Programmatic advertising
The next evolution in marketing

Vienna, 23.05.2017

Premedia

What you will see

Contents

13.08.20

Premedia

What is programmatic advertising?

Premedia

Definition

Programmatic advertising in a nutshell is the automation of buying and selling of ad inventory, supported by a real-time bidding eco system.

Premedia

But wait!

Let's start a step earlier

Premedia

Online Marketing

Basic knowledge

Premedia

Roles and participants

- **Advertisers**
- **Publishers**
- **Agencies**

Premedia

Advertisers

A person, organization or company which places advertisements in order to target customers.

Publishers

Publishers are responsible for the distribution of digital publications. Publishers control digital content and sell related add inventory.

Premedia

Agencies

An advertising agency, often referred as a creative agency, dedicates its business to create, plan, and handle advertisement and sometimes other forms of promotion and marketing for its clients.

Forms of Online Marketing

- Website
- Display advertising
- Search Engine Marketing
- Content Marketing
- Email Marketing
- Affiliate-Marketing
- Social Media Marketing
- Etc.

Premedia

Programmatic advertising
Programmatic ecosystem

Premedia

Basic technologies

- Cookies
- Pixels
- Banner ads
- Ad servers
- Ad networks
- Ad exchanges

Premedia

Cookies

- A cookie is a small piece of data send from a webserver and stored in a web browser.

- Cookies are used to identify users and for storing user information and preferences.

- Cookies are also used for user tracking.

- First-party cookies have the same domain as the shown website.

- Third-party cookies have a different domain and come e.g. from banner ads within a website.

13.08.20

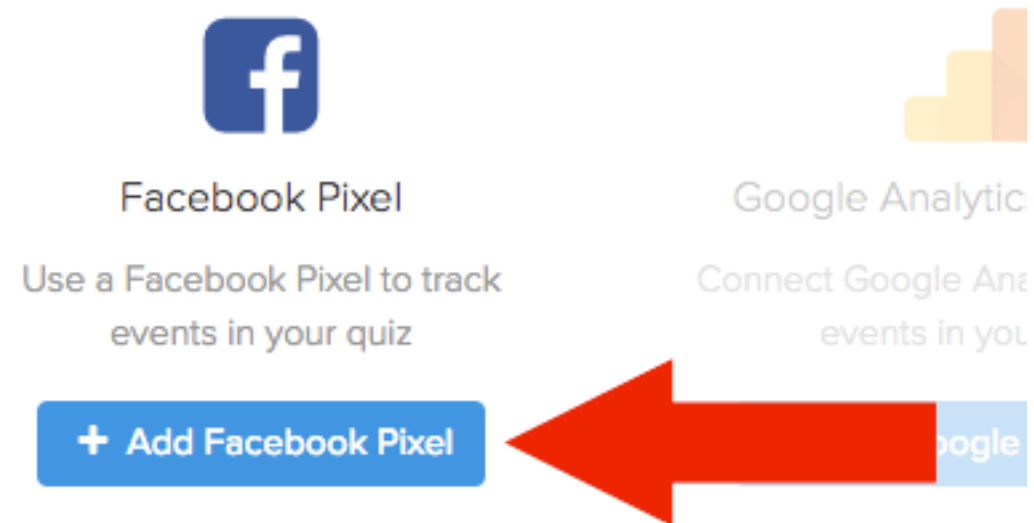## Privacy Policy

This website uses cookies to ensure you get the best experience on our website.

Read More

Got it!

Pixels

- **A tracking pixel is a piece of code embedded in an email or web page, in order to track user activity**

- **A tracking pixel is usually implemented as a tiny, invisible image (1x1, or one pixel).**

Facebook Pixel

Use a Facebook Pixel to track events in your quiz

+ Add Facebook Pixel

Google Analytic

Connect Google Ana
events in you

ogle

13.08.20

Premedia

Banner ads

- Banner ad is a common form of display advertising.
- In a programmatic ecosystem banner ads can be personalized based on the stored data
- Product retargeting is a typical use case for personalized banners.

Visitor comes to your site & leaves without converting

Your ads display on other sites

Visitor clicks the ad and comes back to your site

Buy Now

Premedia

Ad servers

- An ad server is a server, used for delivery of digital ads.

- An ad server is also used for campaign trafficking, reporting, and post-campaign analysis.

- For publisher, an ad server is used to manage and prioritize simultaneous campaigns from multiple clients.

- For advertisers, an ad server enables centralized campaign management across different media and publishers.

