Attractions.io

Should you buy or build?

The enterprise guide to developing a guest experience platform

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You and your stakeholders all agree it's time to enhance your guest experience and influence on-site behaviour through a digital platform. But now you're faced with a challenging decision: should you buy an existing guest experience platform, hire an agency to build it for you, or take on the task of building it from scratch?

As an enterprise attraction, you've got unique needs. You cater to high guest volumes, meaning scalability is important. You need customisation and personalisation options to set you apart from your competitors. You already have a complex tech ecosystem, so integration capabilities are a must. And, to frame all of these requirements, you need robust analytics and reporting capabilities to enable your attraction to gather actionable insights and drive data-backed strategies.

We've consulted and worked with world-leading attractions like Alton Towers, San Diego Zoo, and the Kennedy Space Center Visitor Complex to deliver incredible digital experiences for their guests. In this guide, we're distilling our knowledge to help you navigate the world of app development.

Let's look at why a guest experience platform is a powerful tool to have.

The role of mobile in the guest experience

Expectations have changed. Digital natives make up most of your guests, and they expect a guest experience enhanced by technology. That's because they've grown up in a world where technology removes friction from their lives. From contactless payments to online food ordering, digital natives look to technology to make things easier.

Mobile devices play a powerful role in shaping the modern guest experience, as it's the only technology guests are guaranteed to carry during their visit that allows for real-time communication. Historically, operators have relied on influencing behaviour through on-site signage and pre-visit email flows. But mobile changes the game.

A guest experience platform delights guests by connecting all of the touchpoints they encounter to reduce friction and optimise their experience. For example, it can:

- 💙 Simplify the admissions process
- 👪 Maximise ride throughput through smart crowd control and virtual queuing
- 🗺 Help guests navigate your attraction through digital wayfinding
- 🍴 Minimise time spent waiting in line to order or collect food
- 👛 Secure tickets and passes in a mobile wallet

Guest experience platforms also help you surface rich behavioural insights that you can use to understand guest preferences and tailor the experience to their unique needs.

This makes guest experience platforms a must-have for enterprise attractions catering to large guest volumes. So, how should you go about making plans to implement this technology?

Planning your guest experience platform

Enterprise attractions have many moving parts, so you'll need to plan how a guest experience platform will fit into your current tech stack. To do this effectively, you can conduct a planning exercise that identifies:

Your intended outcomes. Start by defining your specifications. What will a guest experience platform deliver for you? What features will it incorporate that benefit your guests and your operators? Planning your outcomes like this provides you with a guide for action and directs your attention towards meeting your goals.

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Your current resources. Embarking on a guest experience project like this requires a lot of attention. It'll involve multiple departments and affect how you run your attraction. Make sure you're aware of your capacity to develop, maintain and update a guest experience platform.

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Your delivery timeline. Ideally, when would you like to roll out your new platform for your guests? Time-to-market is important as it determines how quickly you'll see returns on your investment. This can potentially affect your company's revenue, market share, and your guests' satisfaction.

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Your budget. Developing a guest experience platform incurs significant CAPEX and OPEX that will affect how you progress with your plans. Complex feature sets will have higher costs associated with them, so it's important to understand what's realistic with the capital you have on hand.

Conducting a planning exercise like this helps you understand your unique requirements and how a guest experience platform will help you solve pain points for your guests and operators. It'll also prepare you for the work you can realistically take on to get your ideas off the ground.

Understanding your options

Your next step is to evaluate your options and choose the development path that's right for you.

To create an enterprise-grade guest experience platform, you've got three choices:

1. Building your own platform in-house.

2. Hiring an agency to build it for you.

3. Buying an existing platform from a SaaS company.

Let's break these down and explore the advantages and challenges of each route.

Option 1: Building in-house

For enterprise attractions, building a guest experience platform in-house is an appealing option. Chances are, you've got solid digital infrastructure in place, you've got enough capital in your pocket to invest in the project, and you're eager to protect your brand. But, what does this development route really look like in practice?

Developing a guest experience platform in-house involves:

- Hiring a crack team of backend and frontend developers, QA testers, engineers, UX/UI designers, project managers, and delivery experts.

