

Avoiding the Next Headline: Enforcement Lessons and Technical Pitfalls from the Latest State Legislation

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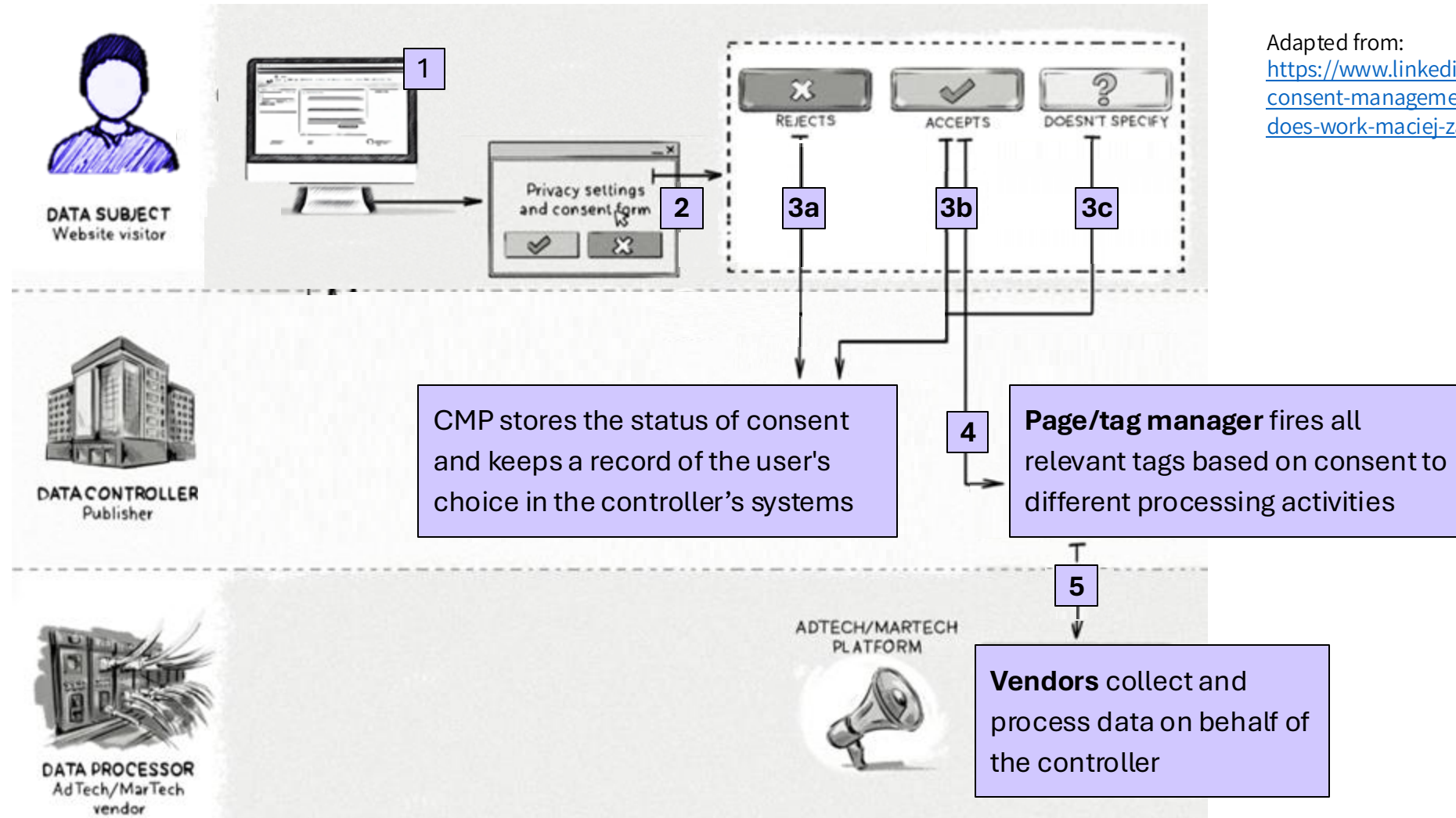
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Agenda

- Pixels Cookies & Tags Overview
- AdTech Ecosystem Explained
- Alternate Tracking Technologies
- How to Manage It All

How Is User Consent Captured And Transmitted?