Premedia

Ad networks

- An ad network is a company specializing in aggregating inventory from different publishers and selling it to advertisers on their behalf.

- The ad network acts as a broker for advertising space, making it easier for publishers to participate in in the market, and for advertisers to run large campaigns across many publishers.

Premedia
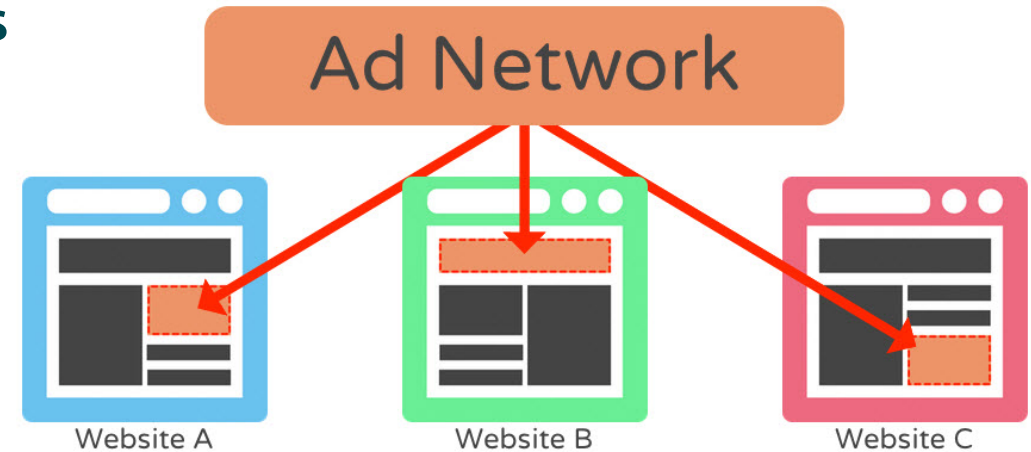
Ad exchanges

- An ad exchange is a marketplace for advertising inventory, based on automated auction technology.

- Ad exchanges enable real-time auction of each impression as it becomes available, selling it to the highest bidder.
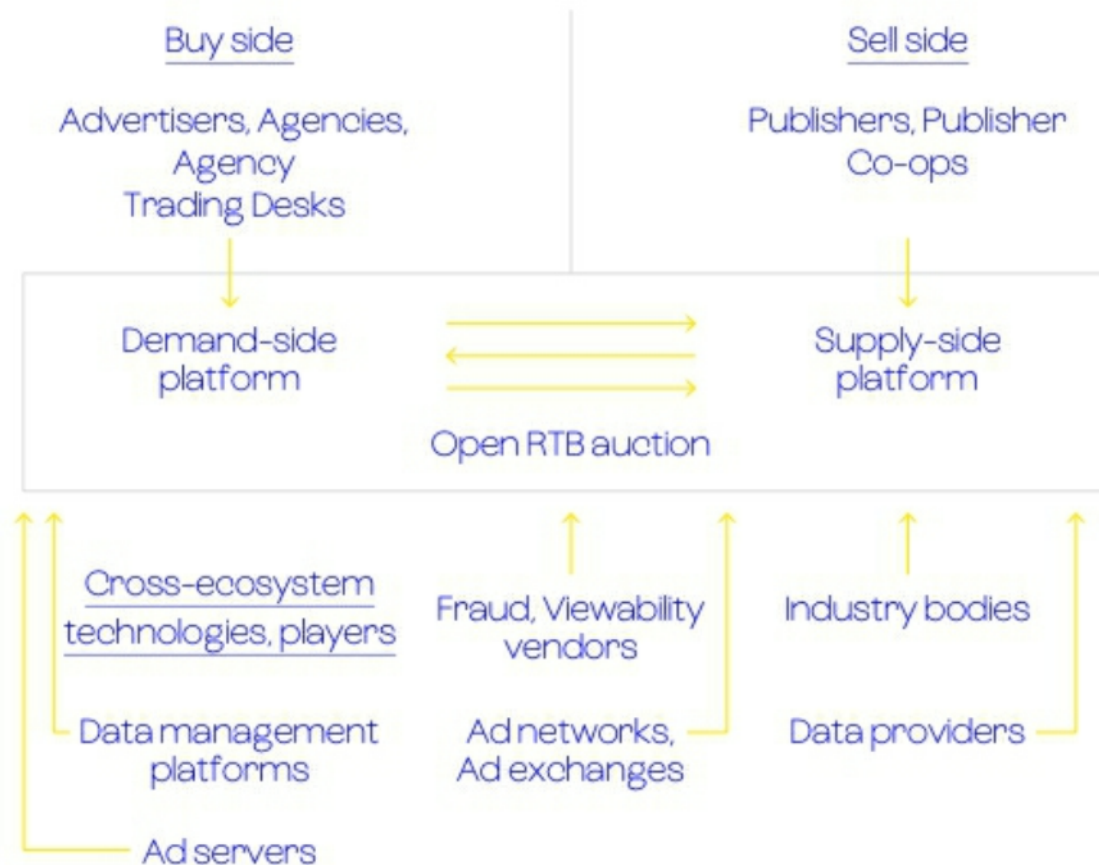
Premedia

