

The SmartFrame Guide to In-Image Advertising

 SMARTFRAME



Introduction

Online advertising is changing.

The introduction of privacy-focused regulations worldwide, coupled with technological changes designed to give online audiences greater control over their personal information, means that advertisers can no longer rely on traditional methods to reach their audiences.

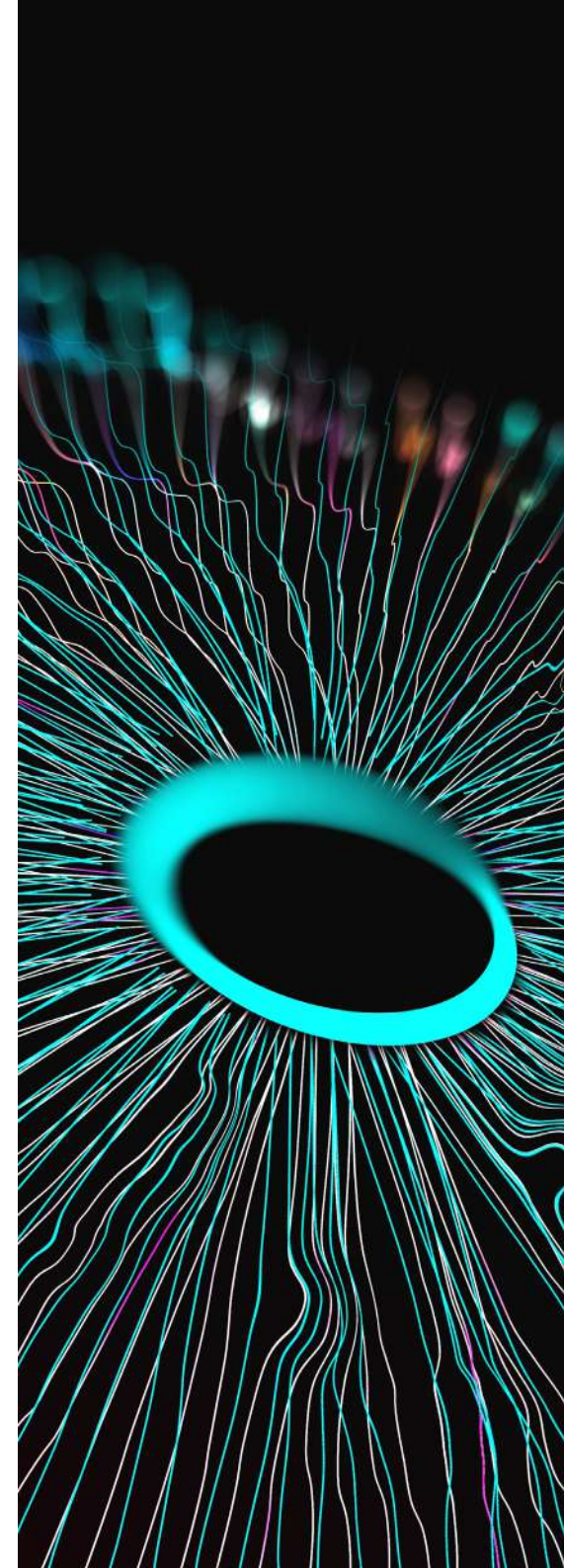
A free and open internet, however, must be underpinned by some form of advertising if it is to remain sustainable.

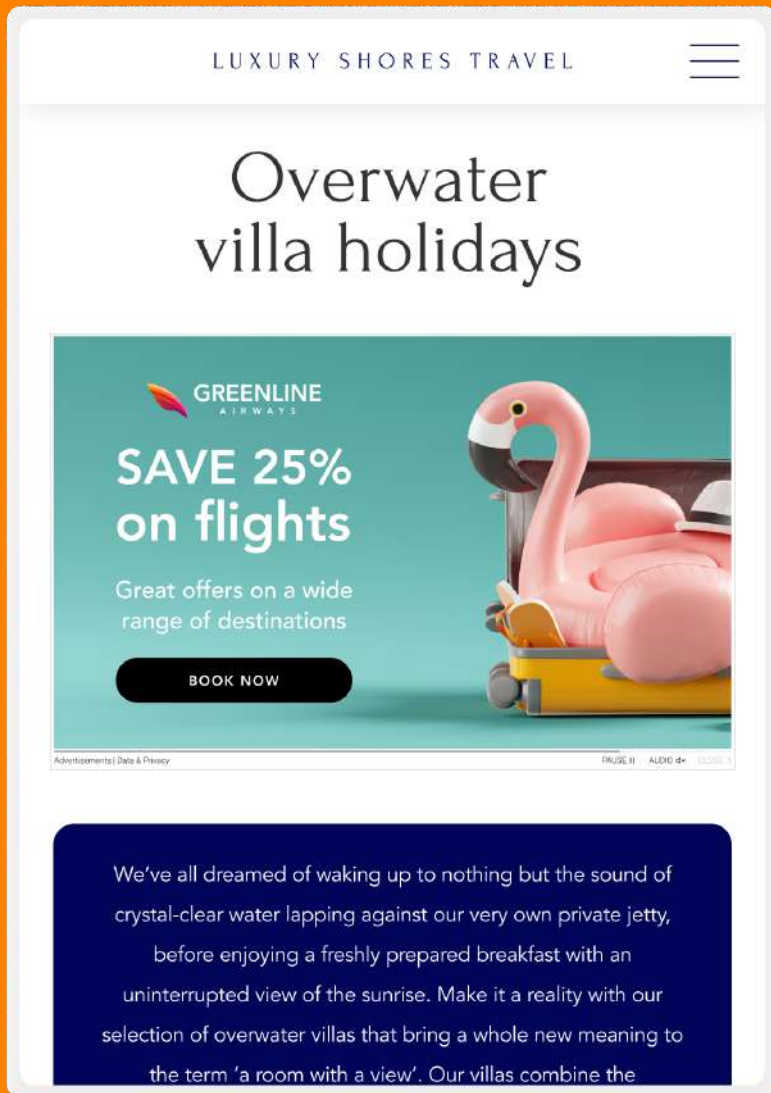
While some websites may do well by adopting a paid subscription model, even these tend to

rely on advertising to compensate for users unwilling to pay for their services.