- Building all of your functionality from the ground up, including backend and frontend systems, based on your specifications.

- Connecting with your service layer through APIs to integrate industry vendors and existing systems. This includes things like ticketing, CRM, analytics, food & beverage...

- Designing the user experience.

- QA testing to verify quality and stamp out any bugs.

- Delivering the app to your guests.

- Monitoring success through metrics like guest satisfaction and secondary spending.

- Maintaining the app through bug fixes, operating system updates, security updates, API changes, and compliance.

The advantages and challenges of building in-house

Advantages	Challenges
Control over the development process With all the development under your roof, you'll have full control over the project management and allocation of resources.	**Upfront and ongoing costs.** Hiring, delivering the product, and completing regular maintenance requires a large investment.
Customisation You develop everything to fit your requirements. You decide exactly how the app looks and functions, in relation to the specific needs of your attraction.	**Resource implications** You could be expending vast resources on reinventing the wheel. Features like maps, mobile food ordering, and digital wallets are known entities that have already been solved.
Ownership You'll have full ownership over the code, and may be able to capitalise the expenditure.	**Slow time-to-market** Hiring and developing from scratch takes time compared to SaaS platforms that can spin up quickly. This can slow down returns on your investment.
Scalability You're in control of the scope of your app. If you need more resources due to seasonal demand for example, you can plan ahead and allocate in advance. This however can also pose challenges, as many enterprises often rely on finding seasonal contractors to supplement teams.	**Maintenance** New versions, content, and operating system updates mean you'll have to allocate resources to keep your app running. You'll most likely have a dedicated resource of multiple developers to keep your app running smoothly.
Dedicated teams You won't be relying on external companies or teams to keep your app development going. Your dedicated developers create your platform and become experts in your tech.	**Integrations** Integrations are often the culprit behind delays when building a custom app. You'll need a service layer with the right APIs in place to connect with your industry partners.

Costings

Below, we've broken down the areas that you'll have to invest in to get your app off the ground:

Cost type	Description
Internal costs	Recruitment, hiring, training, software.
Infrastructure	Tooling, CMS, databases, servers.
Software licensing	Based on data volumes.
Security	Penetration testing, vulnerability assessments, compliance testing.
Ongoing Maintenance	Solving bugs, new version releases, operating system updates, optimising performance.
Data analysis	Tools, data processing, data storage.
Around-the-clock support	Recovery, rapid fixes, on-call shifts.

Team structure

If you're starting from scratch, you'll need to hire a backend team to build your core functionality and connect with your industry vendors. Then, you'll need teams of both Android and iOS developers to build for each operating system.

Salaries for experienced software developers range from $130,000 to $200,000 per year in the US and about €60,000 to €100,000 per year in Europe, depending on their experience.

But those are just their pay-checks, you'll need to consider the fully burdened costs, which include:

- Employment taxes.

- Contributions.

- Benefits packages.

- Software costs.

- Onboarding.

Your hiring plan will depend on the scale of your guest experience platform, your current infrastructure, and how complex your new features are. Below, we've broken down the roles that go into developing a guest experience platform.

Frontend engineers
$150,000+/year

DevOps engineers
$150,000+/year

Site reliability engineers
$150,000+/year

Android developers
$150,000+/year

iOS developers
$150,000+/year

UI/UX designers
$100,000+/year

Backend developers
$150,000+/year

Quality assurance testers
$70,000+/year

Product managers
$100,000+/year

Delivery managers
$100,000+/year

Building in-house: Final costs

Depending on the scale of your app and your current infrastructure, your initial development costs for a complex, enterprise-grade app will cost you several million dollars for the backend work, and roughly another million plus on top for the frontend.

After that, there are some extra ongoing costs to consider, such as:

- Registering your app on the App Store.

- Paying cloud hosting service bills.

- Maintaining and upgrading your infrastructure.

- Integrating with your existing partners - including ticketing, F&B, CRM, etc.

According to SPDLoad, a software development company for startups, you can expect these maintenance costs to bill as high as twice your initial development cost.

