

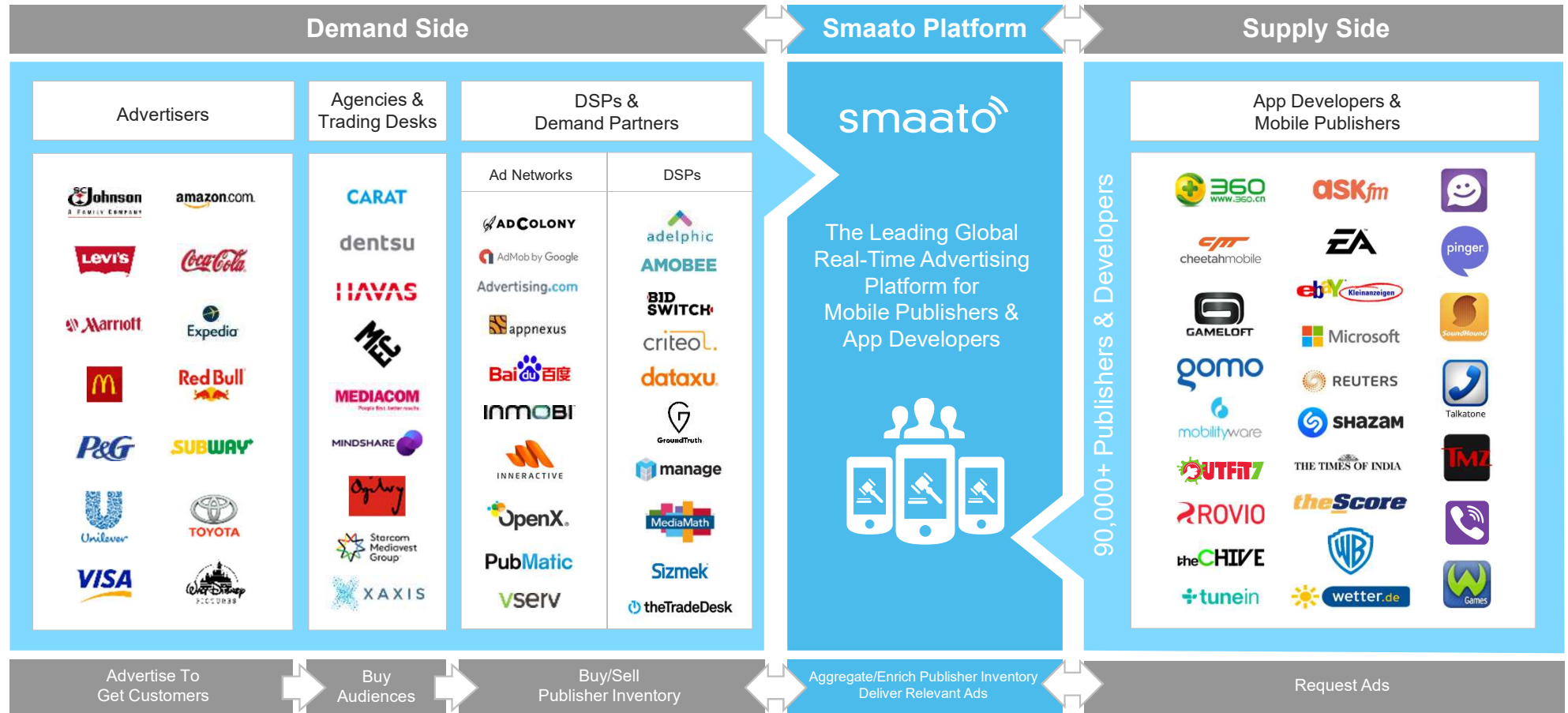


Top Trends That Will Shape the Future of the Mobile Advertising Industry

ARNDT GROTH
PRESIDENT, SMAATO

Complexities of Mobile Programmatic

Who Are All the Players in Mobile Programmatic Advertising?



Connecting Advertisers to the
World's Mobile App Audience
Transparently & Securely



- Direct Relationships With **90,000+** Publishers & App Developers Worldwide
- **1+ Billion** Monthly Unique Mobile Users and **500+ Billion** Monthly Impressions
- Advanced Traffic and Audience Targeting
- Private Marketplace Options

- Connected to Over **450+** DSPs & Ad Networks
- Clean, Protected Mobile Advertising Marketplace & almost 100% Fraud Free
- Global Real-Time Bidding Ad Exchange
- Serving **91 of Top 100** Ad Age Advertisers



San Francisco



New York



Hamburg



Singapore



Shanghai

Top Mobile Advertising Trends

For 2018 and Beyond

smaato[®]



Complexities of Mobile Programmatic



Mobile Video Advertising



In-App beats Mobile Web



Transparency



Enhanced Attribution: Digital to Offline



General Data Protection Regulation (GDPR)



Complexities of Mobile Programmatic

Our Industry Continues to Evolve

Header Bidding

Waterfall Auction

```
# Ads.txt file for example.com:
greenadexchange.com, 12345, DIRECT,
075815479 silversip.com, 9678, RESELLER,
640221 blueadexchange.com, 37426,
DIRECT orangeexchange.com, 45678,
RESELLER silversip.com, 88679, RESELLER
```

- The Interactive Advertising Bureau's method of preventing digital advertising fraud
- Publishers place a publicly accessible "ads.txt" file on their server describing what supply-side platforms and networks are allowed to sell their inventory
- Currently used for web-based advertising but being considered for apps

Supply Path Optimization

Untangling the Mobile Programmatic Supply Chain



Both buyers and sellers can optimize the supply path by building and choosing partners with direct relationships

Buyers optimize their ROI -- Sellers maximize their revenue

Reduction of Buyer Fees



Exchanges have long charged additional fees to buyers

The Industry Is Moving Toward

First-Price Auction



Clearing Price



Smaato does not charge buyer fees



Complexities of Mobile Programmatic

Our Industry Continues to Evolve

Header Bidding

Waterfall Auction

```
# Ads.txt file for example.com:
greenadexchange.com, 12345, DIRECT,
075815479 silversip.com, 9678, RESELLER,
640221 blueadexchange.com, 37426,
DIRECT orangeexchange.com, 45678,
RESELLER silversip.com, 88679, RESELLER
```

- The Interactive Advertising Bureau's method of preventing digital advertising fraud
- Publishers place a publicly accessible "ads.txt" file on their server describing what supply-side platforms and networks are allowed to sell their inventory
- Currently used for web-based advertising but being considered for apps