Adapted from:

<https://www.linkedin.com/pulse/what-consent-management-platform-cmp-how-does-work-maciej-zawadzinski/>

PIXELS, COOKIES, & TAGS 101

What are Pixels, Cookies & Tags?

```
<!-- Facebook Pixel Code -->
<script>
  !function(f,b,e,v,n,t,s)
  {if(f.fbq)return;n=f.fbq=function(){n.callMethod?
  n.callMethod.apply(n,arguments):n.queue.push(arguments)};
  if(!f._fbq)f._fbq=n;n.push=n;n.loaded=!0;n.version='2.0';
  n.queue=[];t=b.createElement(e);t.async=!0;
  t.src=v;s=b.getElementsByTagName(e)[0];
  s.parentNode.insertBefore(t,s)}(window, document,'script',
  'https://connect.facebook.net/en_US/fbevents.js');
  fbq('init', '1885084354934839&ev=PageView&noscript=1');
  fbq('track', 'PageView');
</script>
<noscript></noscript>
<!-- End Facebook Pixel Code -->
```

Pixels are scripts and 1X1 images embedded within websites, ads, and emails that send user info directly to third party servers.

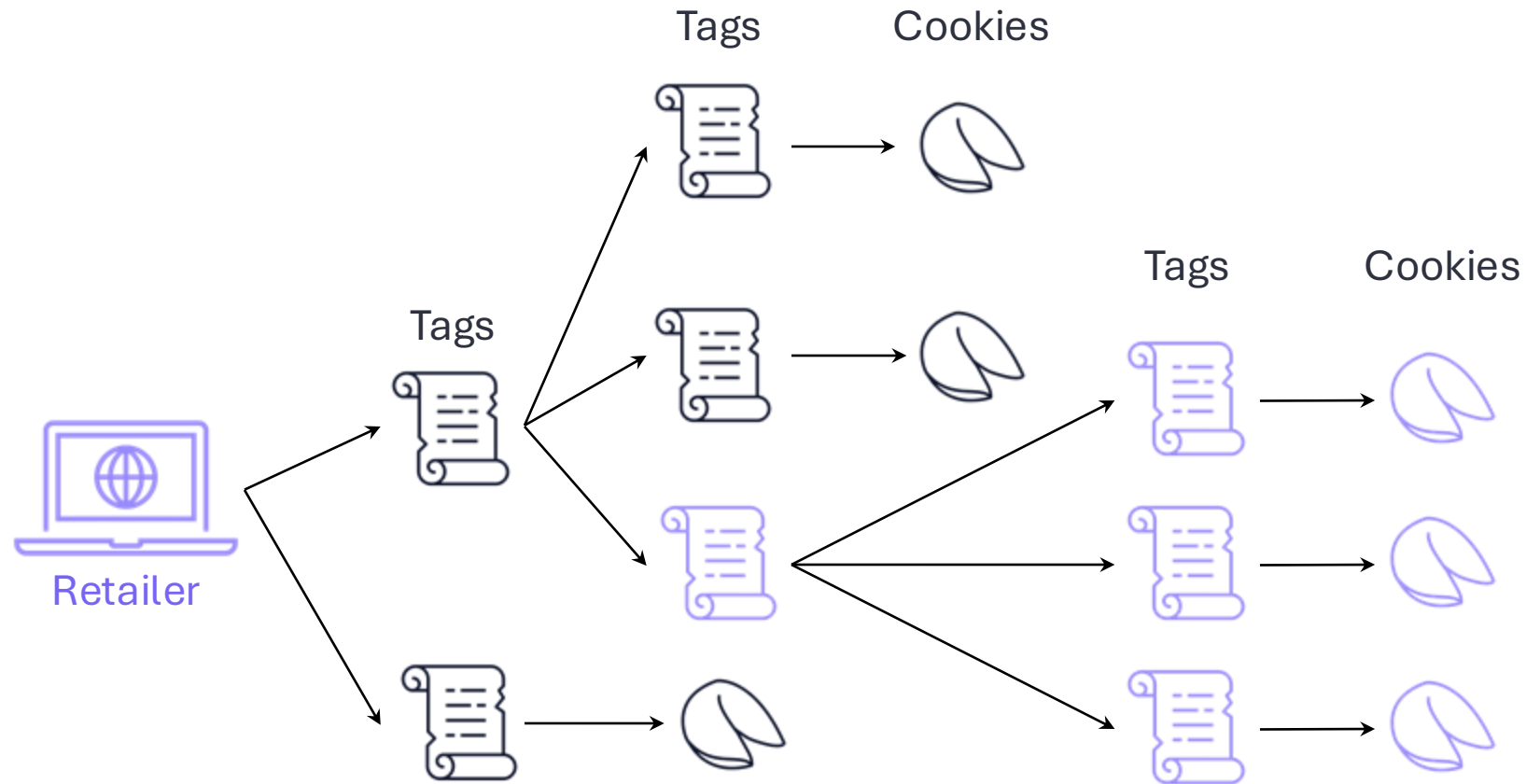
Name	Value	Domain	Path	Expires / Max-Age
S	billing-ui-v3=sJABbfGho2ilSkAnJdqz0HQ...	google.com	/	Session
OTZ	7201252_84_88_104280_84_446940	www.google.com	/	2023-10-10T20:52:22.000Z
NID	511=mKWgeMmONdqERJ34S6wi96f6uel...	google.com	/	2024-03-16T21:51:29.099Z
usprivacy	1NYN	www.google.com	/	2024-09-07T00:29:27.222Z