So what does the future of online advertising look like? Once we move beyond third-party cookies, how can advertisers and marketers confidently target the most relevant audiences while complying with regulations?

Various solutions have been proposed, such as improved first-party data collection and Universal IDs, as well as in-image advertising, which is the focus of this guide. But what exactly is in-image advertising? And how does it work? Read on for everything you need to know.





What is in-image advertising?

In-image advertising refers to the process of displaying an advertisement over an image.

This image itself is already part of the webpage's content. It could be the lead image in a news article, for example, or one further down the page that's used to illustrate a particular point. In other words, it is content the user expects.

Conventional display advertising, by contrast, is typically served alongside this content, often in a banner at the top of the page, an MPU at the side, or as a popup.

With in-image advertising, the appeal lies in the fact that the image hosting the ad is part of the content itself. Since users expect to see something visual in that space, the experience feels less intrusive compared to standard display ads.

Another advantage is that such images usually occupy a prominent position, ensuring that any ad served within them aligns with the content the user is already enjoying.

These two factors – fitting seamlessly into the user experience and occupying prime real estate – increase the likelihood that the ad will be seen and engaged with, ultimately boosting the ad's effectiveness and the campaign's ROI.

Why are we talking about in-image advertising now?

In-image advertising is not a new concept. In fact, it has been around for the best part of the last 15 years.¹ So why is it receiving greater attention today than ever before?

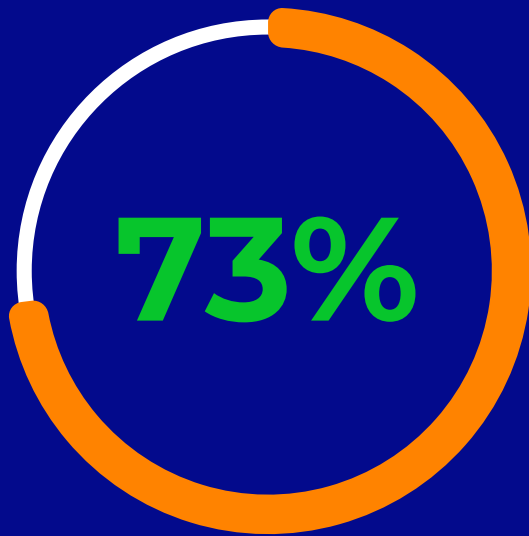
One reason is that the ways in which in-image advertising has evolved over the years mean that today's systems better serve advertisers and online audiences than they have in the past.

Similarly, advances in the technology behind in-image advertising have made it far more viable for a broad range of brands. AI-based image recognition, for example, often used in contextual targeting for brand safety, has become far more capable and accurate over the last decade.

Another reason is that most of us now have fast enough internet connections – whether at home, work, or on mobile devices – to allow images, videos, and ads to load seamlessly. This wasn't always the case, but it now gives advertisers new opportunities to reach online audiences.

Finally, many people recognize that advertising must constantly evolve to remain effective. Just because a solution has worked in the past doesn't mean it will continue to do so in the future. The issue of banner blindness, where viewers become so accustomed to banner ads that they eventually tune them out, highlights this and underscores the need for alternative display solutions, such as in-image advertising.



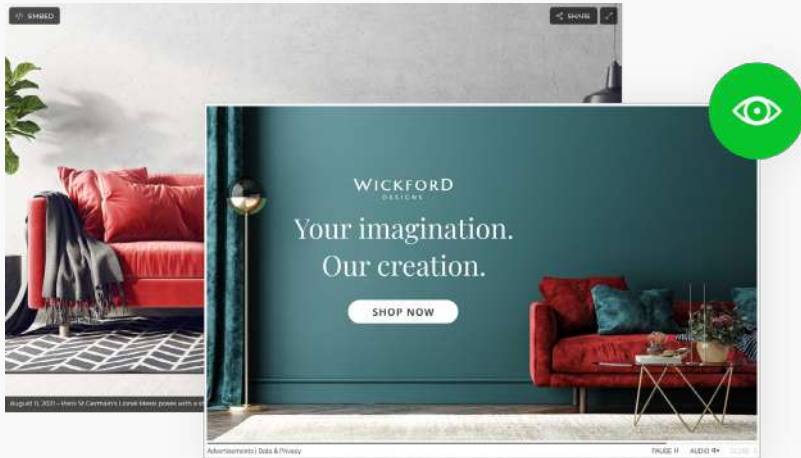


Percentage of people who find contextually relevant ads more compelling than those served without considering context.²

When you consider that headlines and images are the first things to attract a user's attention online, serving advertisements within these images, rather than as standalone banners, makes a lot of sense. According to research conducted by Nielsen, SmartFrame's in-image ads are perceived as 34% more relevant and 14% more memorable than display ads, with a 22% increase in engagement.*

The growing interest in contextual targeting, driven by the shift away from cookie-based behavioral targeting, is also partly responsible for this trend. As brands and marketers look for new ways to reach audiences while respecting user privacy and complying with regulations, contextual targeting has gained prominence. This, in turn, has led to increased interest in exploring the synergy between in-image advertising and contextual targeting.

* Nielsen Digital Content Evaluation measures the impact of native, social or branded digital content by exposing a relevant and representative sample of online panelists to a campaign's content. Commissioned by SmartFrame, this study assessed whether the content generates better engagement for advertisers by providing a better visual experience for users. This research analyzes 1,200 responses surveyed in August 2021.

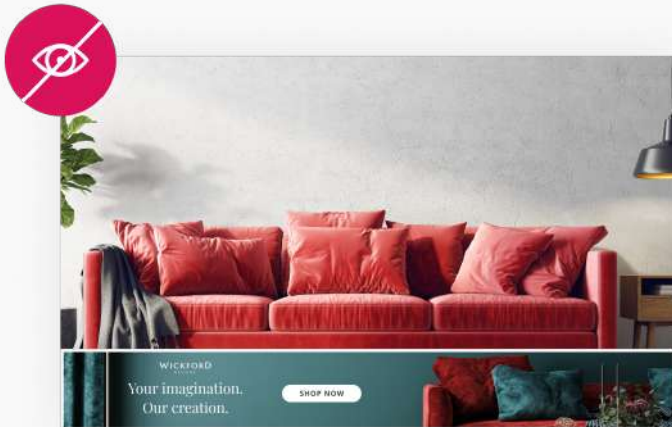


What does in-image advertising look like?