Supply Path Optimization

Untangling the Mobile Programmatic Supply Chain



Both buyers and sellers can optimize the supply path by building and choosing partners with direct relationships

Buyers optimize their ROI -- Sellers maximize their revenue

Reduction of Buyer Fees



Exchanges have long charged additional fees to buyers

The Industry Is Moving Toward

First-Price Auction



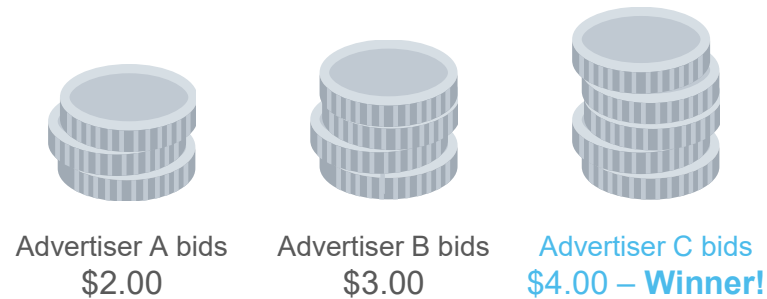
Clearing Price



Smaato does not charge buyer fees

The Industry Is Moving Towards First-Price Auctions

First-Price Auction



Clearing Price

Advertiser C pays  for the inventory

Second-Price Auction



Clearing Price

Advertiser C pays  for the inventory





Exchanges have long charged additional fees to buyers



Fees are often not transparent or communicated effectively



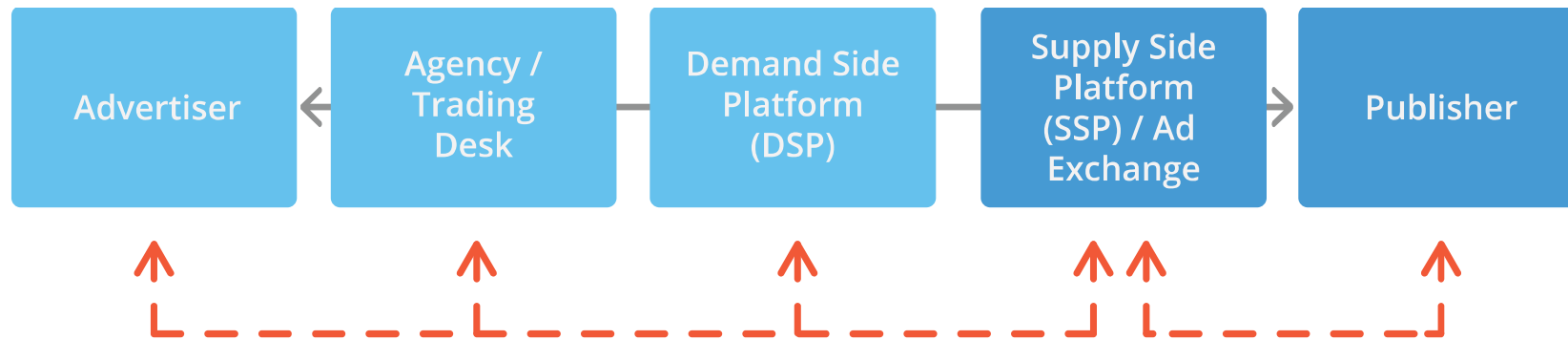
To improve transparency, buy-side fees are being reduced or eliminated throughout the industry

Smaato does not charge buyer fees



Supply Path Optimization

Untangling the Mobile Programmatic Supply Chain



Both buyers and sellers can optimize the supply path by building and choosing partners with direct relationships

Buyers optimize their ROI ↔ Sellers maximize their revenue

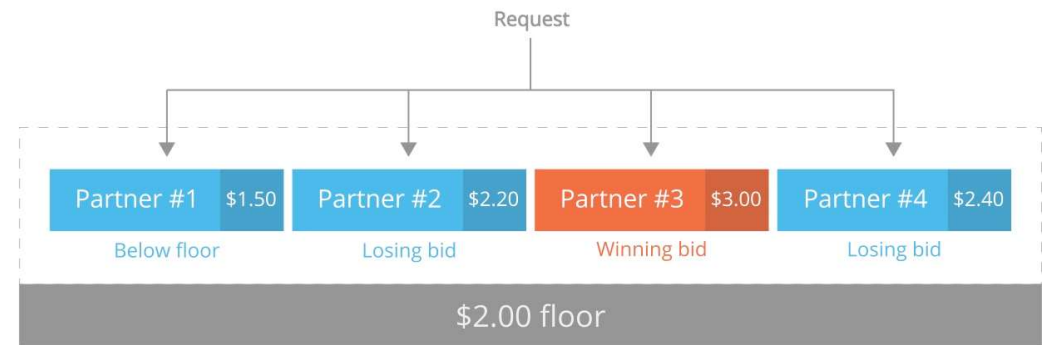


Waterfall Auction



vs.

Header Bidding



```
# Ads.txt file for example.com:  
greenadexchange.com, 12345, DIRECT,  
d75815a79 silverssp.com, 9675, RESELLER,  
f496211 blueadexchange.com, XF436,  
DIRECT orangeexchange.com, 45678,  
RESELLER silverssp.com, ABE679, RESELLER
```

- The Interactive Advertising Bureau's method of preventing digital advertising fraud
- Publishers place a publicly accessible "ads.txt" file on their server describing what supply-side platforms and networks are allowed to sell their inventory
- Currently used for web-based advertising but being considered for apps



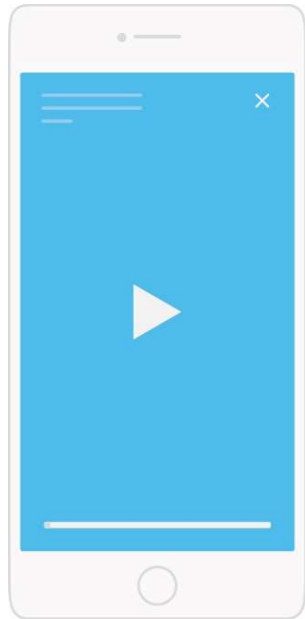


Mobile Video Advertising

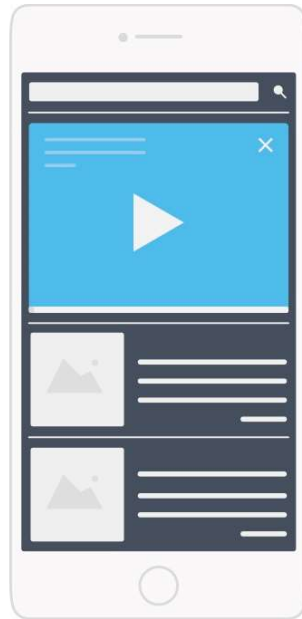
Video Ad Spending Is Skyrocketing

smaato[®]