The numbers can seem a little daunting, but you've got to consider your returns. Take Disney as an example. They invested a massive $1 billion into the internal development of their magic+ platforms. But, when you consider that Disney World welcomes around 60 million guests a year across their parks, those costs start to look a little more realistic.

Option 2: Hiring an agency

If you're unsure about using your own people to build your app, but you know you'd like a platform built from the ground up, then you may choose to outsource the work to a software development agency. Agencies in this field offer a range of software development services, including building enterprise-scale mobile applications.

It's a popular route to take, after all:
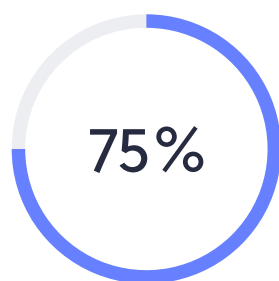
75%   IT services make up nearly three-quarters of all business outsourcing.
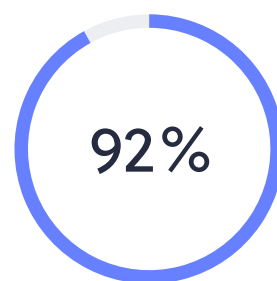
92%   92% of the Forbes Global 2000 companies use outsourcing.

Working with an agency to build a guest experience platform typically involves:

1.   Scoping out and agreeing on your internal requirements, before creating a shortlist of companies to work with.

2.   Sending out an RFP (request for proposal).

3.   Setting up discovery calls with potential agencies to explain what you're looking to achieve, both from a product and business perspective. Agencies will also be keen to understand your existing tech stack and whether key vendors, like ticketing and POS providers, have APIs they can work with.

4.   The agency putting together a proposal to submit, which will often go to a presentation phase. You'll be making your final decision based on the strengths of these proposals.

5.   Selecting your preferred agency and starting the contracting process. This includes an MSA (master service agreement) and then you'll set out the scope of work.

6.   Once signed, the agency starts working on your application.

Advantages and challenges of working with an agency

Advantages	Challenges
Cost-effectiveness Choosing an agency can help streamline the costs associated with building an app from scratch. However, long discovery times and lengthy feedback cycles can ramp up the overall costs. A four-week discovery might be around $60,000, whereas a 12-week could be $200,000+.	**Scope creep** This is where the scope of a project gradually expands beyond the original parameters laid out in the contract. To avoid scope creep, it's important to be thorough with your discovery process and outline everything you want from the project early on. This not only helps you budget the project better but also helps the agency plot out its workload.
Delivery speed Typically, agencies can apply a larger team to a project than an attraction building in-house would be able to. This helps them deliver projects faster generally, although some very large enterprises may have the resources to employ large development teams.	**Scalability** Agency projects are finite. Once they've completed the work outlined in the contract, it's over to you. If your app needs updates before the summer season for example, you'll need to contract the agency again for the extra work or purchase a retainer.
Access to specialist talent Agencies have experienced developers in place ready to work on your project. This means you don't have to go through the tedious hiring process to access the skills you need.	**Integrations** Just like with building-in-house, integrations can cause delays. If you've told your agency that you've got APIs in place to work with your integrations and then it turns out these aren't working as intended or require extra code, you'll end up incurring further costs. You'll also be hard-pressed to find agencies with domain knowledge for attraction integrations such as ticketing, F&B, photography, and others.

Hiring an agency: Final costs

Agency costs vary massively depending on the scope of the project. There are several factors that can impact the overall bill. These include the complexity of the app, whether there are delays in discovery and feedback cycles, and how much extra maintenance you've factored in for post-release.

In the end, you'll be looking at a comparative price to building your own app in-house, perhaps slightly less expensive. You're still going through the same process, you're just handing off the main development to a third party. Your discovery phase could cost you anywhere up to $200,000. Your backend, CMS, and service layer development costs will be $1M+. After that, it's another $1M+ for the front end. Finally, you can expect another $250,000 or so every quarter for extra maintenance.

ABC AGENCY

Discovery phrase: $200 000

Backend, CMS, and service layer development:

$1M plus...