Cookies record information in a text file to the user's device, to enable services such as personalization, advertising, and anti-fraud protections for the site.

Tags are pieces of code snippets embedded in webpage code that perform a variety of functions on the site. A pixel is one type of tag. Tags can also serve images, enable features, and bring in sub-processors to the user's browsing session.

- Pixels and cookies can track behavior, personalization, analytics, and cross-site experiences
- All cookies function the same - context determines the label (1st vs 3rd party)
- Browsers can limit 3rd party cookies (but only in the technical sense)
- Pixels and cookies work together - pixels can trigger the setting or reading of cookies
- Pixels are often JavaScript-based - collecting richer data and enabling advanced user tracking

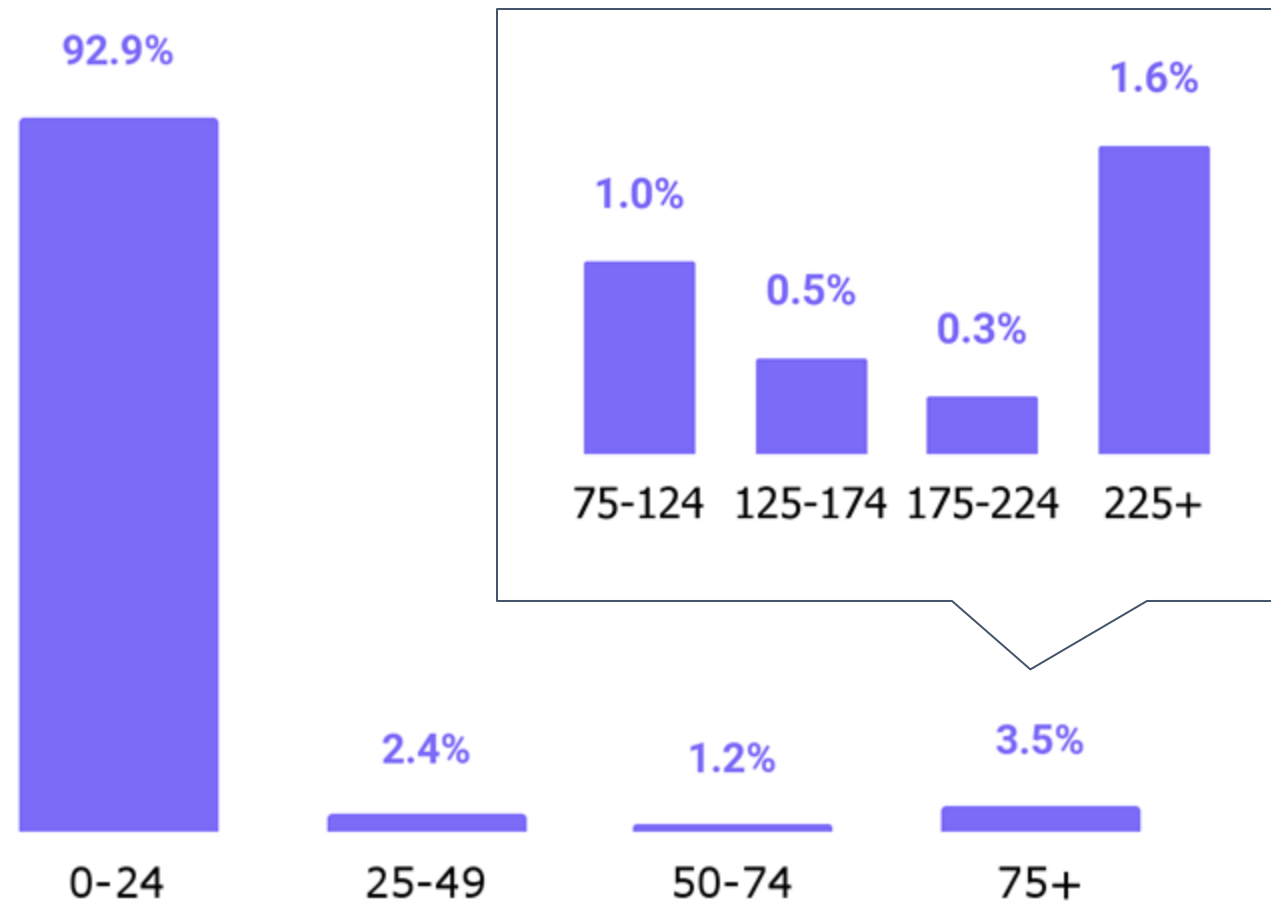
How Tags & Cookies Deploy as a Page Loads