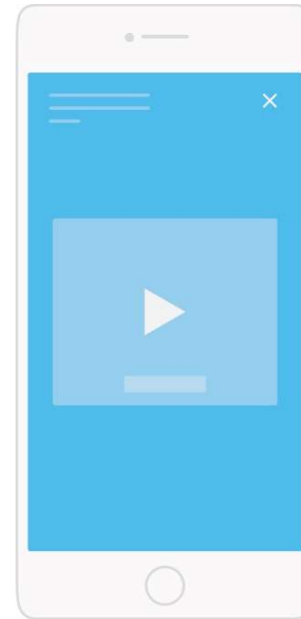
Ad Spending Growth by Mobile Video Ad Format, Q4 2017 vs. Q3 2017



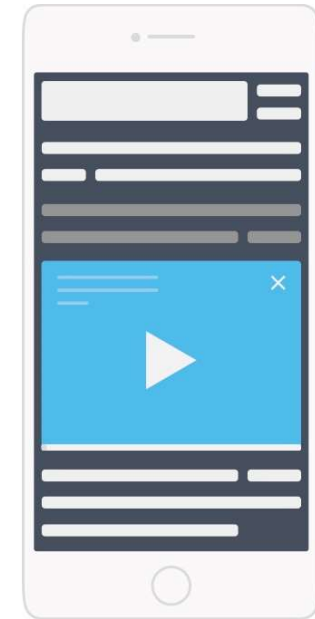
Interstitial
Video
+97%



Instream Pre-Roll
Video
+102%



Rewarded
Video
+32%



Outstream
Video
+60%

Source: Smaato Publisher Platform (SPX) - Q4 2017 vs Q3 2017

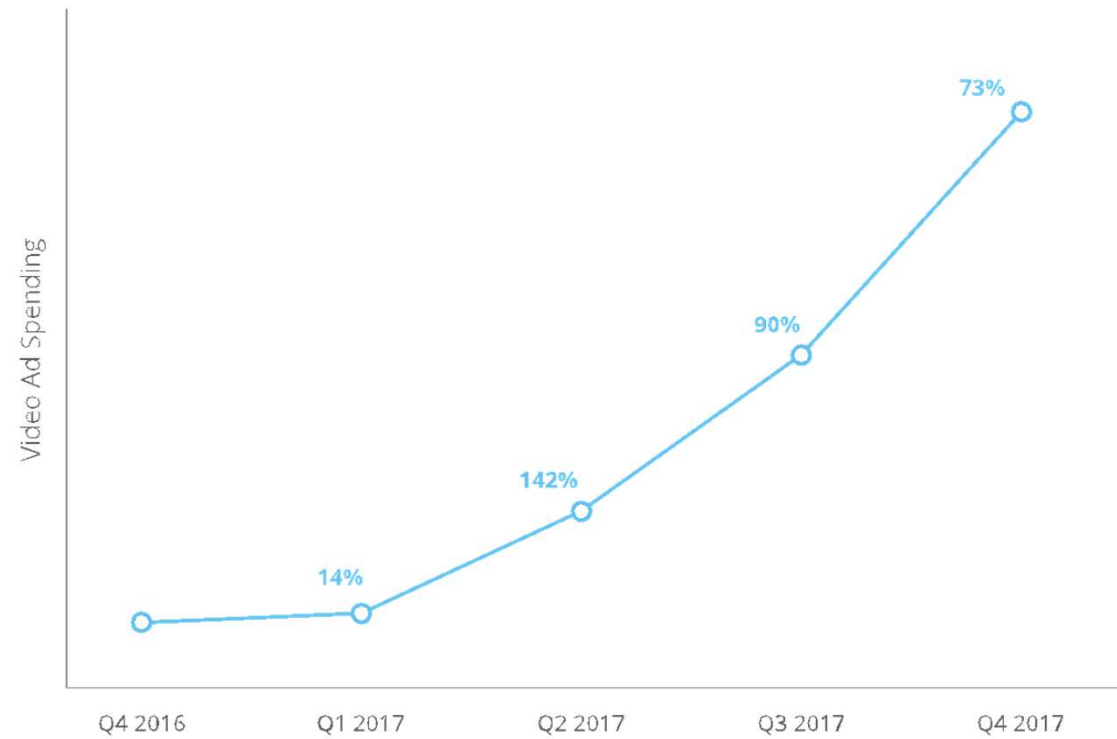
Version 01.01



Mobile Video Advertising

Advertisers' Investment in Video Continues to Grow

Mobile Video Ad Spending Growth, Q4 2016 – Q4 2017



Source: Smaato Publisher Platform (SPX) - Q4 2016 - Q4 2017



An effective method for gaining informed clicks and high-quality conversions is to use rewarded video ads. Since this ad format is opt-in, with users choosing to watch in exchange for a reward, it has the highest viewability rates of any mobile ad format.

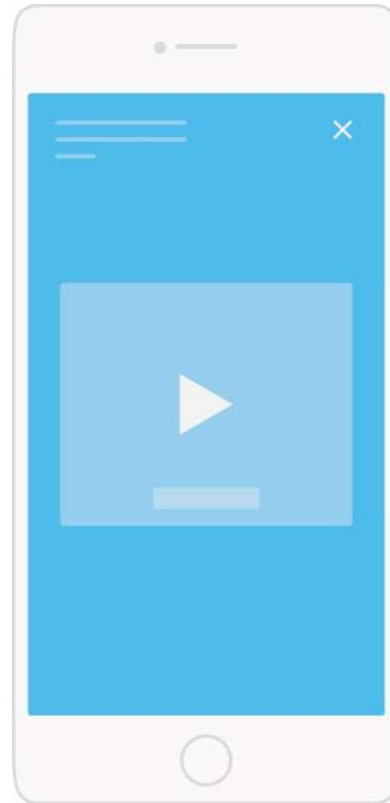
Technology:
Vast standard



Tracking:
Quartile / VTR etc.