Front end: $1M plus....

Option 3: Using SaaS solution

SaaS (software-as-a-service) companies allow you to use their software as part of a managed service. For attractions, this means the SaaS company hosts your guest experience platform and provides you with customer support, maintenance, and updates to keep it running smoothly.
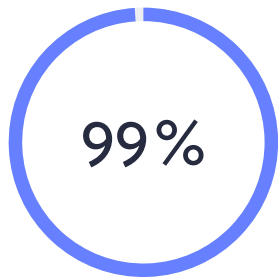
99% Of organisations are using one or more SaaS solutions in their daily operations.

SaaS allows you to leverage the knowledge of a company devoted to improving the guest experience. The Attractions.io platform for example is the result of over a decade of specialist development, designed to solve common pain points and create a friction-free guest journey. It's not just a frontend app, you also gain access to a powerful backend console that would set you back several million dollars and many years of development time if you built it yourself.

If you choose to use SaaS, the process typically involves:

1. Finding a SaaS company that provides the features you're looking for (such as personalised branding, digital wayfinding, mobile food ordering etc.)

2. Booking a discovery call to demo the product and talk over your requirements.

3. Receiving a quote.

4. Signing the contract.

5. Rolling out your new app with your existing systems.

6. Delighting your customers with a fully branded guest experience platform.

The advantages and challenges of SaaS

Advantages	Challenges
Speed of implementation A SaaS company can develop your guest experience platform quickly. Attractions.io for example, can spin up a mobile app for a customer in as little as 8-12 weeks, depending on the integrations required.	**Lack of ownership** Working with a SaaS company means you won't have ownership of your platform's code. This is a drawback as it means you can't count the app in your company assets.
Cost-effectiveness SaaS companies offer various pricing models to suit your finances, including annual subscriptions and usage-based models.	**Customisation** Depending on your platform, you may find your customisation options are limited with SaaS. Certain providers, like Attractions.io, can build on top of their core platform to meet requirements.
Tried and tested features. SaaS platforms have been tested and proven by other large attractions. You'll have a bank of customer testimonials and case studies which demonstrate positive returns, and you'll be able to try out the technology for yourself by using other apps powered by the platform.	**Limited influence on product roadmap** SaaS companies will build the functionality that they think holds the most value for the industry as a whole. This could meet the needs of your park, or it might miss the mark because your requirements are more unique.
Ongoing support With SaaS, you have the benefit of a support team dedicated to helping you solve any issues with your app. You also won't have to worry about new versions, updates, and security—it's all done for you by your provider.	**Requires a third-party vendor** Some large enterprises are eager to keep everything under their own roof. If that's the case, SaaS may not be right for you.

Not all SaaS companies are created equal

When you're exploring the SaaS market, it's worth keeping in mind that different companies will offer different solutions in their service offering.

Finding the right SaaS partner isn't easy, but the best ones offer a feature-rich guest-facing app to stamp out the problems that guests face and a sophisticated operator console to help your team make data-driven decisions.

They'll allow you to:

- Write your own plugins.

- Use APIs to connect to your industry partners.

- Engage with professional services to help you build your unique requirements on top of their core platform.

