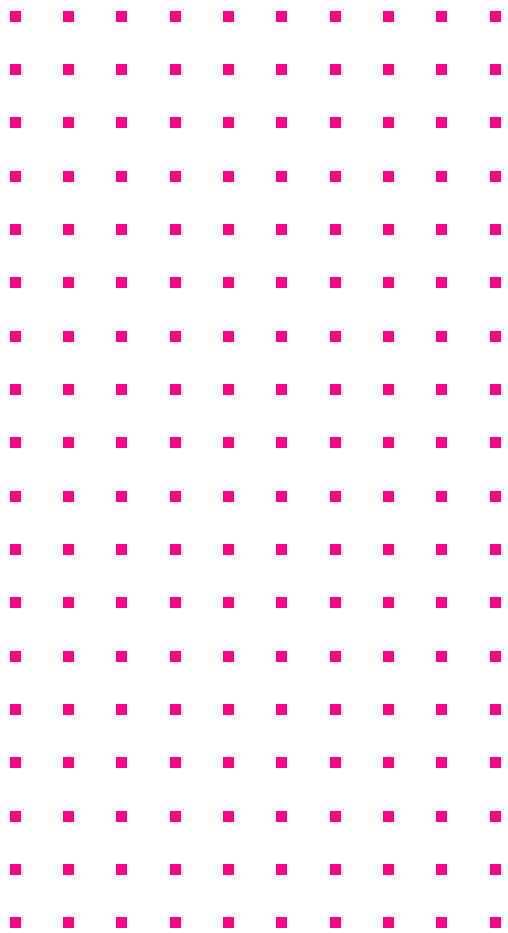
This may sound like a lot to take in, but we can't emphasise enough how important these points are.

So often we see touchscreens that aren't being used because of a poor user experience, which is not only a waste of time and money, but means that your audience isn't interacting with your brand.



All activity within Ebbsfleet Garden City

On the banks of the River Thames, Ebbsfleet exploits its strategic location to continue the tradition of great place-making in the UK; combining the best of urban and rural living and building on the ethos and pioneering spirit of Georgian, Victorian and Edwardian planned communities to deliver a new benchmark for 21st century development including up to 15,000 high quality new homes.



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05

INDUSTRY
TRENDS

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06

OCCASIONS

Tap for more >

07

PURPOSE /
DRIVERS

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08

VIDEO PORTAL

Tap for more >

09

SUPPORTING YOU

Tap for more >

10

ABOUT BACARDI

Tap for more >

Who we are Who we are

We're a creative technology business with our own **interactive experiences platform** and over twenty years of event, sales, marketing and interactive communications experience.

We specialise in creating interactive experiences that help our customers engage more meaningfully with their customers.

How we achieve this is by knowing everything there is to know about what's important to your audience, the technology comes to nothing if the content isn't tailored to their needs.

And, with the proliferation of technology platforms and content overload – it's even more crucial than ever to always start with your audience.

We'll guide and support you throughout the entire journey, from idea to amazing reality.

Our unique **Customer-Success Blueprint®** drives our development process.

We'll use it with you to define the vision for your experience, what you want users to experience and do, and what results you need as a business.

The answers to these questions and more are key in helping us to define your customer's journey, the most relevant content and visual story needed to create a personalised experience.

The more personalised an experience the better – authentic, human content makes for a much more memorable and valuable experience.

That's when you start to see the magic happen.

So, we'll work with you from the initial idea, inspiring you in the art of the possible. From creative and user experience design to technical development. Choosing the right hardware, managing the installation, maintaining your experience, and feeding back rich data and analytics to measure your Rol.



JSP. Advanced Safety Systems. Sales experience touchscreen



Some of our great clients that we're very proud to be partnered with



**We're a friendly bunch
and always up for
chatting through ideas,
so please don't hesitate
to get in touch.**

hello@popcomms.com

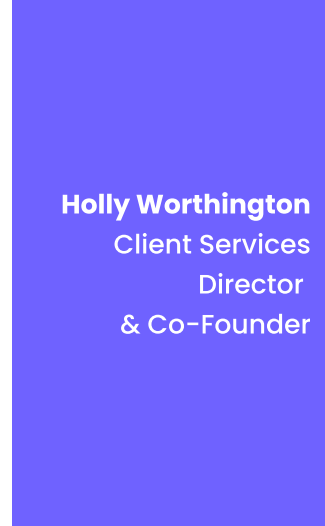
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