When tags piggyback onto a page, 4th+ Parties can collect consumer data

Quantity of Cookies

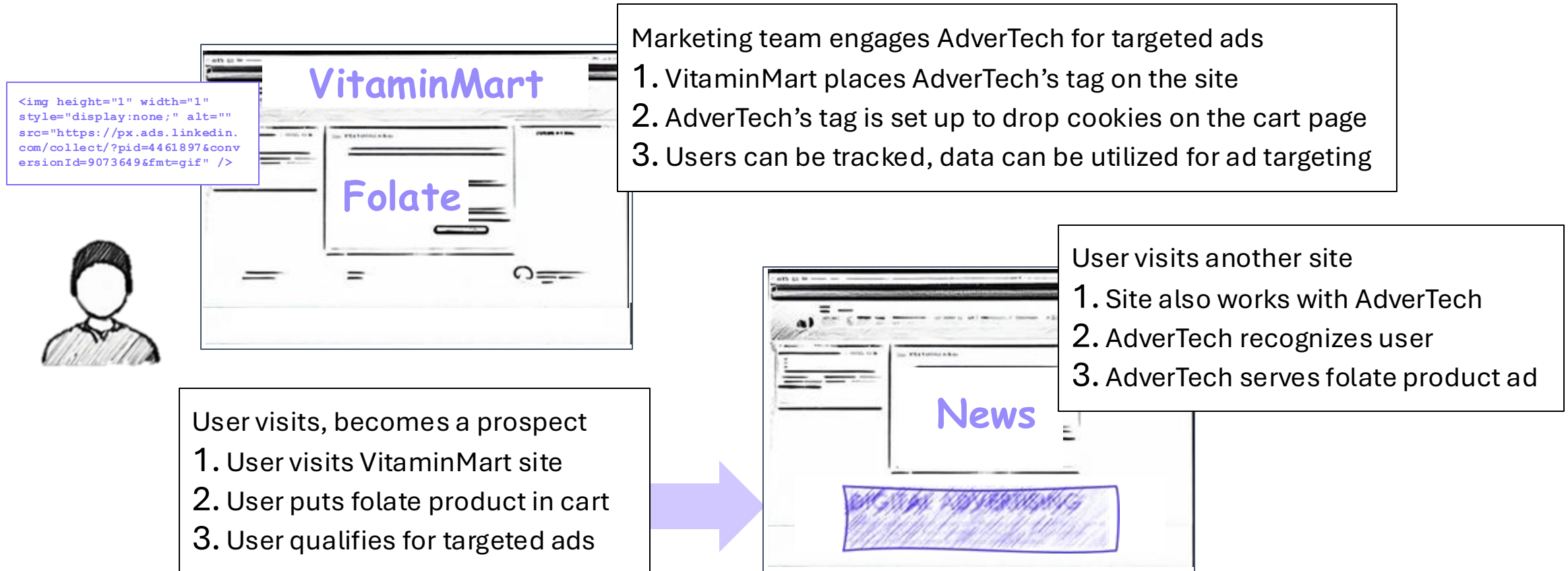
Most home pages have
<24 cookies, while some
exceed **200**