It's likely that you've already encountered in-image advertising. This can take many forms, but the most common type is the banner ad that occupies around 10-15% of an image, typically at its base. These ads vary in composition, but most feature a small creative element with some copy, along with a call to action (CTA).

Other types of in-image ads include simple links to product pages and video ads that appear when the user hovers over, or clicks on, the image. Hotspots, which link products displayed in images to their respective product pages, are also sometimes used as a form of in-image advertising.

These formats have been around for some time and all share one common characteristic: they only occupy a portion of the image, leaving the rest of it visible. For the ad to stand out, it must be prominent enough to be noticed and understood. However, if the ad is too large, it risks obscuring the image and irritating the viewer, meaning that neither the image nor the ad is displayed in an optimal way.



Contextual targeting aims to be relevant to the content the user is viewing at that particular moment.

With size being a key concern, finding the right balance between messaging, creative design, and the call to action is crucial. Additionally, problems with brand association can arise if an ad is displayed alongside undesirable content, such as a controversial celebrity or an organization accused of unethical behavior.

The newest form of in-image advertising takes a different approach to address these issues. Instead of placing an ad within the image and obscuring some of its details, the ad temporarily occupies the entire image. This provides far better visibility for the advertiser and allows the user to engage fully with either the ad or the image, rather than a compromised version of both displayed simultaneously. It also works equally well for standard display ads and video ads, the latter of which is often impractical to display within a banner ad.

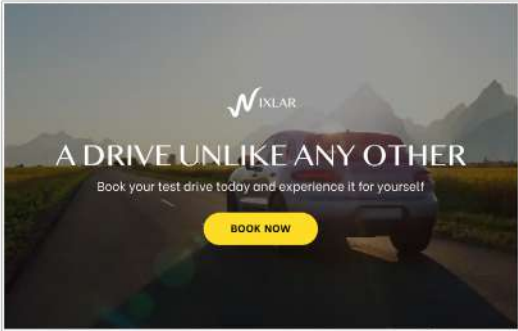
In-image ads generally offer the same kind of functionality and messaging that most users are accustomed to. This can include the option to close the ad, as well as volume control or muting options for video ads. Links to information about why a specific ad is being displayed, along with ad personalization options and privacy policies, may also be included where applicable.

ASQUITH'S AUTOSHomeNews

5 Hidden Features to Check in Your New SUV

Monday 23 March [Written by Jeremy Asquith](#)


The average car today has so much tech shoehorned into it that it's very likely you'll be driving around completely unaware of its many useful tricks. This is arguably more the case for SUV owners than anyone else, given that these models will command a premium and arrive with stronger headline specs – although it's common now for even budget SUVs to pack a raft of surprises.

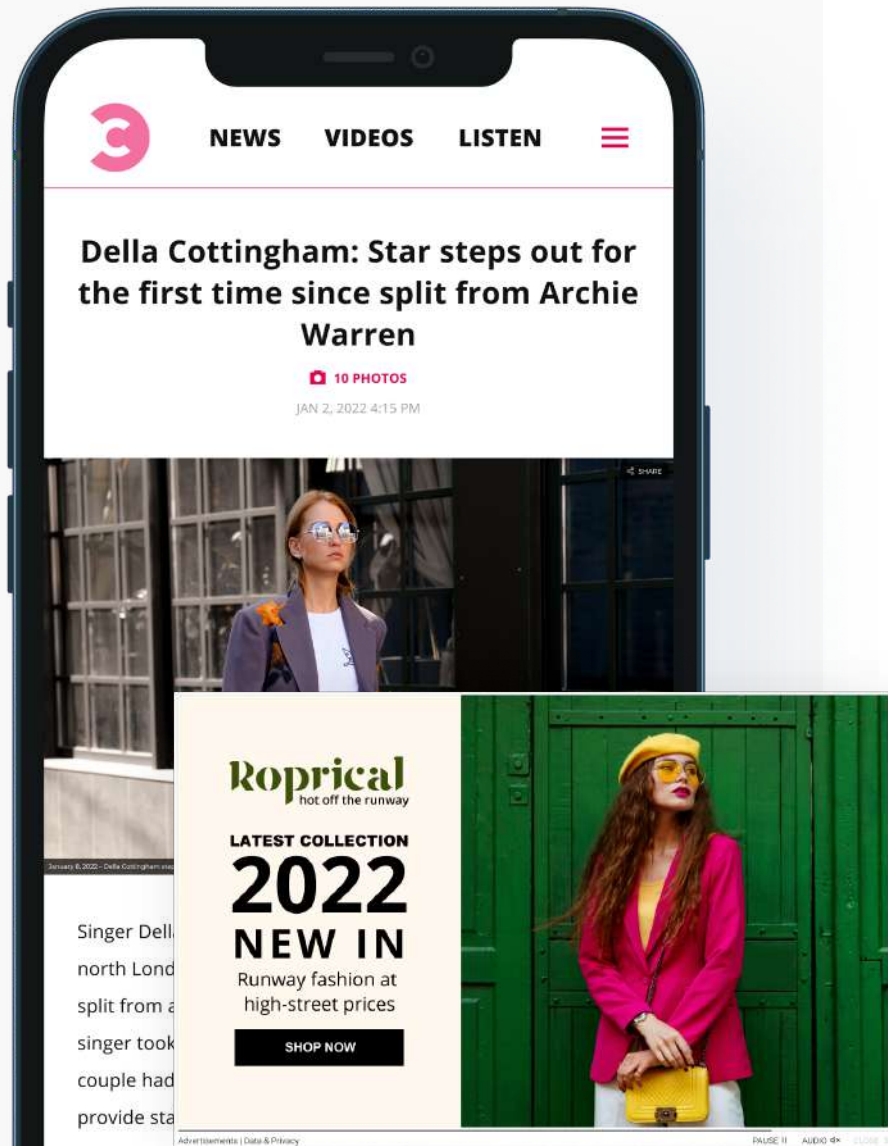


Advertisements | Data & Privacy

PAUSE R AUDIO 4x

These features range from different lighting and locking options, window and sunroof customisations, changes to the operation of front- and rear-assist systems, and multimedia settings that simplify navigation and option recall. On many models you can also boost your overall safety in various ways, such as by customising visual and aural warnings and programming reminders for when certain things might need your attention.