Let's explore some of the features offered by the best SaaS companies in more detail.
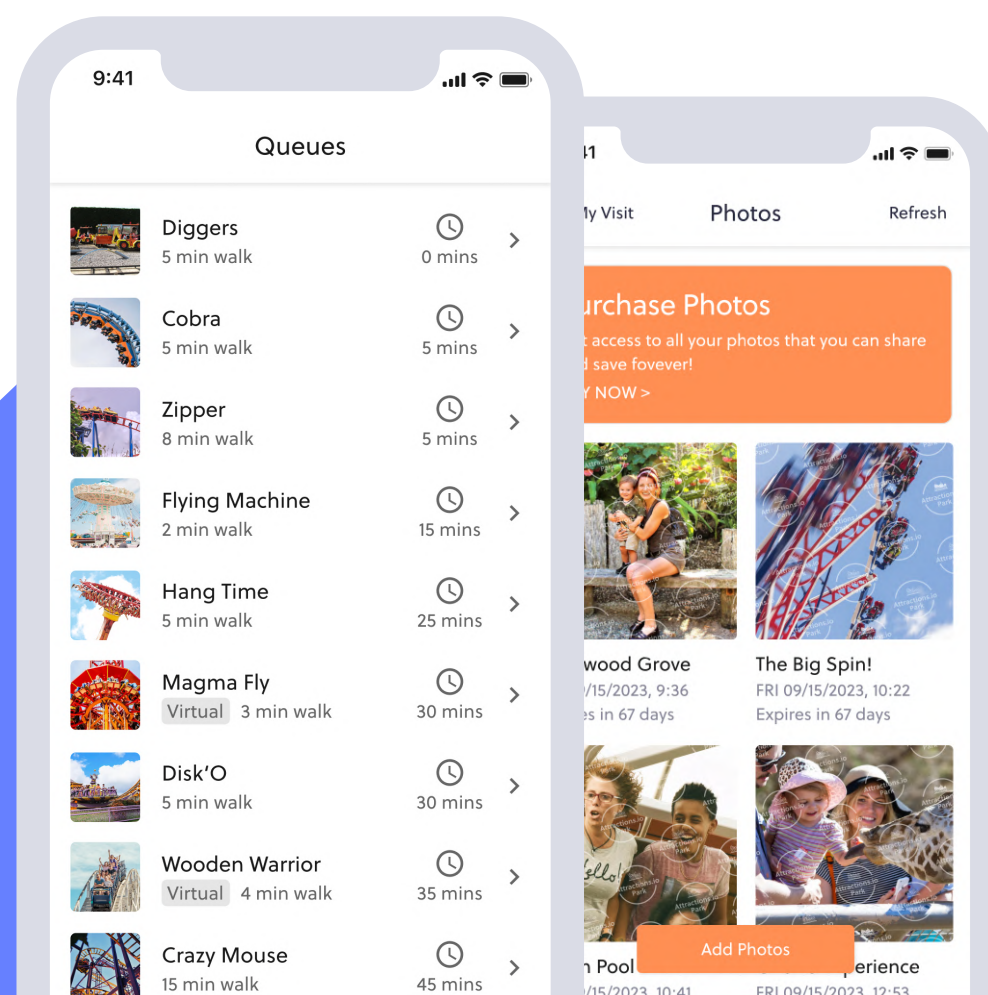
Rich feature sets for your guests

SaaS companies have been in the guest experience game for a while, and they've put all their effort into ironing out the friction points that frustrate your guests.

The Attractions.io platform for example has a comprehensive range of functionality, including a feature-rich mobile app for your guests to help them make the most of their visit.

Some of the guest features that SaaS guest experience platforms offer include:

Feature	Benefit
Interactive Wayfinding	Directs guests to rides and shows while also improving accessibility with route options to avoid uneven terrain.
Mobile Wallet	Many attractions are going ticketless and mobile wallet functionality imports tickets into the app, ready to scan at turnstiles.
Mobile Food Ordering	Allows guests to order food and beverage from outlets in the app, helping drive secondary spending.
In-app Photos	Gives guests more time to purchase ride photography by managing photos inside the app. This extends consideration time, driving more revenue.
Virtual Queuing	Enables guests to join lines for popular rides directly from their smartphone, and receive a notification from your park's mobile app when it's time to ride.
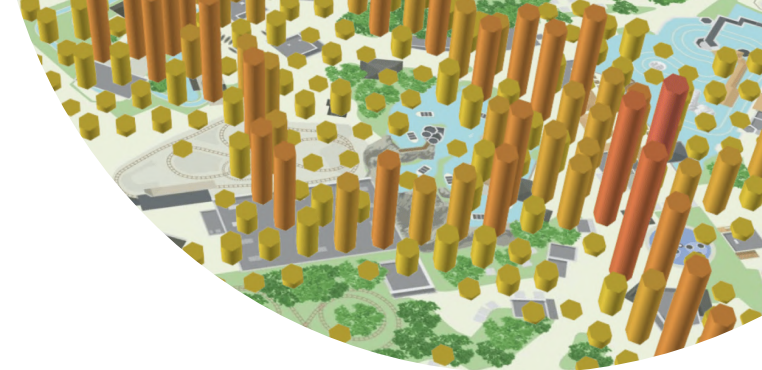
Powerful controls for your operators

SaaS platforms equip your team with the tools to design the ultimate guest experience and the insights to make data-driven decisions.