Programmatic advertising

How it works

- **Approach**
- **Demand side platforms (DSP)**
- **Supply side platforms (SSP)**
- **Data management Platforms (DMP)**

Premedia

Approach

Programmatic advertising ecosystem

Premedia

Demand side platforms

- A demand side platform (or DSP) is a gateway to the programmatic world for agencies and advertisers.

- DSPs are used to purchase advertising in an automated way on a wide range of inventory – including ad exchanges, ad networks or Supply Side Platforms (SSP)

Premedia

Supply side platforms

- A supply side platform (or SSP) makes it possible to sell advertising inventory in a programmatic way.

- SSPs are commonly utilized by online publishers to maximize yield (aggregate revenue) from publishers' inventory, using sophisticated rules and algorithms.

- SSPs have the benefit of connecting publishers' inventory to a few demand sources – such as ad exchanges, networks and DSPs.

Premedia
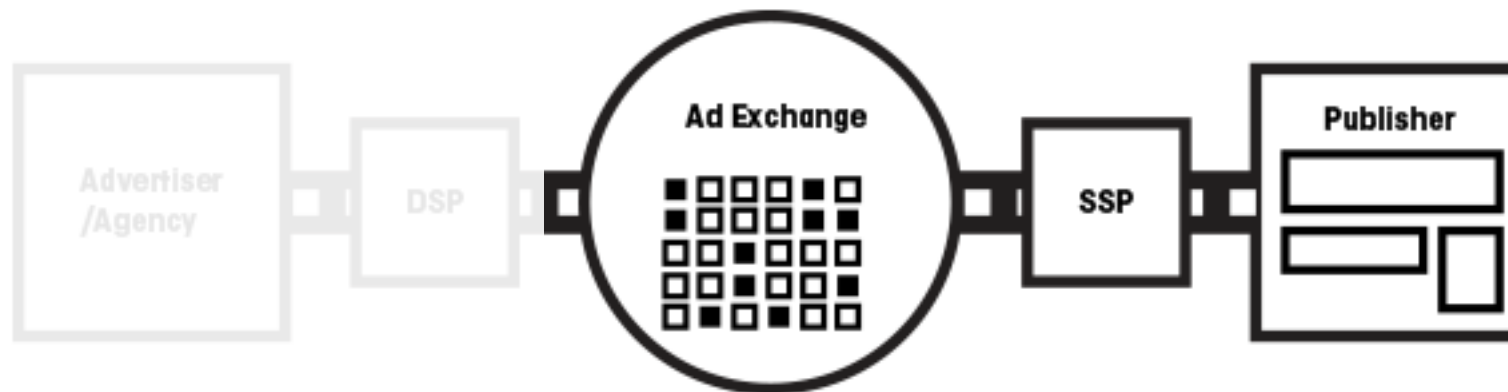
Data management platforms

- Data management platforms (DMP) is used to collect, store, classify, analyze and manage large quantities of data.

- A DMP can typically take in data from many disparate sources, including CRM Systems, websites, apps, or external partners.

- A common use case is creating audience segments based on collected visitor data.