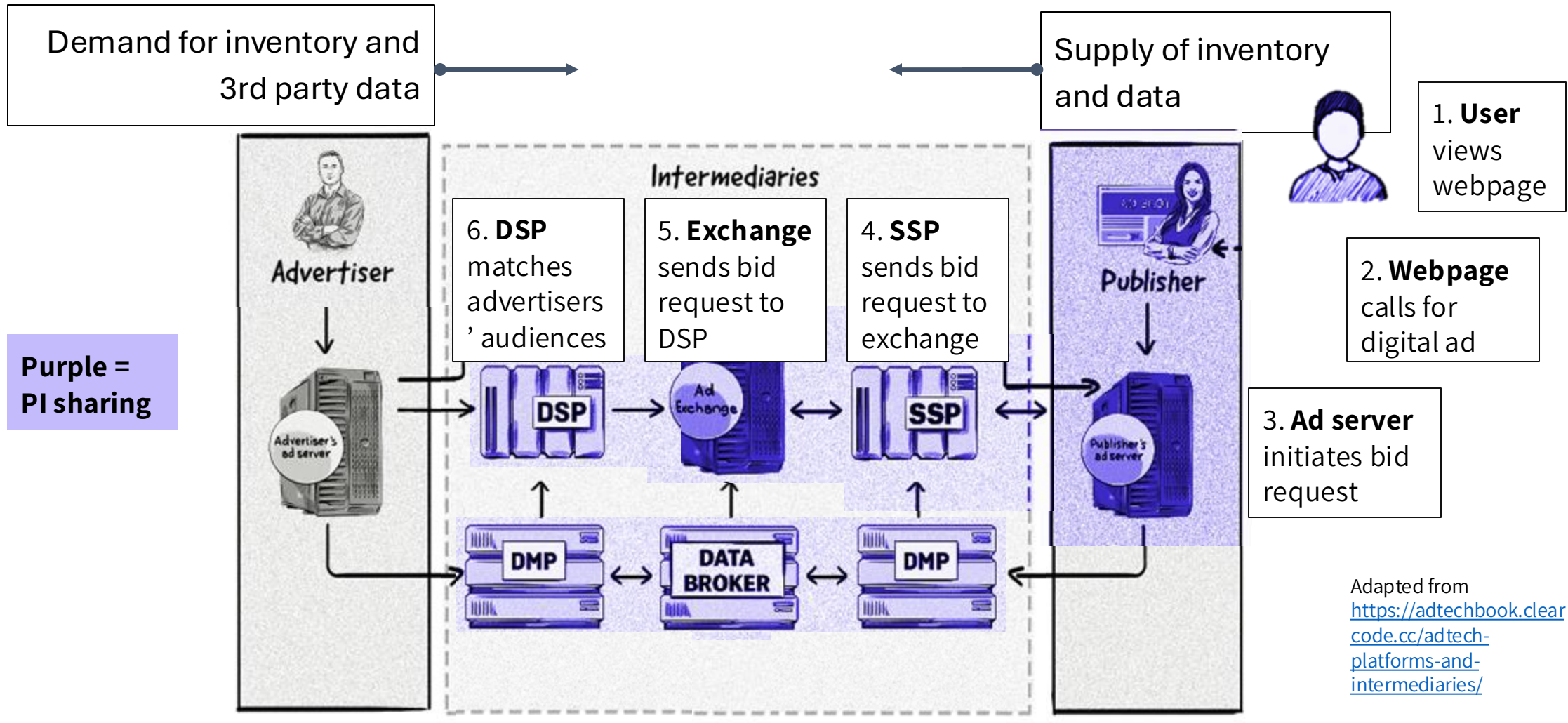
Source: Boltive

ADTECH ECOSYSTEM EXPLAINED

How Do Web Pages Share User Data?



How Does User Information Traverse The Ad Ecosystem?