Viewability:
100%, full-screen



User Experience:
Forced ad, non-skippable



Placement:
In-app games



Price:
Medium range: \$1.00 - \$6.00



In-App beats Mobile Web

smaato[®]



In-App beats Mobile Web

Enables Reliable 21+ Month User Tracking

TV

1950s – 1980s



Internet

1980s – 2010s



Apps

2010 – Present



Consumers Now Spend **90%** of Smartphone Time In-App

Cookies Track Where Users Go

- Can easily be deleted
- Not standard across browsers
- No GPS

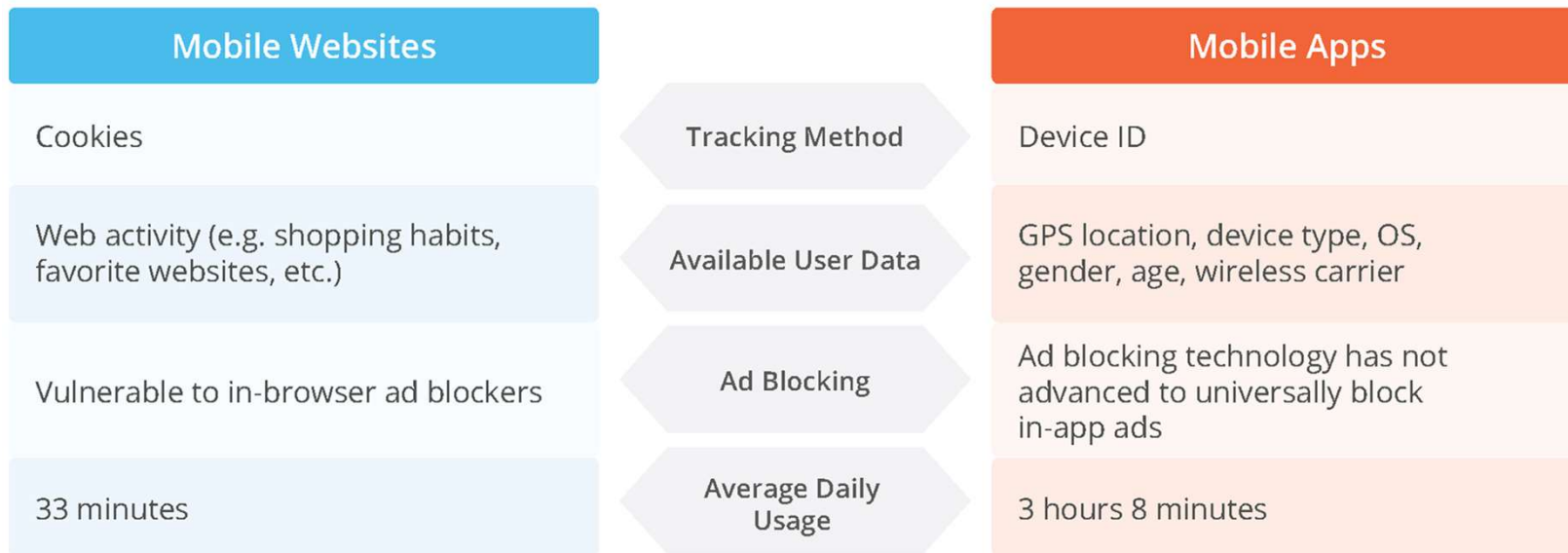
Device IDs, Smaato ID & GPS tracking

- Where users go
- What they do there
- What they do over time



Advantages of In-App

Mobile Websites vs. Mobile Apps





Transparency

Buzzword or Necessary Reality?

“Advertisers Put Transparency on the Top of Their 2018 To-Do Lists”

Digiday



“Is Transparency Fueling Advertiser Paranoia?”

Ad Exchanger

“Why Transparency and Sustainability in Programmatic Matter Now, More Than Ever”

Huffington Post



Transparency

Three Shades of Transparency

Inventory



Partner



Cost



Enhanced Attribution: Digital to Offline



Enhanced Attribution: Digital to Offline

A Consumer's Journey: Pre-Mobile World

smaato[®]

VIEWS BRAND ADS

Watches TV/Online ads that create brand awareness.



VISITS STORE

Enters store, where 70% of purchase decisions are made.



ENCOUNTERS IN-STORE PROMOTER

Meets promoter in-store who explains product benefits or samples product.



PURCHASES PRODUCT/BRAND

Purchases product at cash register in cash or via credit/debit card



Enhanced Attribution: Digital to Offline

A Consumer's Journey in a Mobile-First World

VIEWS BRAND ADS

Watches Mobile/Online ads that create pre-purchase brand awareness. Concept of "primetime" is now gone.



SEES MOBILE AD NEAR STORE

Frequency-capped geo-targeted mobile ads within X km/mile radius of store bring qualified consumers into store.



VISITS STORE

Enters store, where 70% of purchase decisions are made, knowing there is a special event/promotion taking place.



ENCOUNTERS IN-STORE PROMOTER

Meets promoter in-store who explains product benefits or samples product.



DEVICE ID MATCHING:
21+ MONTHS



USER DATA

- Device ID
- Device OS

- Carrier
- Campaign ID

USER DATA



USER DATA

- Age
- GPS
- Country
- Gender

USER DATA

USER DATA

MARKETING ROI

- AD/PROMO SPEND
- STORE VISITS
- FIRST PURCHASE
- REPURCHASES



REWARDED CONSUMER SCAN/PHOTO ATTRIBUTES PURCHASE AND THEN RETARGETING BEGINS

Triggers attribution by scanning product UPC/QR Code in exchange for reward. Retargeting begins.



PURCHASES PRODUCT/BRAND

Pays for product at register, potentially with NFC mobile payment.



RECORDS BEACON

Promoter has a beacon in her pocket, which is received/noted on consumer's app.