The Attractions.io platform for example, enables your team to interact with guests on an individual level through powerful user segmentation and targeted messaging. And, with integrated real-world analytics, you can better understand your guests' behaviour, helping you to identify and solve operational pinch points.

Some of the operator benefits you can expect from SaaS platforms include:

Feature	Benefit
Interactive Heat Maps	Allows operators to visualise guest flow across attractions and pinpoint high and low footfall areas.
User Segmentation	Improves the relevance and impact of marketing by building custom segments to target guests based on demographics and behaviour.
Messaging & Offers	Personalises guests experiences by sending tailored messages and offers to increase secondary spending.
Content Management	Applies real-time updates to app content through an intuitive control panel.
Feedback	Provides daily readings of guest satisfaction to help prioritise new initiatives.
Data Dashboards	Grants access to a wide variety of guest data, helping to improve overall park operations.

SaaS development: Final costs

The SaaS route streamlines your costs. Everything is included in your annual fees, so there are no hidden bills to catch you out.

Enterprise attractions looking for a rich feature set and a powerful backend console can expect to pay around $200,000 a year minimum for their guest experience platform.

This cost includes everything—deployment of the app itself, all of its features including those that are guest-facing and the console for operators, as well as ongoing support.

For large attractions that are eager to keep their costs low, but see the value in a guest experience platform, choosing SaaS can be a high-value option.
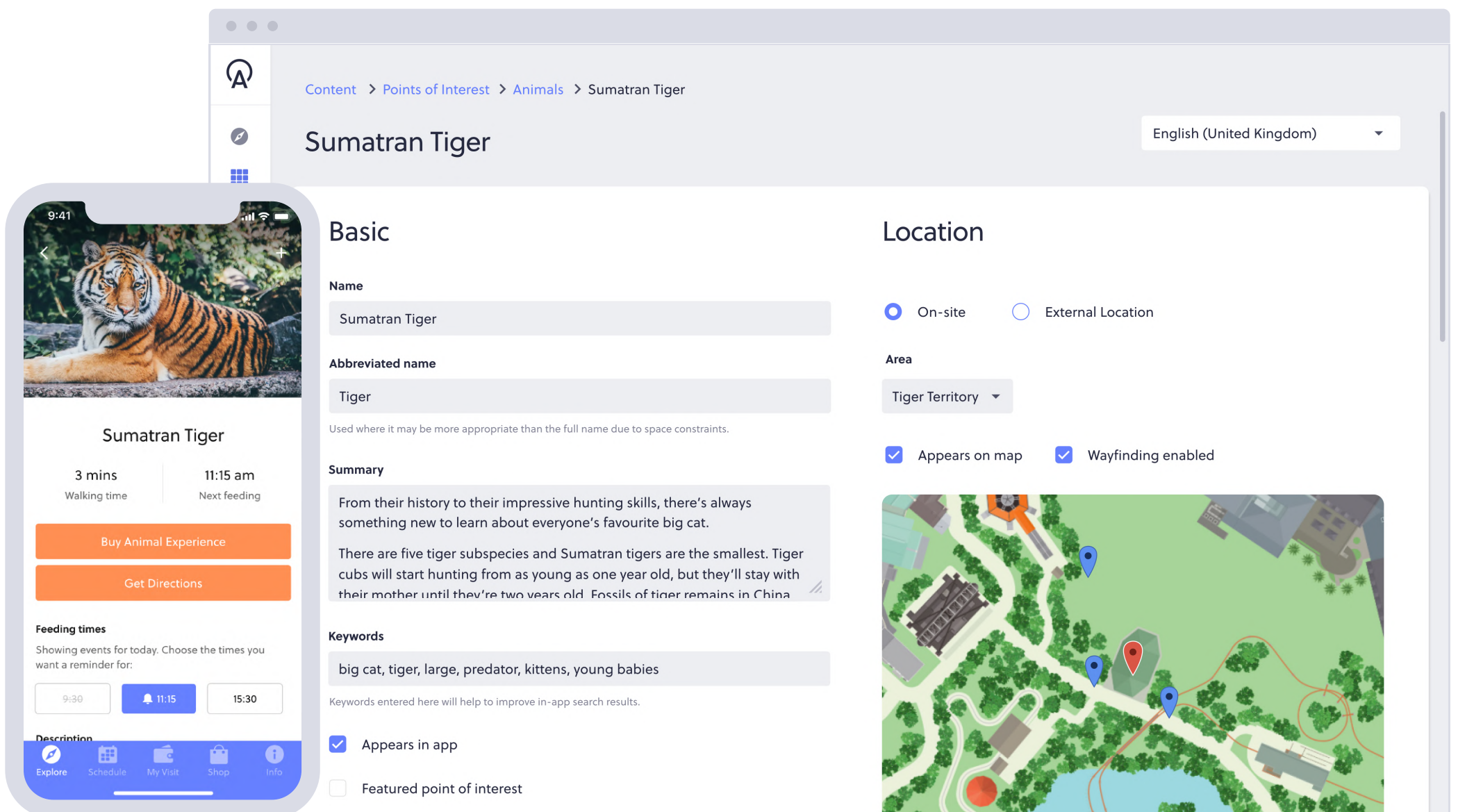
Comparing your options