Collect Data On Your Website Users

Process the Data

Interested in Finance

Lease Expires in 5 Months

From Texas

Spent Less Than $500 in Q1

Frequent Website Visitor

Spanish Speaking

Segment the Data for Optimal Targeting

Premedia

Programmatic advertising
Programmatic trading

Premedia

Programmatic trading
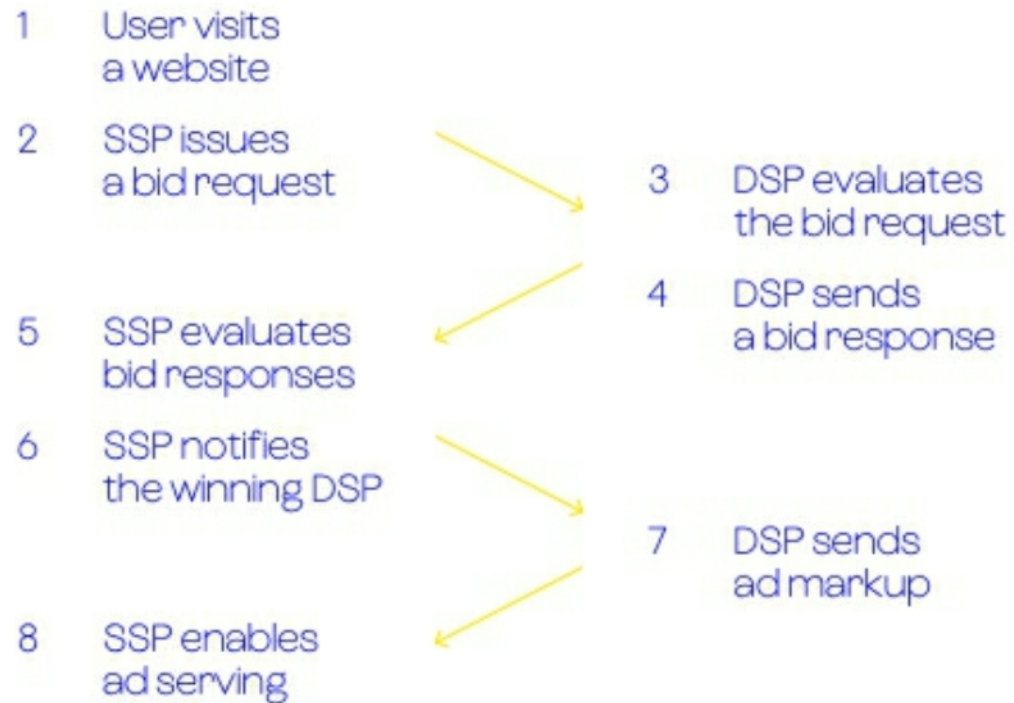
Interaction and transaction

- **Real-time bidding auction**
- **Open RTB standard**
- **Header bidding**

Premedia

Real-time bidding auction

- A real-time bidding auction enables buying and selling of individual ad impressions in a fraction of a second

- Every real-time bidding auction follows a process established by the Open RTB Protocol.

- An auction happens in real time (while the users is waiting for a page to load), and typically takes less then 100 milliseconds.

- A separate auction is usually held for each available impression on the page.

Premedia

Auction approach

1   User visits
a website

2   SSP issues
a bid request

          3   DSP evaluates
the bid request

          4   DSP sends
a bid response

5   SSP evaluates
bid responses

6   SSP notifies
the winning DSP

          7   DSP sends
ad markup

8   SSP enables
ad serving

Premedia

OpenRTB standard

- In order to simplify communication between buyers and suppliers of inventory, protocol standards have been developed.

- OpenRTB originally started 2010 as a pilot project between a handful of DSPs and SSPs, has now adopted as an IAB standard.

- OpenRTB API specification describes basic interactions taking place between an exchange and bidders, including bid request, bid response, win notices and ad markups.

Premedia

Header bidding

- Header bidding technology enables a publisher to solicit bids for each impression from multiple demand sources simultaneously, rather then sequentially.

- The technology is always based on a JavaScript tag placed in the header section of a website (hence the name).

Premedia

Programmatic advertising

Advantages

✓ **Saving costs**
Advertisers pay only for relevant impressions

✓ **Increased efficiency**
Through automation and careful targeting

✓ **Real-time data and insights**
Data can be used to draw insights to improve the effectiveness of any campaign

✓ **Increased reach**
More campaigns can be managed centralized

✓ **Transparency**
Through programmatic, advertisers can track their audience and costs

✓ **Flexible to changing market dynamics**

Premedia

Data

The elixir of life for programmatic advertising

Premedia

Data

Categorization

- **First-party data**
- **Second-party data**
- **Third-party data**

Premedia

First-party data

- **First-party data is is collected directly from your own user.**

- **For example gender, age, visited pages or products, etc.**

- **This data can determine purchase intent or other behavioral patterns.**

1st

DATA GENERATED & OWNED BY ORGANIZATION

Sales

CRM

Other

Web

Offline

Premedia

Second-party data

- Second-party data is obtained through partnerships with other entities and is basically their first-party data.

- Second-party data sharing can also take the form of co-ops, where multiple partners pool their data together.