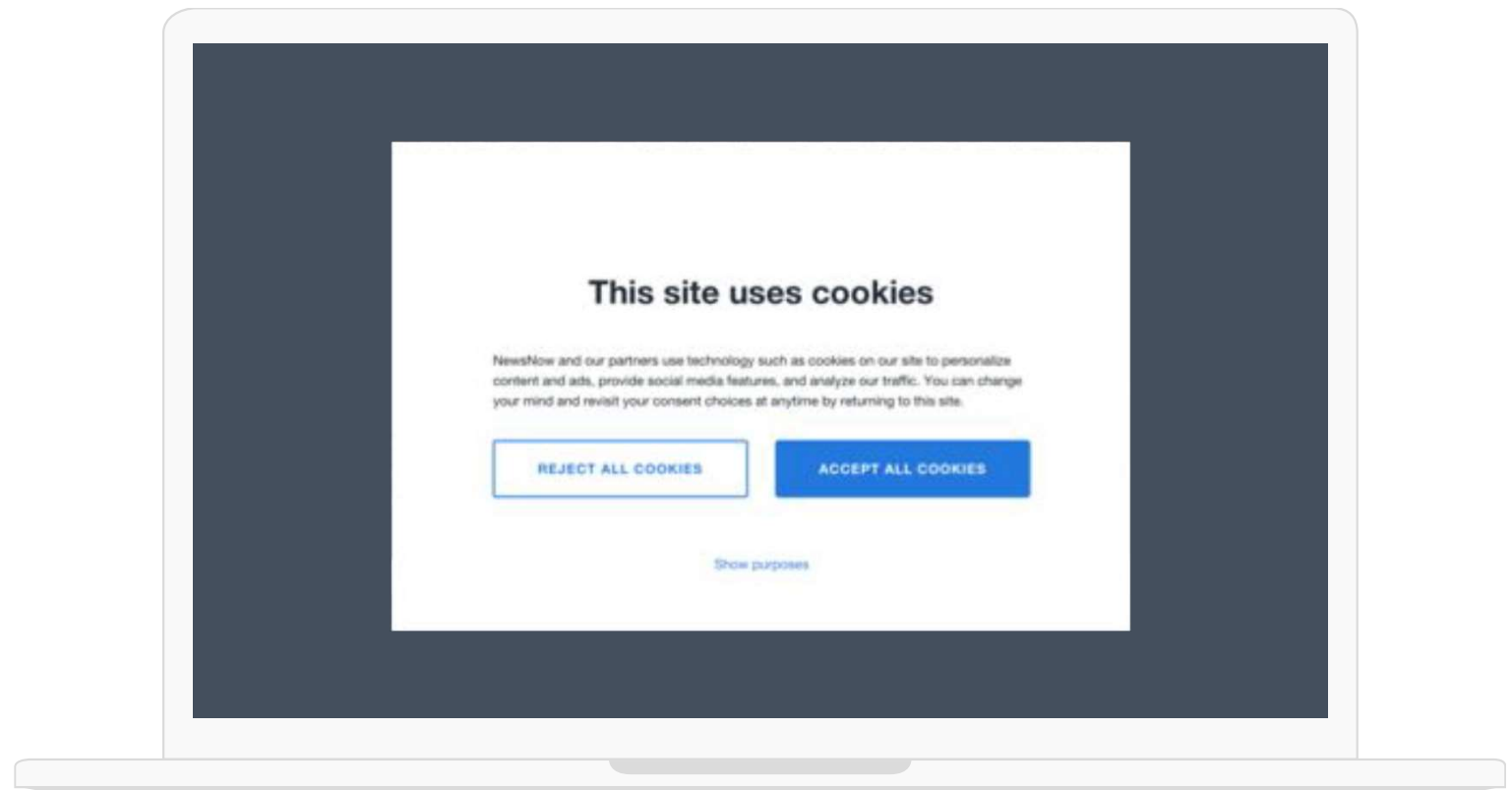
General Data Protection Regulation (GDPR)

Example of Custom UI (Simple Consent)

smaato[®]

Level 1:

Simple consent collection for all selected vendors and purposes



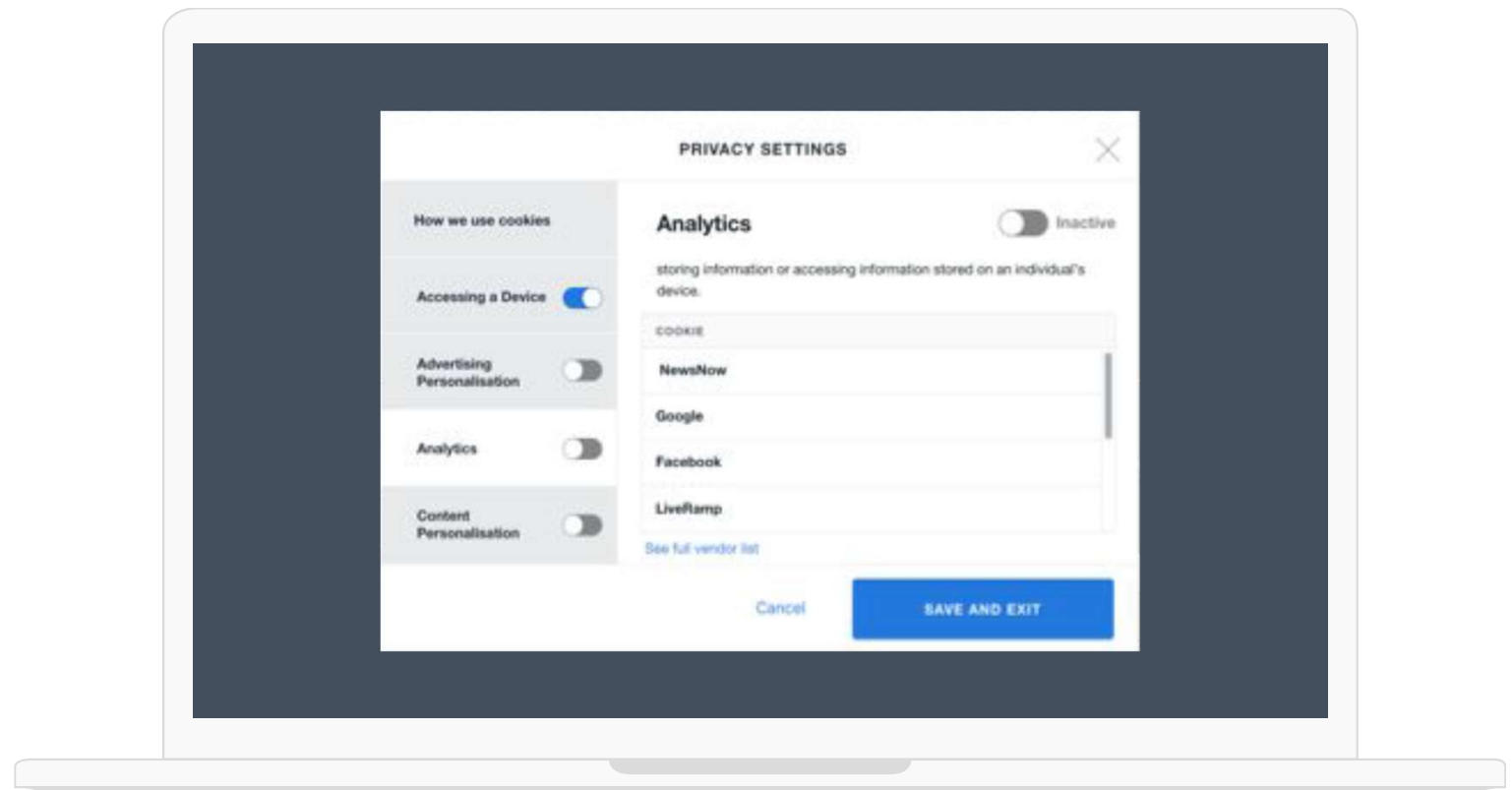
General Data Protection Regulation (GDPR)