The singer, whose smash hit Candy spent three weeks at the top of the charts last year, was dressed in oversized white jeans, a white top, and a floral blazer. She is believed to have bought the Hampstead townhouse she shares with Warren two

BEHAVIORAL OR CONTEXTUAL?

The specific advertising displayed within an image depends partly on whether the underlying ad tech uses behavioral or contextual targeting.

Behavioral targeting is based on a user's previous online activity, which means that ads served using this method may not relate to anything else displayed on the webpage being viewed at that moment. This type of targeting has been a mainstay of in-image advertising to date, but the decline in support for third-party cookies makes it increasingly difficult to implement. Even if regulations allowed it to continue, it's uncertain whether brands would want to rely on it; in one study, 64% of people found ads to be annoying and intrusive, with security and privacy concerns frequently cited as key reasons for using ad blockers.³

Contextual targeting, on the other hand, aims to make ads relevant to the image and webpage on which they appear. Since it doesn't rely on tracking information, this approach not only avoids the privacy issues associated with behavioral targeting but also ensures that ads are shown to an audience engaged with related content at that moment. This helps create more relevant and cohesive online environments, which can improve user satisfaction. Contextual targeting will be discussed in greater detail later in this guide.

Why advertise within images?

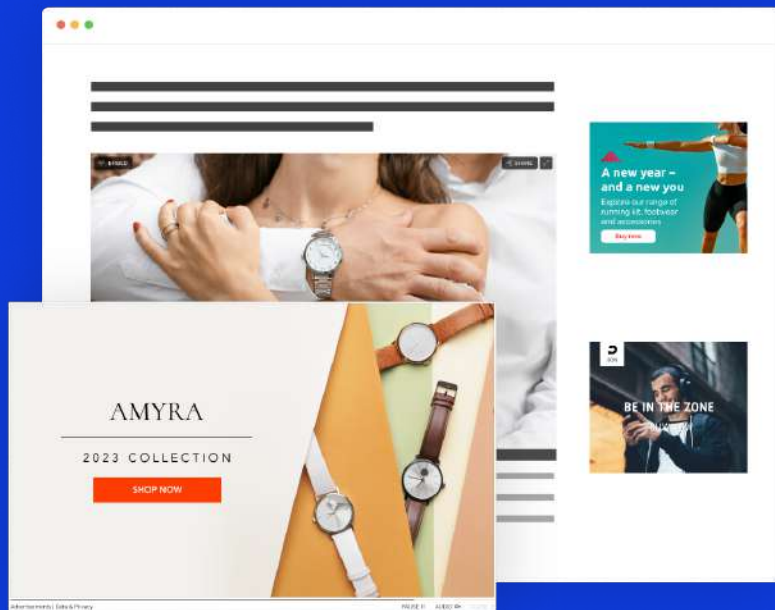
Images are an essential part of online content. They engage viewers, illustrate the subject matter, and help users quickly assess where to focus their attention.

The prevalence of images online can be partly attributed to the growing ease with which we can capture and share them today. While it's difficult to measure exactly how many images are captured each year, it's estimated that around 1.5 trillion images were taken in 2022 alone.⁴

Although most of these images won't end up online, the fact that many social media platforms – from established networks like Pinterest, Instagram, and Snapchat to newer arrivals like BeReal – are centered on image sharing highlights just how vital images are online.

Capitalizing on the interest they generate, therefore, is a no-brainer. But what specific advantages does in-image advertising offer that conventional advertising cannot match?





Images that are used to display ads may feature additional interactive functionality that makes them more engaging, such as CTA buttons, captions, and sharing options

VISIBILITY

Images are typically one of the first elements that attract a viewer's attention, so advertisements placed within them have a much better chance of being noticed compared to banner ads located around a page's content.

Advertisements served within the leading image of an article are clearly more prominent than, for example, an MPU positioned at the side. By placing an advertisement in an image that is already part of the webpage's content, the viewer is far more likely to notice it.

ENGAGEMENT

Images published online today may feature a host of interactive functions, such as full-screen buttons, zoom controls, integrated captions, and options to share them on social media platforms and beyond. Online audiences are becoming accustomed to engaging with these types of controls, so placing advertisements in these spaces increases the likelihood that they will interact with them in some way.

CONGRUENCE

While ads should carry a label identifying them as such, blending them into a page's existing architecture – rather than introducing additional units that shift content around – creates less fragmentation and improves the user experience.

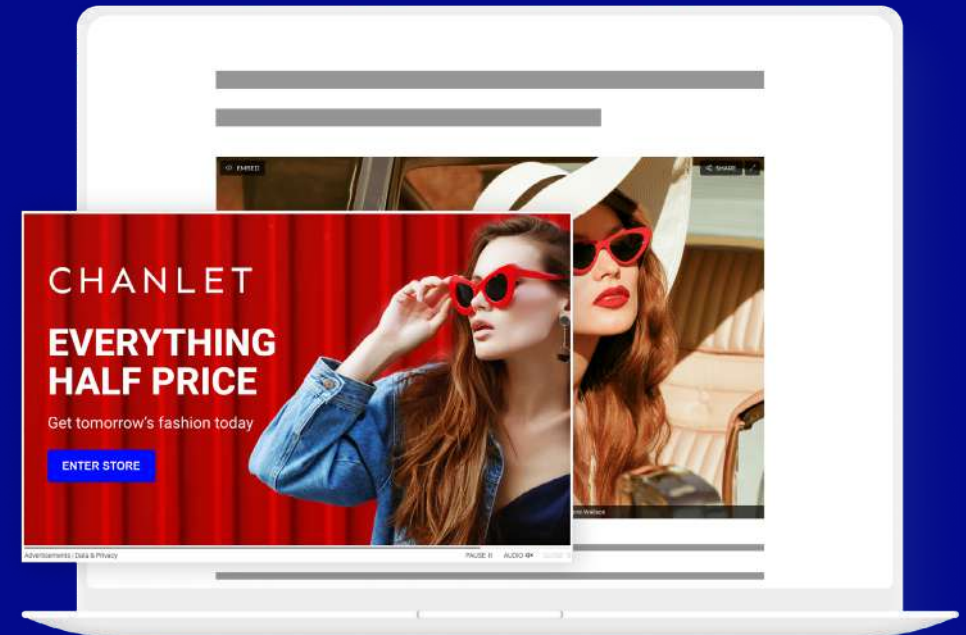
SIZE

As images may occupy a significant proportion of a page, advertisements served within them can be far more prominent than standard banner ads and MPUs. This is especially true for modern forms of in-image advertising, where the entire image is momentarily occupied by an advertisement.