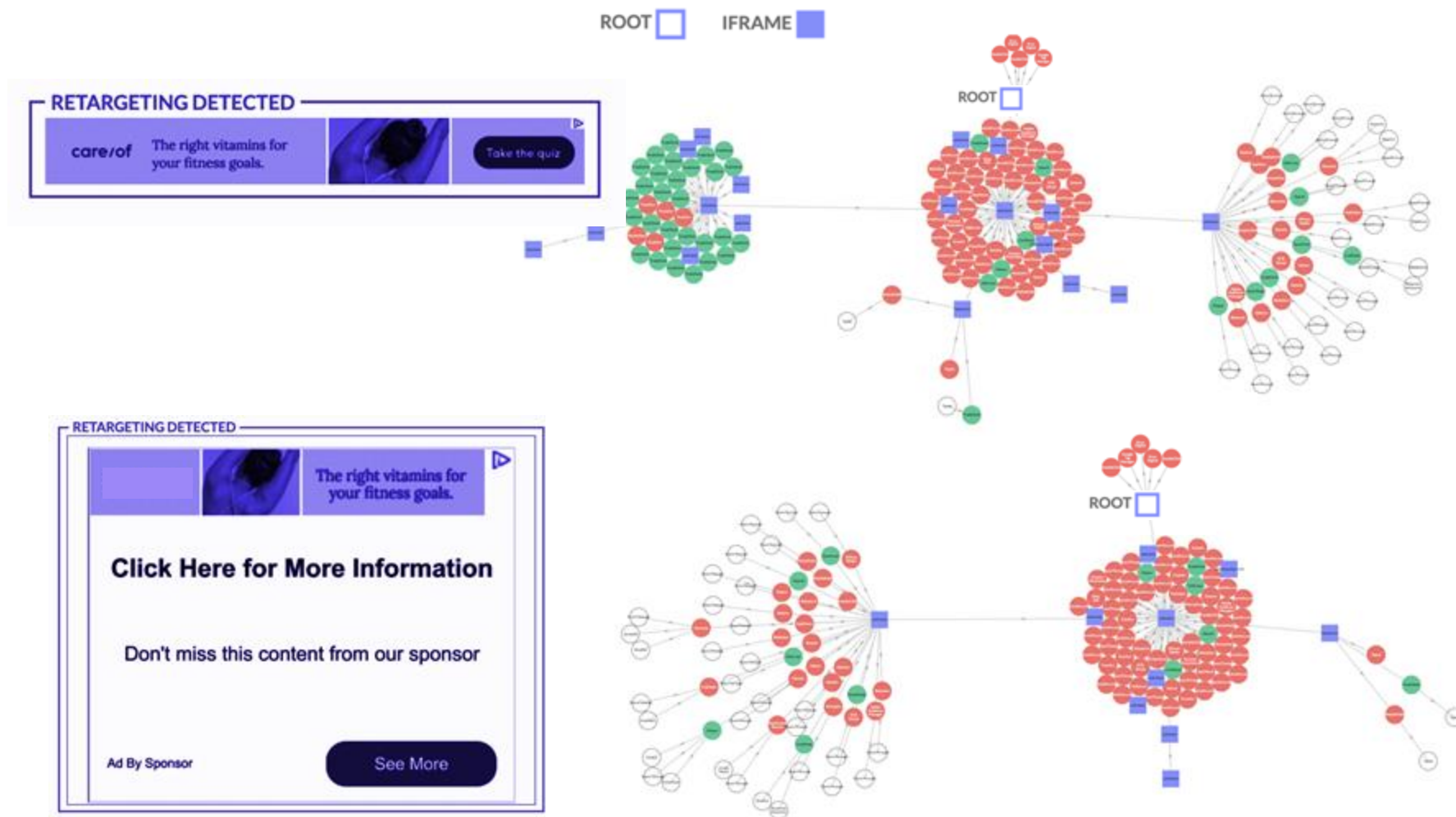


Discovering Personal Health Data Shared Without Consent

Situation: Direct to consumer