Example of Custom UI (Purpose-Level Consent)

smaato[®]

Level 2:

Purpose-level consent options for consumers



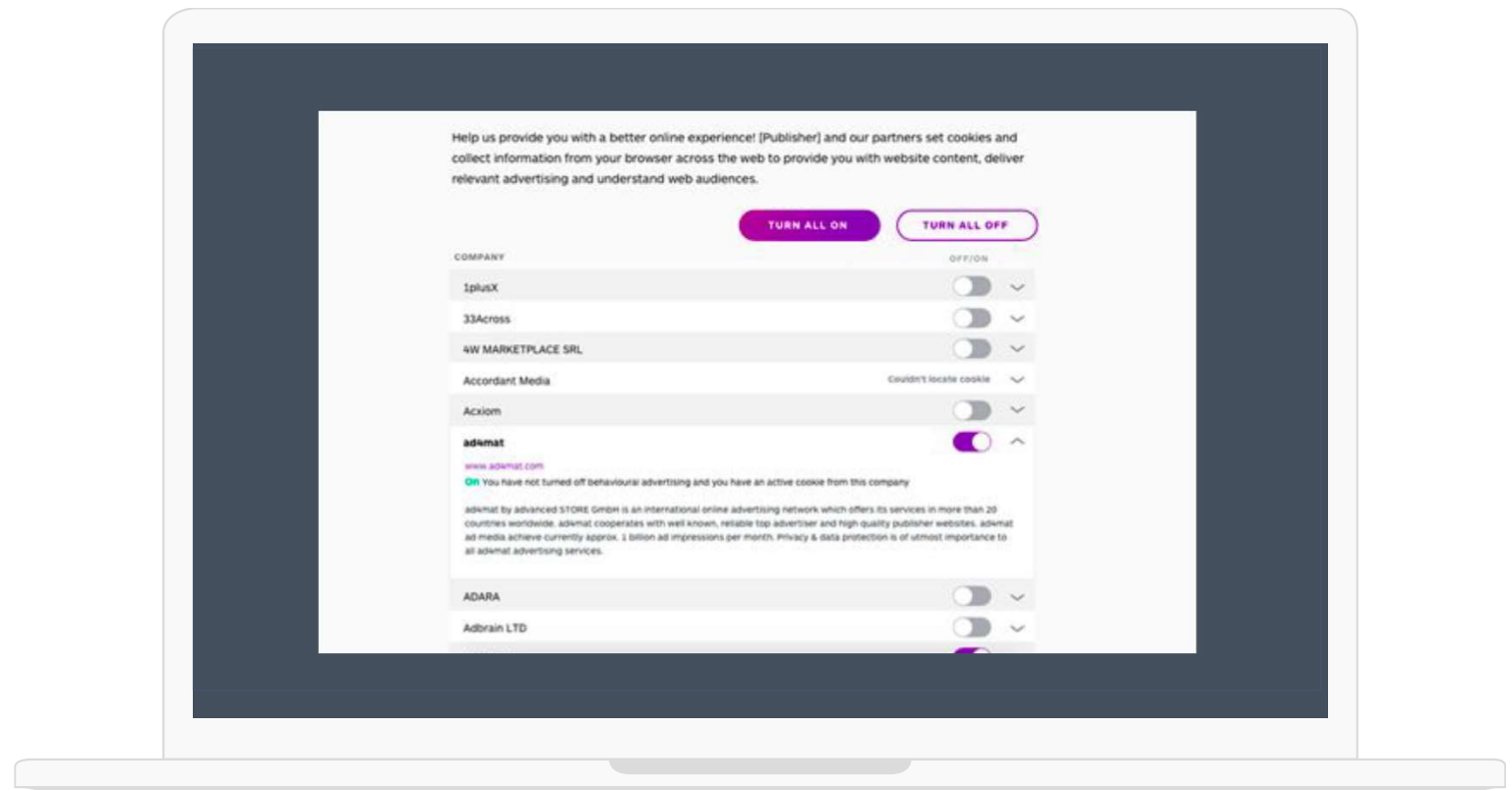
General Data Protection Regulation (GDPR)

Example of Custom UI (Vendor-Level Consent)

smaato[®]

Level 3:

Vendor-level consent options for consumers



General Data Protection Regulation (GDPR)