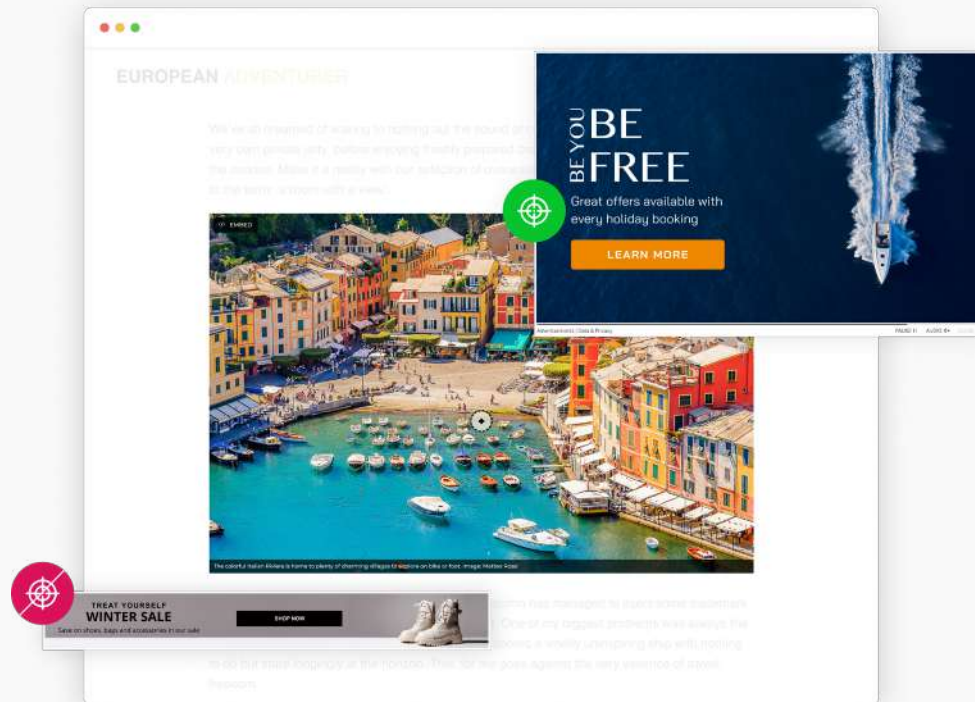
DYNAMIC SELECTION

As many webpages contain several images, a decision needs to be made as to which ones should carry advertisements. Clearly, it's not advisable to serve ads in all images capable of displaying them, therefore, the ad tech system used must identify and select images for maximum visibility while leaving the remainder of the page's content intact.

Additionally, it is important to implement a method for capping the frequency of ads to ensure user satisfaction. This can now be achieved through contextual targeting, without relying on personally identifiable information.



Ads served within images can occupy the same space as images, which means they stand a far better chance of being seen than conventional banner ads



Contextual targeting aims to be relevant to the content the user is viewing at that particular moment, rather than what the user may have previously looked at online

What difference does contextual targeting make?

Advertisements served within images can be based on behavioral or contextual targeting.

Behavioral targeting understands who it is targeting by using third-party cookie data, rather than the content in the environment in which the ad is displayed. That means it may target the right user, but not at the right moment; the user's mind may be elsewhere, and there is a chance that they may no longer be interested in the service or product being advertised.

It's unlikely, for example, that the user would be interested in advertisements for holiday deals once they had returned to work, or for a pair of shoes post purchase. True, third-party cookies may be used to record whether the user had followed through with a purchase, and this could then be used to adjust advertisements accordingly. But if they had bought a product on a different device, in a different browser, or offline, this information would not be available. So, behavioral targeting takes the user rather than the moment into account, whereas contextual targeting is designed to do both.

While contextual targeting does not rely on tracking information to determine exactly who it is targeting, it operates on the assumption that the user is interested in a particular subject as they view relevant content at that moment. By utilizing information from the image in which an ad can be displayed, as well as the online environment in which it appears, contextually targeted ads can be selected to align more closely with the content the user is viewing.

This approach addresses the main issues with behavioral targeting, namely the jarring nature of ads that bear no relation to what the user is currently looking at and the perception that a third party is tracking the user's activity.

Studies have shown that online audiences prefer to see advertisements relevant to the content they are currently viewing.^{5,6} An obvious reason for this preference is that it helps create a more cohesive online environment, but studies have also noted additional positive effects for brands. One study, for example, revealed that contextual targeting increased purchase intent by 63% compared to audience- or channel-level targeting, and that contextual targeting led to an 83% greater likelihood of consumers recommending a product shown in such an ad over one displayed via audience- or channel-level targeting.⁷