personalized vitamin retailer

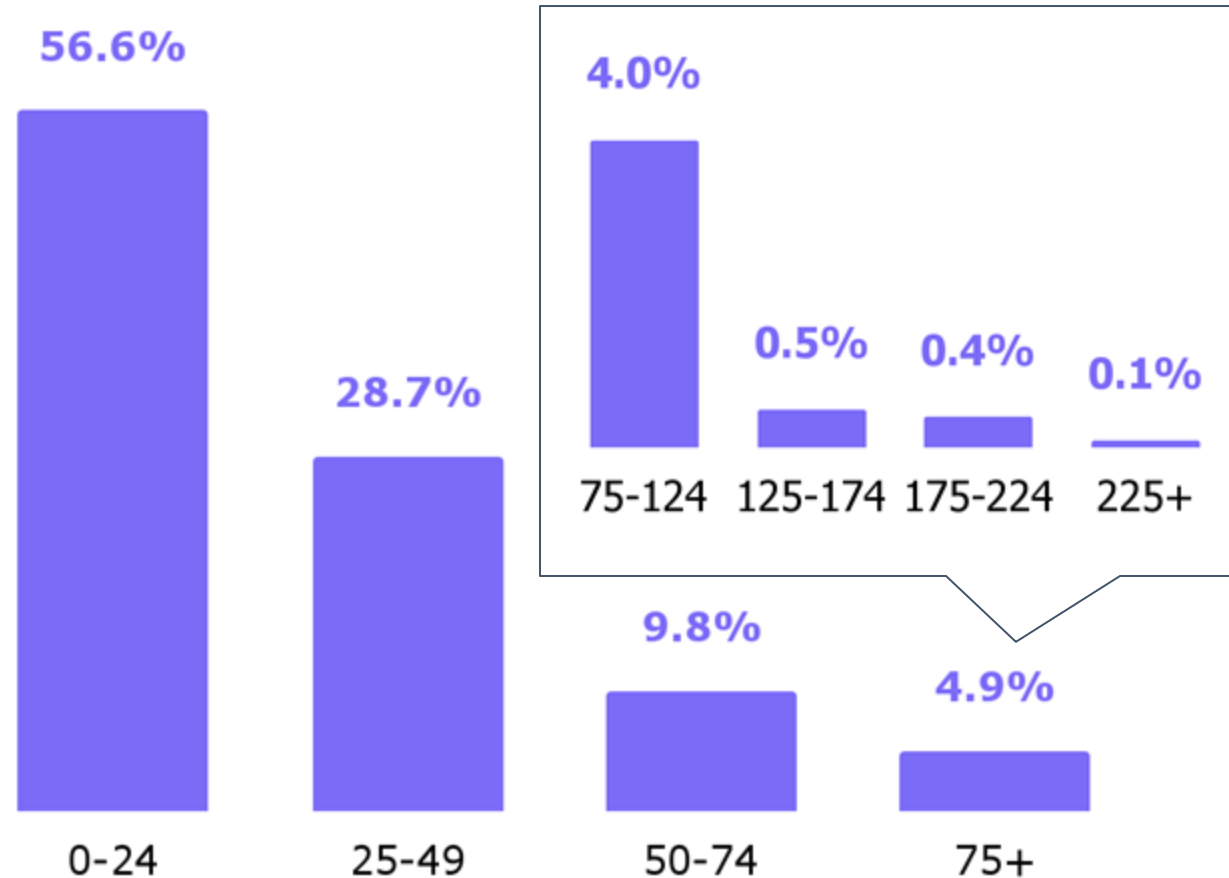
Problem: Hundreds of ad trackers drawn to attractive consumer target