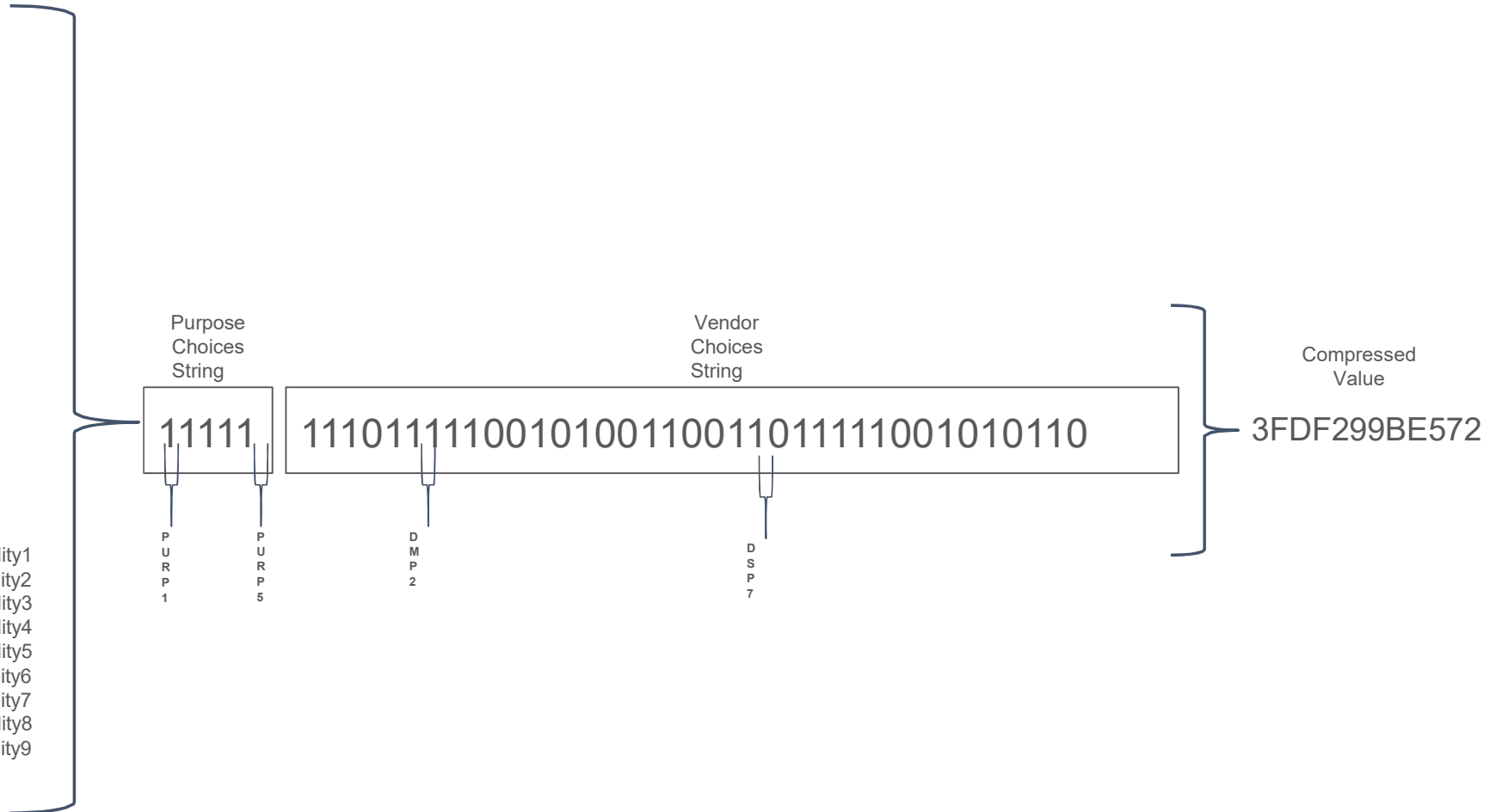
Encoding Choices for Storage & Transmission

Purpose Choices

- 1. ✓ PURP1
- 2. ✓ PURP2
- 3. ✓ PURP3
- 4. ✓ PURP4
- 5. ✓ PURP5

Vendor Choices

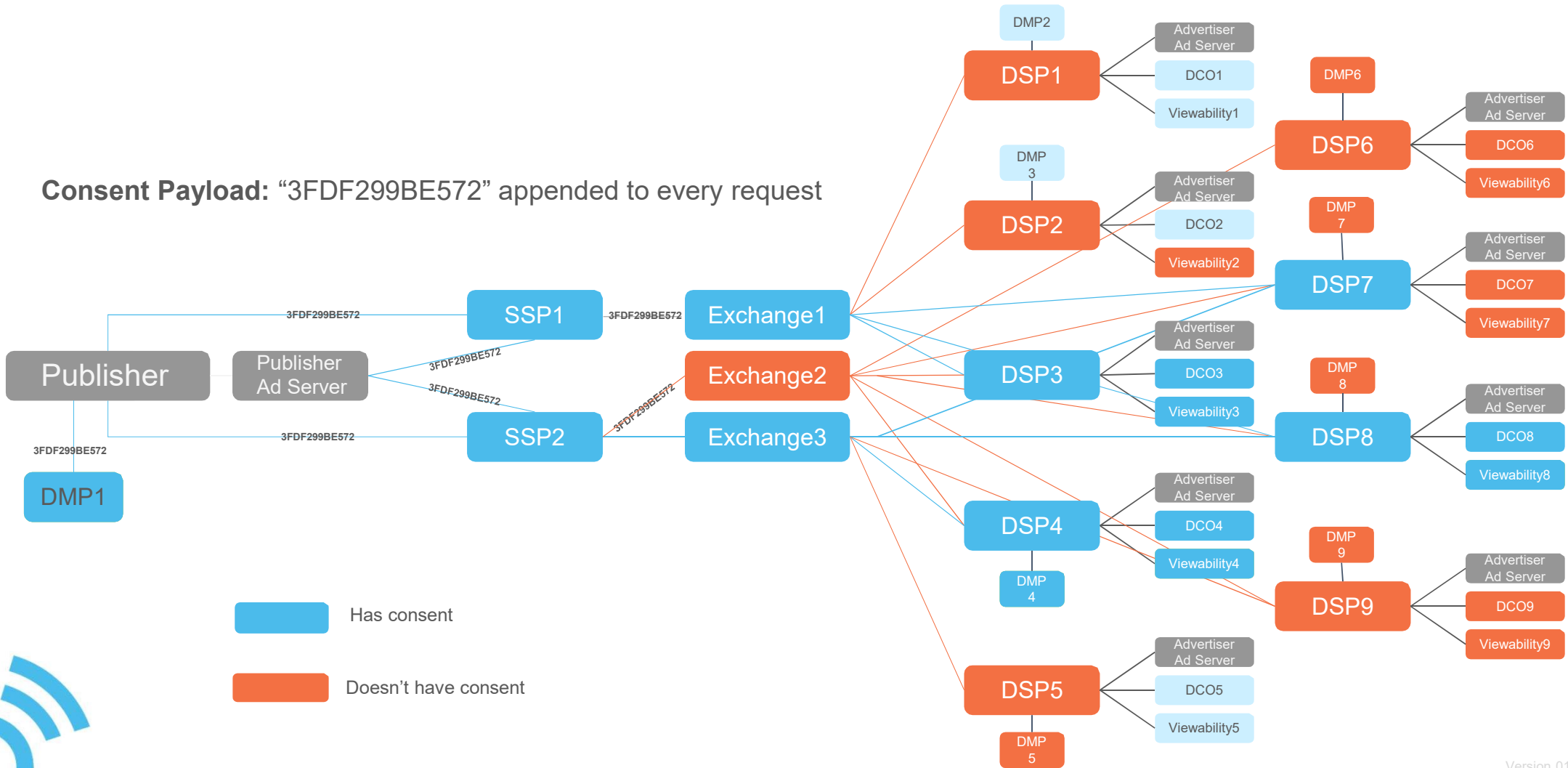
- | | |
|----------------|--------------------|
| 1. ✓ SSP1 | 21. ✓ DSP7 |
| 2. ✓ SSP2 | 22. ✓ DSP8 |
| 3. ✓ Exchange1 | 23. ✗ DSP9 |
| 4. ✗ Exchange2 | 24. ✓ DCO1 |
| 5. ✓ Exchange3 | 25. ✓ DCO2 |
| 6. ✓ DMP1 | 26. ✓ DCO3 |
| 7. ✓ DMP2 | 27. ✓ DCO4 |
| 8. ✓ DMP3 | 28. ✓ DCO5 |
| 9. ✓ DMP4 | 29. ✗ DCO6 |
| 10. ✗ DMP5 | 30. ✗ DCO7 |
| 11. ✗ DMP6 | 31. ✓ DCO8 |
| 12. ✓ DMP7 | 32. ✗ DCO9 |
| 13. ✗ DMP8 | 33. ✓ Viewability1 |
| 14. ✓ DMP9 | 34. ✗ Viewability2 |
| 15. ✗ DSP1 | 35. ✓ Viewability3 |
| 16. ✗ DSP2 | 36. ✓ Viewability4 |
| 17. ✓ DSP3 | 37. ✓ Viewability5 |
| 18. ✓ DSP4 | 38. ✗ Viewability6 |
| 19. ✗ DSP5 | 39. ✗ Viewability7 |
| 20. ✗ DSP6 | 40. ✓ Viewability8 |
| | 41. ✗ Viewability9 |