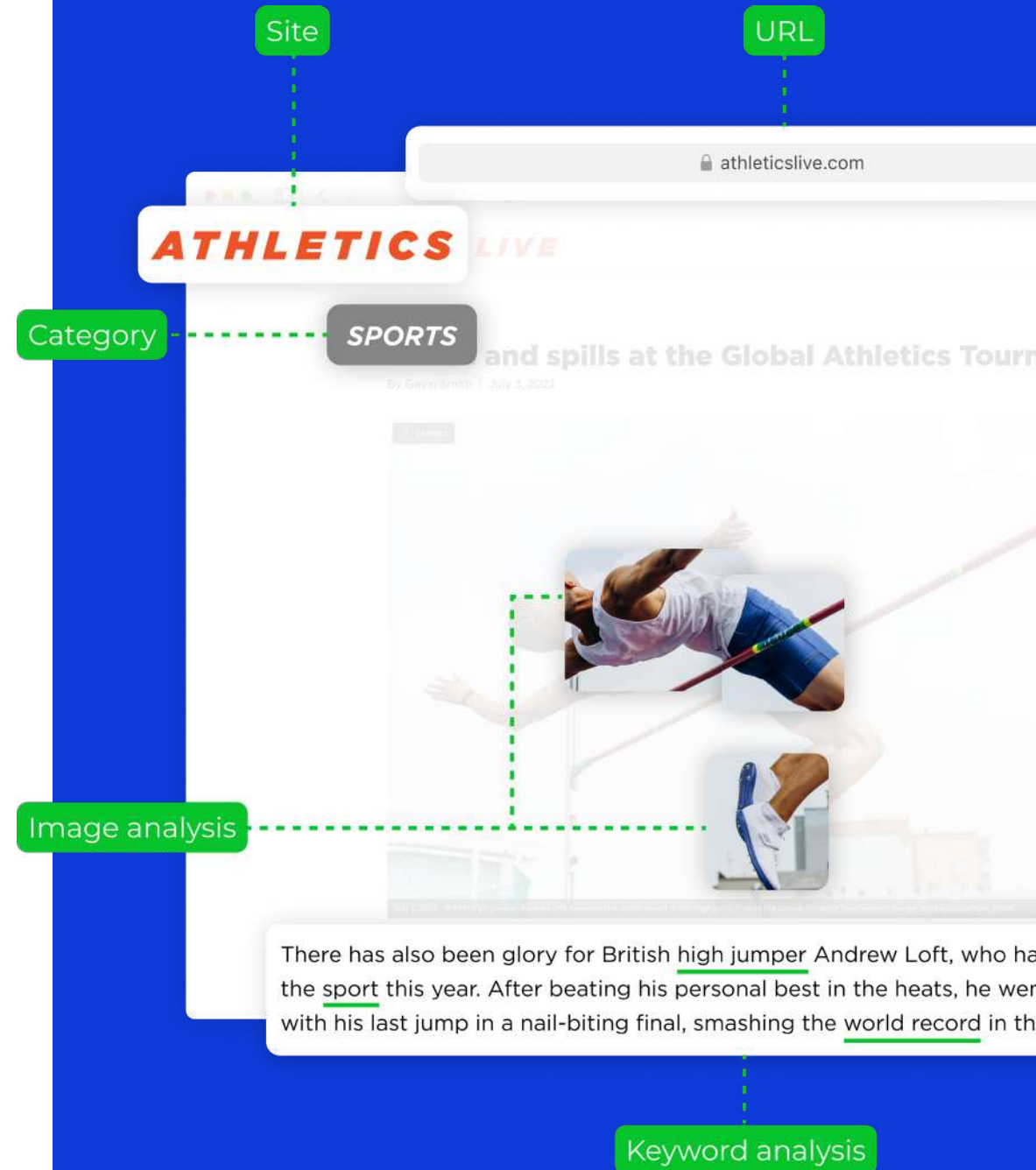


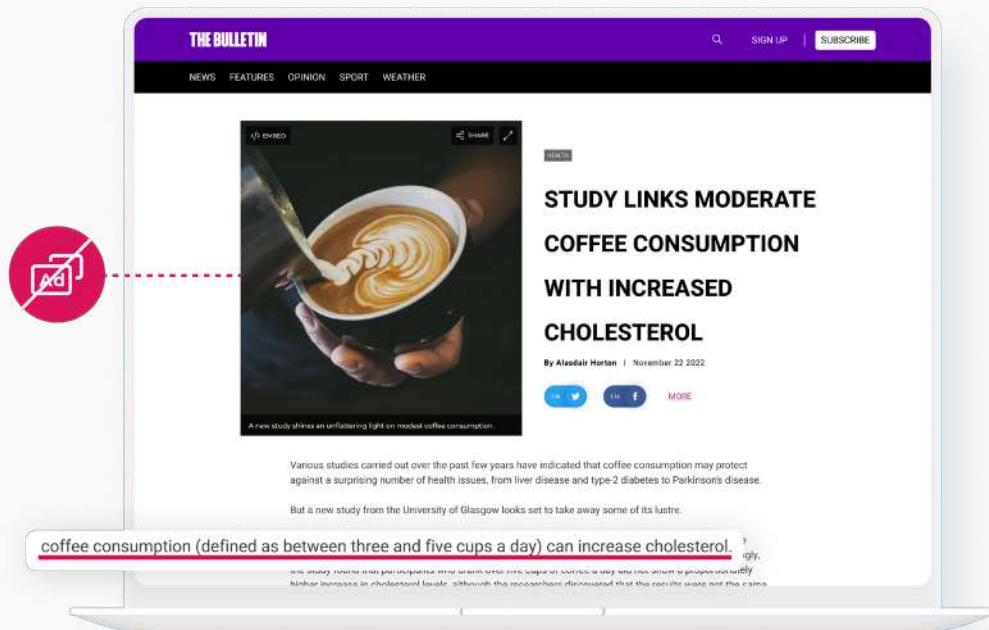
How do we determine contextual relevance?

Contextual targeting works by displaying an ad in an environment deemed relevant to what's being displayed. But how is this relevance determined?

Much of this relies on contextual signals, which help to build a picture of what the user is viewing. At a basic level, these signals include keywords within the body of an article, as well as headlines and subheadings on the page, in addition to the topic or category to which the content belongs and the URL of the site.

Understanding what the user is looking at is just as important for determining which ads to show as it is for deciding which ads not to show. Identifying keywords that could be problematic and comparing them with terms on a negative keyword list specified by the advertiser can help prevent a brand's advertisements from appearing alongside questionable content.





