

EX1050

Dear MarTech Maestro,

I think of pixels as little squares of light on screens – TV, monitor, phone, etc. I know that we somehow also use 'pixels' to track ads. Are these two different definitions of a 'pixel'? If not, exactly how and why are they related?

Sincerely,
PixelatedAndConfused

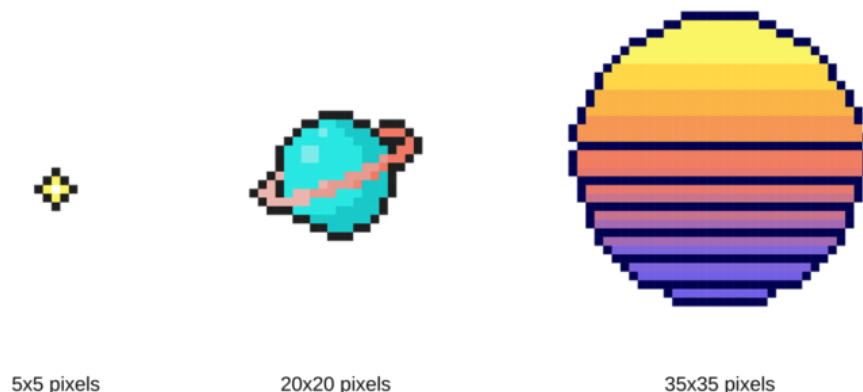
CAN YOU SEE IT? PIXELS AND SCREENS

PixelatedAndConfused,

What an excellent question – and yes, these two things are directly related. Conceptualizing a pixel as a single dot on a screen is indeed the best way to start.

Next, think about how many pixels it takes to display even a basic letterform or icon on a screen. Chances are it would take at least 16 pixels (4×4) to even convey something very simple. Most favicons are at least 16×16 – that's 256 pixels for what amounts to a tiny emoji.

So then, what does it look like to have an image that is just one pixel? Would you even notice it? What if it was also transparent?



THE OLDEN TIMES | GEOCITIES AND USER VISITS

To tie this all together, let's time travel back to the late 90s when pants were big, hair was spiky, and the web was just in its infancy. For anyone as ancient as I am, you'll know the pinnacle of tech was to have your own GeoCities

website with scrolling text and a visit counter on the bottom of every page.



Of course, the content on these sites was invariably terrible, and 85% of the visits were likely from someone's mom refreshing endlessly. The answer was obvious – we needed better content!

But as young techies driven by pageviews like gen z is driven by likes, we, of course, decided to get creative in a morally ambiguous way and cheat the system to look like big-time players.

One way to do that was to 'trick' people into unknowingly visiting your page by inserting the entire URL into message boards, causing it to load every time someone went to that board. We would do this by passing the URL as the source of an image that was set only to be 1 pixel by 1 pixel, like this:

You'll notice this isn't actually an image – no worries, a browser will load it in full anyway. Nobody looking at the message board would know that this imperceptibly tiny dot was actually loading the index page for my Zach Morris Fan Club site and triggering the visit counter every time. Lookout, I'm about to hit 500 pageviews!

SOMEONE GOT SMART | TRACKING PIXELS

Eventually, dynamic coding with languages like PHP and Javascript made it easy to do many more interesting things with our HTML. The smart digital marketers started using this former black-hat, pixel-planting method for legitimate website tracking with much success.

See, with dynamic code, you can put logic into your web page that collects information out of the URL query string and insert them into a database every time a page loads and a user visits a website. Along with these, you can insert other parameters that can be gained from the browser, like the IP Address, the exact time of day, whether a specific cookie is set, etc.

I know what you are thinking, “Hey, those sound like pretty familiar metrics!” Well, they are. The hitch in adding code like this is that it only works on sites where the marketer has the ability to edit the codebase directly.

But if I’m [a leading digital marketing agency out of Austin, TX](#) (as opposed to a self-publishing Saved By the Bell fan), then I likely don’t have that kind of access to my client’s server. Implementing or maintaining such a setup would be difficult and messy, especially for multiple clients.

But if I set up a page on my own server and have the client put a 1×1 tracking pixel of my page on their page, then my page/database/server can store information about what is happening on the client’s server with very minimal work or input from them.

It’s quick and easy, meaning I can define the schema of what I want to track and keep the raw data consistent from one client to the next. It’s even relatively simple to have a client populate a custom parameter they are using on the page – something like order ID or customer ID. This might look something like this:

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CONCLUSION

Essentially anything that can be added to the query string of my tracker’s URL when it loads in a single pixel can also be captured in a database, provided you know what the parameters are named.

While there are multiple methods to accomplish third-party tracking these days, the pixel method is still used quite often and has proven to be both easy to implement and efficient for the client and the agency. Over the years, tracking methods have migrated to third-party cookies, but recent changes in [web privacy](#) are starting to push the industry back toward methods like first-party, pixel-style tracking.

Here at Adlucent, we track with both third-party cookies AND first-party pixel data for redundancy and for gathering data from browsers that reject third-party cookies *COUGH* *Safari* *COUGH*. We refer to our in-house pixel tracking as the “Adlucent Pixel” and send order and visit data directly into a database in [Deep Search™](#). From a technical perspective, we use a Javascript function that the client can either place on their page or into a tag manager.

While this is implemented in Javascript as opposed to the more rudimentary HTML image tag above, it actually still operates partially by creating a 1 pixel by 1 pixel image that will set a first-party cookie. So, yeah, any single pixel on your screen may be a tracking system shrunk to an imperceptibly small dot on the screen and camouflaged with transparency.

Have any questions or want to learn more about partnering with Adlucent? [Reach out today.](#)

WHO AND WHAT IS THE MARTECH MAESTRO?

MarTech Maestro is here to help you navigate the ever-evolving world of digital marketing technology. With Blair Mundy, Adlucent's Solution Architect, as your knowledgeable guide, you'll never feel lost in a jungle of tech terms. The MarTech Maestro will break down complex tech jargon and answer the questions you've been too afraid to ask. Do you have a question for MarTech Maestro? Anonymity is guaranteed, so let your curiosity run wild!