Choosing the right development route is tricky without seeing them side by side. Below, we've broken down the differences between each option against the main factors in your decision:

	Building in-house	Using an agency	Buying SaaS
Cost	Large upfront and ongoing expenditures due to hiring developers and product teams. Developing a functional, feature-rich app can cost several million.	Large upfront contractual costs to get your project started. You'll then have to pay for at least minimal maintenance as OSs and APIs will continuously update.	Annual subscription or usage-based costs depending on the complexity of your app. Enterprise customers can expect to pay minimum annual fees of around $200,000 for a feature-rich guest experience platform.
Delivery speed	Building an app from scratch can take some time, slowing down your time-to-market speed. Developing from the ground up can potentially take several years.	Agencies have larger teams to deliver an app in a relatively short timeframe. However, delivery times vary depending on the complexity of your app and your existing infrastructure.	SaaS companies already have their functionality ready to go. They can spin up an app with your branding very quickly. Attractions.io for example can have an app ready in as little as 8-12 weeks.
Resource Requirements	Developing an app is taxing on your resources. You'll need human resources to develop the app, financial resources to invest in its success, as well as IT resources to stage and host the application.	You'll need time and money. Agencies will conduct in-depth discovery calls to understand your requirements and successful projects depending on proactive collaboration with your agency. You'll expend financial resources in line with the terms of your contract.	Your SaaS company takes on most of the resource demands. You'll just need to pay your annual fees and be proactive in collaborating with them to foster a strong relationship.

|	Building in-house	Using an agency	Buying SaaS
Customisation	Building yourself opens up the customisation options. Your final product will be a unique, business-centred app that's designed specifically with your target user in mind.	Agency projects can provide the same level of customisation as building in-house, as long as it falls within the scope. If the brief you provide goes into detail about the customisation options you require, you'll end up with a similar tailored app with your end-user in mind.	Generally with SaaS, your customisation options are limited to the feature set that the provider has. Some providers, such as Attractions.io, can build on top of their feature set to help meet your unique requirements.
Scalability	With all the control in your hands, you can scale up your development during peak seasons, and scale back when demand is lower.	Agencies will only work to the requirements of the project outlined in their contract. Extra work outside of that will have to be billed separately.	Scalability options will vary between providers, but often you'll have the flexibility to scale your package up or down depending on your needs.
Support	Maintaining your app will be entirely your responsibility. You'll have to invest in keeping it up to date, adding new content, and working with new operating system versions.	Agencies projects are finite and so once your app is complete, it's over to you. If you need further help with your app outside the scope of the project, you'll have to negotiate this with the agency.	With SaaS, you'll have a dedicated support team of people experienced in your domain to support you every step of the way.