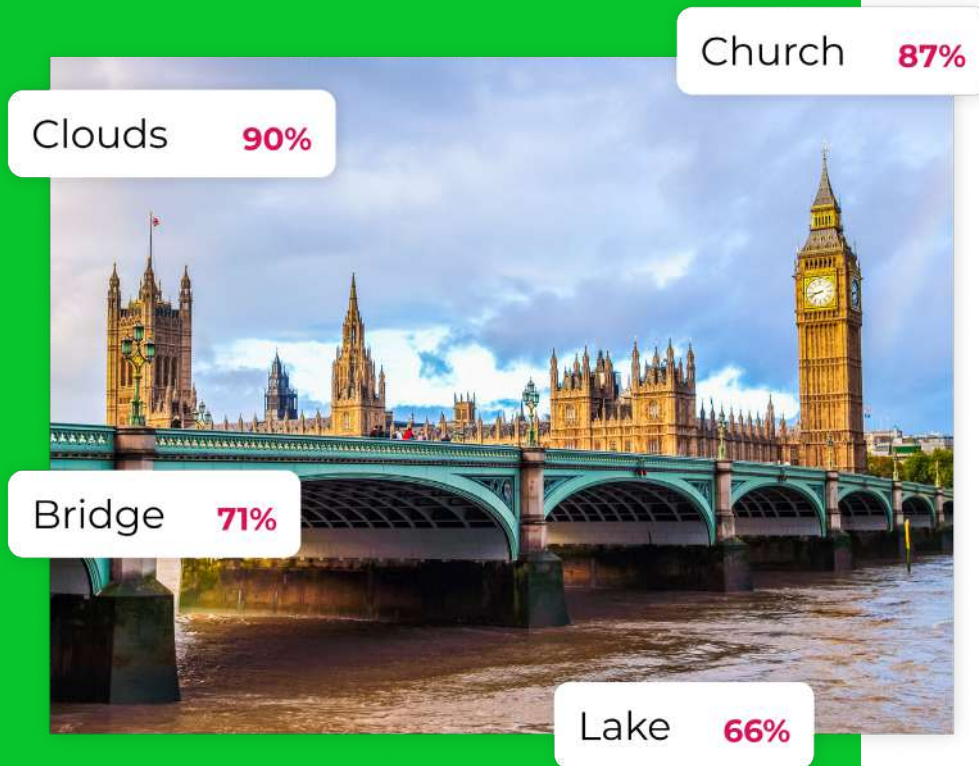
By developing a complete understanding of what's happening on a webpage, brands can ensure their ads are shown in an environment that is not only relevant and safe for their brand but also more likely to lead to positive reception of their ads.

This is brand safety at a basic level, but semantic analysis can build on this by aiming to understand the article and the meaning of the copy within it as a human might.

Identifying words without context can only tell us so much – and this is can easily be complicated when it involves words that can mean or describe different things depending on how they are used. But understanding the relationships between different words, as well as the nature and tone of an article and any emotions expressed, helps to create a more specific picture of the content itself.

This provides a stronger foundation for determining what might be an appropriate ad to display within it. It also means that both brand suitability and brand safety can be judged, rather than the latter alone.

Why is it important to combine the two? Let's suppose a news website publishes a story about coffee. You might assume this would be a perfect opportunity for a coffee chain to advertise its new products – after all, the user has already indicated some interest in the subject. But suppose the story describes a study that suggests possible health risks from the consumption of coffee; it's unlikely that the same brand would want to remind people of its existence at that particular moment.



Today's AI-powered subject recognition systems can successfully identify many elements in images, but not all of them may be accurate – and such systems have no way of knowing just how accurate they are without human intervention.

Images are an integral part of most online content, and image analysis can complement the methods mentioned above. By detecting images on a page and identifying the subjects within them, it's possible to add another layer of understanding to the content. This is especially important for in-image advertising as the weighting of contextual signals varies across a page; if you're advertising within an image, it's crucial to know what the image depicts.

Additional contextual signals can also be derived from analyzing audio or video content, which helps to develop an even more nuanced understanding of a page. However, as these approaches rely on real-time judgments and a degree of guesswork, the potential for error remains. Only a human can determine whether a machine has correctly identified a subject in an image, and this not only impacts ad effectiveness, but also brand safety and suitability.

Understanding an article and its environment is critical to ensuring a match for the right ads. AI technologies are essential due to the volume and complexity of webpages where ads might appear – manual analysis alone simply isn't practical – although these AI tools cannot guarantee error-free results. Therefore, combining the efficiency of AI tools with human oversight and judgment is necessary. Adding the human element also allows for additional context and insight into images and other content, which AI would not be able to provide.

How can AI help? And can we trust it?

AI-powered image-recognition technologies are now mature enough to play a useful role in judging subjects and ad placements. But just as a nuanced understanding of an article is required to determine its suitability, a clear understanding of what an image depicts is essential to ensure the right ads are matched to it.

This is where AI systems can falter, not necessarily due to a lack of competence – although we can expect them to improve over time as they are trained with a broader range of images – but for two other key reasons.

The first of these relates to the quality of the images these systems may need to assess.

Images that feature well-defined subjects with clear details are easier to evaluate than those that are blurry, obscured, or affected by artefacts.

While it's true that most images accompanying an article or news story would typically meet the technical standards for publication, there are many reasons why an image that doesn't meet these standards might still be valuable and used.

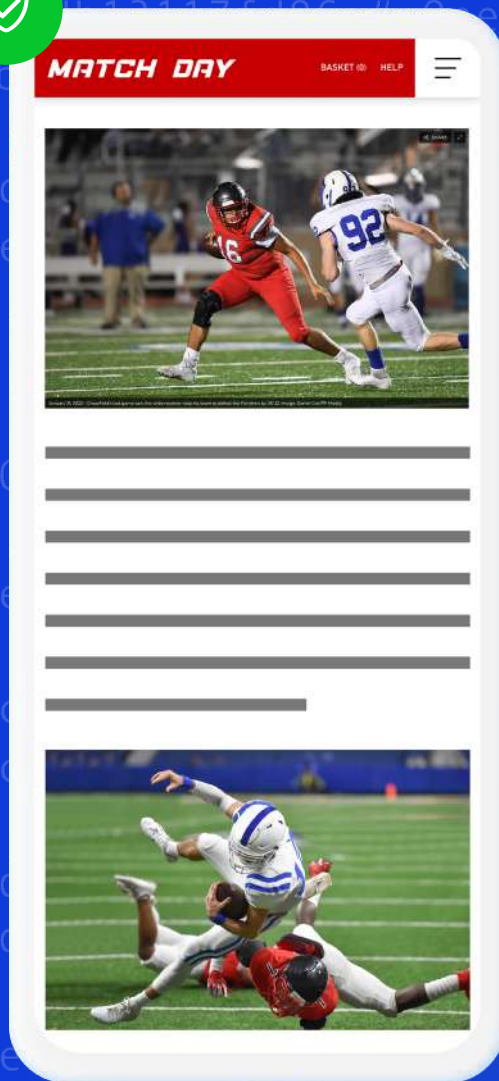
For instance, images captured during unfolding events, in challenging conditions, or by non-professional photographers who happened to be in the right place at the right time with a smartphone or consumer-grade equipment, may still hold significant value.