From a study with
CR Consumer
Reports™



Quantity of Pixels and Other Trackers

Most ads have <49 pixels and other trackers, while some exceed **200**



Source: Boltive

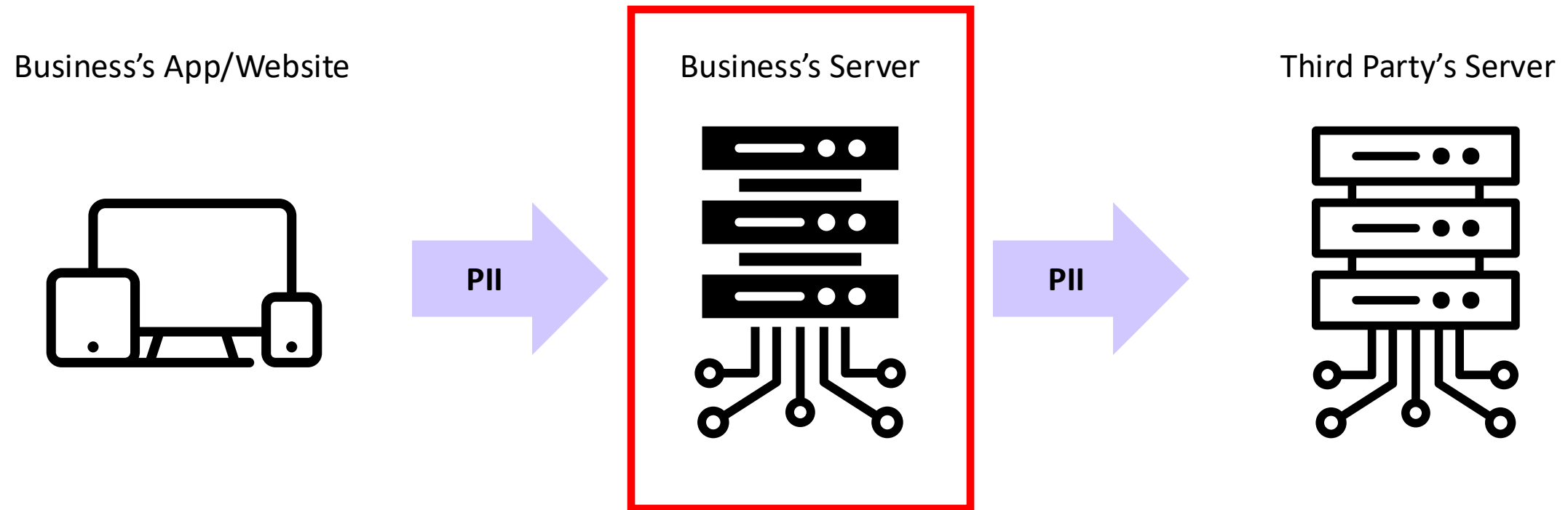
ALTERNATIVE TRACKING METHODS

Alternative Tracking Example: Fingerprinting

```
},  
"connection_type": "wifi",  
"country": "US",  
"cpu_type": "16777228",  
"debug": false,  
"environment": "FULL_APP",  
"facebook_app_link_checked": false,  
"first_install_time": 1674661286723,  
"hardware_id": "BB660FE7-B834-4017-AF26-8CD6FA96A945",  
"hardware_id_type": "vendor_id",  
"instrumentation": {  
  "/v1/open-brtt": "481"  
},  
"is hardware id real": true,  
"language": "en",  
"lastest_update_time": 1674321124000,  
"latest install time": 1674661286723,  
"local_ip": "192.0.0.2",  
"locale": "en_US",  
"metadata": {  
  "skan_time_window": "86400.000000"
```

```
},  
"model": "iPhone14,2",  
"opted_in_status": "not_determined",  
"os": "iOS",  
"os_version": "16.2",  
"plugin_name": "ReactNative",  
"plugin_version": "5.4.1",  
"previous_update_time": 1674321124000,  
"randomized_bundle_token": "1146819458998152596",  
"randomized_device_token": "1146819458909906090",  
"retryNumber": 0,  
"screen_dpi": 3,  
"screen_height": 2532,  
"screen_width": 1170,  
"sdk": "ios1.42.0",  
"update": 0,  
"user_agent": "Mozilla/5.0 (iPhone; CPU iPhone OS 16_2 like Mac OS X)  
AppleWebKit/605.1.15 (KHTML, like Gecko) Mobile/15E148"
```

Alternative Tracking Example: Server-to-Server



Identity Graph Example

NAME	IP ADDRESS	MAILING ADDRESS	PHONE NUMBER	EMAIL	COOKIE	HASHED EMAIL	EMAIL ID
SUSIE Q	11.111.11.111	1 MOUSE LANE MOUSEWORLD	123-23-2345	SUSIE@GMAIL.COM	Hj123l	d7984b9599199b83cc213f1 9cb2906d2	NOP456

HOW TO MANAGE TRACKING

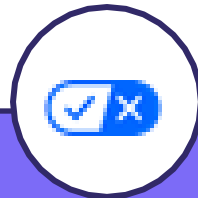
Cookie/Pixel Requirements



Banner or
No Banner



GPC



Do Not Sell or
Share Personal
Information



Disclosures
(privacy notice,
cookie policy)



Contracts

- Trust as a competitive advantage: respecting privacy fosters trust, impacting reputation and loyalty
- Enhanced consumer experience: anticipate consumer preferences and adapt accordingly to create better UX
- Improved ad effectiveness: deliver relevant, high-quality ads and receive better ad campaign analytics
- Mitigate legal and regulatory risks: avoid fines, legal action, and reputational harm stemming from non-compliance

Action Steps to Take Today

- Review consent disclosures and privacy policies
- Schedule regular touchpoints with product and marketing
- Create digital tracker/adtech governance program (e.g. policy, process, scanning, etc.)
- Test consent mechanisms and opt-outs across platforms regularly
- Monitor ongoing regulatory developments

Q&A

Thank You!