About Attractions.io

For over a decade, we've been helping world-leading experiences like Alton Towers, San Diego Zoo, the Kennedy Space Center, and more enhance their guest journey with intuitive digital touch-points.

Our guest experience platform provides features that help attractions understand their guests' behaviour. By connecting data across the entire guest journey, we've helped attractions gain the insights they need to boost satisfaction and drive spending to other revenue channels, such as retail outlets. Our branded mobile app pairs guest-facing features with a powerful operator console, helping attractions alleviate friction and leverage data insights to personalise their experiences.

And it's no problem if you've already got tech in place. The Attractions.io platform integrates seamlessly with your existing systems, making it easy to create and maintain engaging digital experiences for your guests.
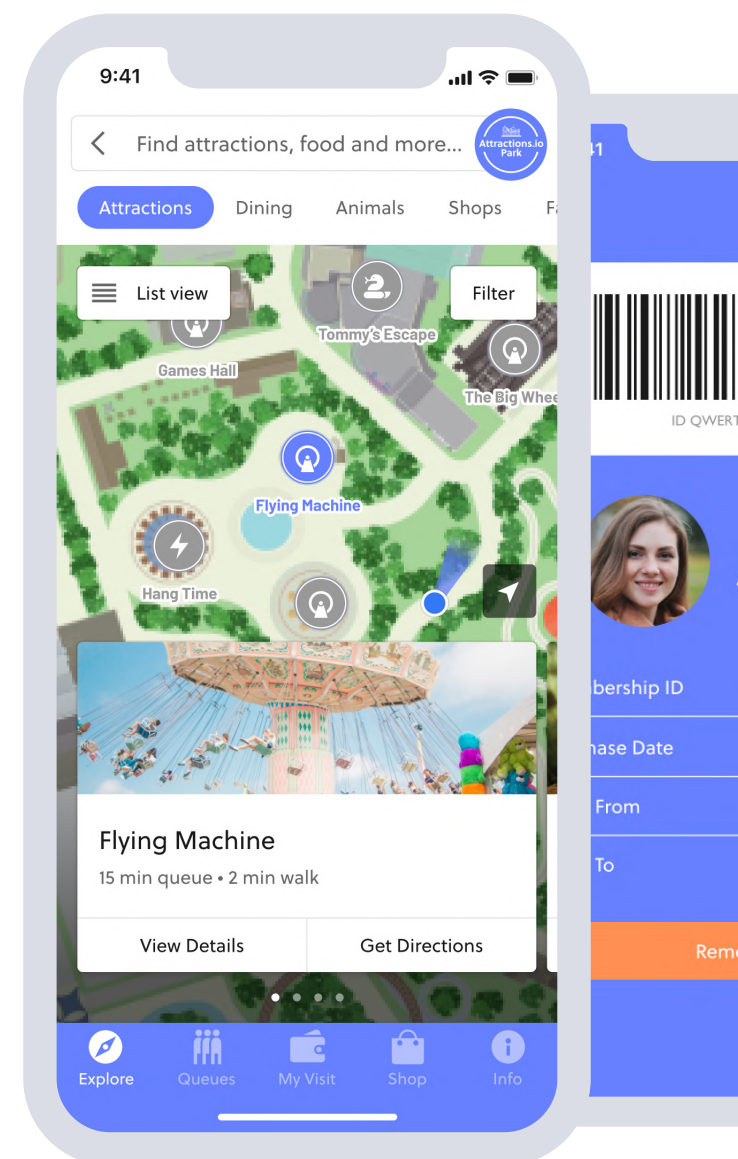
Our mobile app technology powers exceptional visitor experiences for:

What could your attraction achieve?

If you're eager to find out how our guest experience platform can help you boost guest satisfaction, increase secondary spending, and unlock valuable insights into guest behaviour, book a discovery call with our experience consultants.

Book your discovery session

Attractions.io