The second issue is that an image-recognition system can only deduce so much from a single image presented without context. For example, if such a system is tasked with analyzing an image of a movie star at a premiere, it would likely recognize the person as human and identify their clothing. A more advanced system might even determine which celebrity is featured. Without human-input metadata, however, it would struggle to identify the specific movie being promoted, the location of the event, the film's genre, and other potentially useful details for determining ad suitability and effectiveness.

This is why combining subject recognition with verifiable metadata makes sense. Metadata provided by the photographer or the image library hosting the image can offer a broader range of terms for contextual targeting. Not only does this enhance targeting accuracy, but it also has the advantage of being manually reviewed by a human, ensuring accuracy and relevance beyond what AI tools alone can provide.



Choosing the right ad tech partner

Any reputable in-image advertising technology will work with a number of other partners to ensure its solution is robust and safe, and will communicate the steps publishers should take to protect their site and reputation. So what are the main factors to consider here?

TRANSPARENCY: WHO CAN SELL YOUR INVENTORY?

Ads.txt files are simple text files designed to combat fraud and improve transparency in programmatic advertising. These files specify which partners are authorized to sell a website's inventory for advertising purposes.

The file itself is uploaded to a website's root domain and is publicly accessible. You can check this by adding **/ads.txt** to the end of a domain. An ads.txt file is required for sites preparing to display in-image advertising, but if your site currently makes use of programmatic advertising, you may already have one. In that case, you simply need to add the relevant details for the ad tech platform responsible for serving in-image ads and re-upload the file to your site.

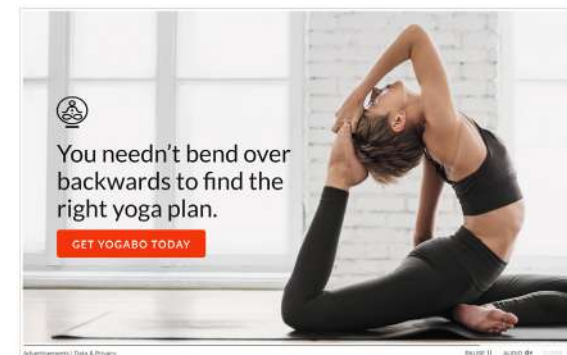
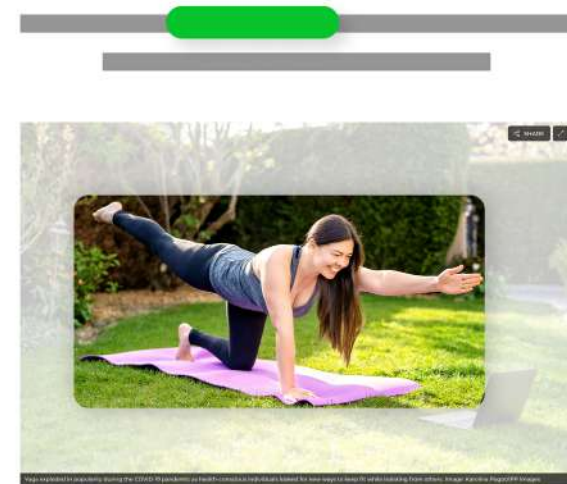
CONTEXTUAL SAFETY: MAKING SURE THE PAGE IS SUITABLE FOR THE AD

If you're an advertiser, you'll want to ensure that your ad appears on pages that are appropriate and aligned with your brand. No brand wants its ads displayed in suspicious environments or next to objectionable content. For this reason, your ad tech partner should have a system in place to analyze webpage content to ensure brand safety.

CREATIVE SAFETY: MAKING SURE THE AD IS SUITABLE FOR THE PAGE

If you're a publisher, you will want the reverse of the above – that is, assurance that the ads served alongside your content are safe and appropriate. Low-quality or harmful ads should be blocked immediately. Your ad tech provider must ensure all ads are thoroughly vetted to prevent misleading content and to protect users from malicious elements, such as phishing attempts or malware.

Publishers need to be sure that the messaging and creatives within an ad – as well as any links that lead from it – do not deceive the user or tarnish the publisher's image in any way



Where do we go from here?

In-image advertising has been around for some time, but the shift away from third-party identifiers and invasive behavioral targeting has prompted brands and marketers to think differently and seek new solutions. These emerging strategies are being shaped by recent research that provides insight into what today's consumers want and expect.

For instance, studies show that most people prefer advertising that is relevant to the content they're consuming. Many are also tolerant of personalization or even desire it, provided it doesn't rely on tracking previous activity.

Research further suggests that most users are willing to share first-party data with trusted websites. This highlights the importance of building and maintaining strong relationships with audiences, rather than viewing them as transient visitors. It also encourages businesses to assess whether their current marketing

strategies are truly effective or if they're missing opportunities by not fully capitalizing on this trust. Additionally, it makes clear that contextual targeting should not be seen as a one-time solution, but rather as part of a holistic approach to understanding and engaging with audiences.

The best examples of in-image advertising take these factors into account, delivering relevant, high-impact ads that audiences expect and are happy to engage with. The effectiveness of such campaigns will vary by provider, but those who balance the evolving needs of consumers with the right mix of human oversight and AI intervention are most likely to succeed.

As the industry evolves, the coming years are likely to be a turning point for in-image advertising. With growing interest and more companies driving its development, it is poised to become an essential part of the future online advertising ecosystem.



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ABOUT SMARTFRAME TECHNOLOGIES

Founded in 2015, SmartFrame Technologies is a London-based software provider that's redefining the digital image standard. Its SmartFrame platform allows content owners and brands to protect their assets and present them in the best possible way, while also allowing publishers to source and embed high-quality images, and for everyone involved to generate new revenue streams by way of in-image advertising.

CONTACT US

To find out more about in-image advertising, get in touch with us today.