General Data Protection Regulation (GDPR)

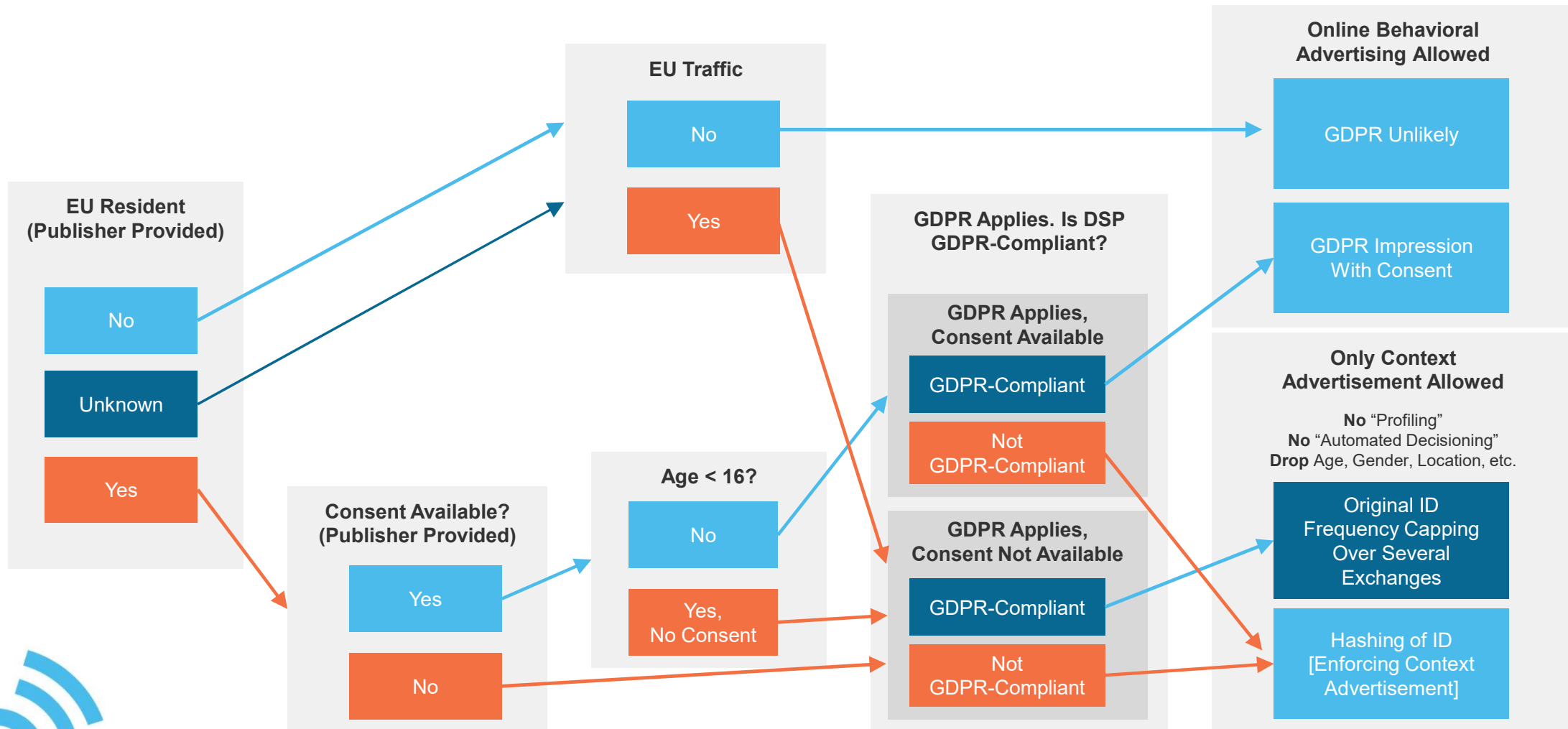
Transmitting Approved Vendors and Consent

Consent Payload: "3FDF299BE572" appended to every request



General Data Protection Regulation (GDPR)

Decision Tree Beginning on May 25, 2018





Thank You

Questions?

ARNDT GROTH
PRESIDENT, SMAATO

ABOUT SMAATO

Smaato is the leading global real-time advertising platform for mobile publishers and app developers. Smaato runs the world's largest independent mobile ad exchange and has been pioneering innovative, mobile-first solutions for publishers since 2005.

Smaato's SPX is a global, intelligent and free-to-use self-service platform and ad server that brings native, video and real-time advertising to over 90,000 app developers and mobile publishers. The company's worldwide reach and extensive network of demand partners provide a massive variety of advertisers with one single integration. Smaato manages up to 19 billion ads every day around the world, across over 1 billion unique mobile users each month.

San Francisco, CA
T: +1 (650) 286-1198
americas@smaato.com

New York City, NY
Tel: +1 (646) 650-5030
americas@smaato.com

Hamburg, Germany
T: +49 (40) 3480 9490
emea@smaato.com

Singapore, SG
T: +65 6336 6815
apac@smaato.com

Shanghai, China
T: +86 21 6263 0446
apac@smaato.com