Third-party data

- **Third-party data is data obtained from external providers, with no direct partnership with the buyer.**

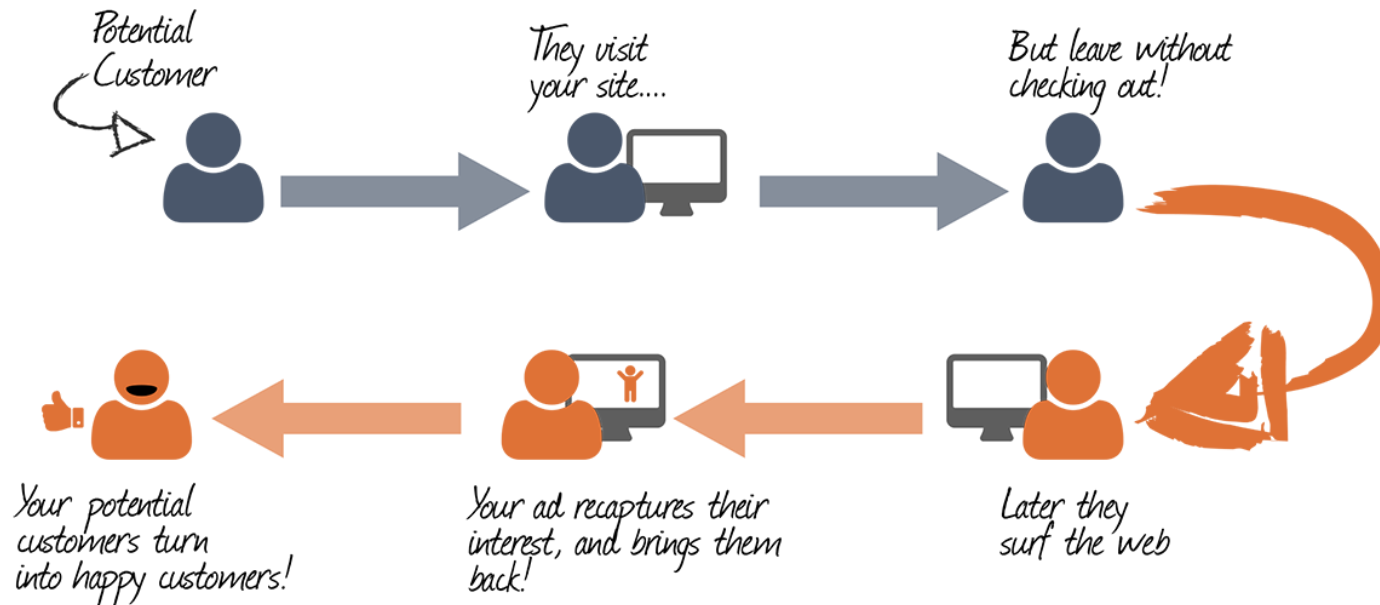- **Third-party data is mainly used for ad targeting.**

3rd

DATA GENERATED & OWNED
BY OTHER PARTIES/VENDORS

Ent.

In-Market

Travel

Other

Premedia

Data

Retargeting

- Site retargeting
- Retargeting process
- Other forms of retargeting
- Retargeting vs. Prospecting

Premedia

Site retargeting

- Retargeting is a form of behavioral targeting aimed at users and advertiser already know.

- For example, an e-commerce advertiser wants to show their ads to users who put an item into a shopping basket, but didn't complete a purchase.

Potential Customer

They visit your site....

But leave without checking out!

Your potential customers turn into happy customers!

Your ad recaptures their interest, and brings them back!

Later they surf the web

Premedia

Retargeting process

1. Retargeting pixel from a chosen vendor is placed on an advertiser's website

2. Conversion pixel from a chosen vendor is placed on a post-conversion page, to track users who have already converted

3. When a user visits advertiser's website, the retargeting pixel saves a cookie into their browser. User is now part of retargeting pool.

4. As user in a retargeting pool browse the web, they see ads that retargeting vendor has purchased on behalf of advertiser.

5. If they make a conversion, they are usually excluded from the retargeting pool.

Premedia

Other forms of retargeting

- Email retargeting
- Search retargeting
- Email-list retargeting (or CRM retargeting)
- Mobile retargeting

Premedia

Retargeting vs. Prospecting

- **Retargeting**:
  Retargeting means reaching out to users that advertisers already know and who has shown strong interest or purchase intent.
  Retargeting is the most prevalent use of **first-party data**.

- **Prospecting**:
  Prospecting means looking for potential customers an advertiser doesn't know yet, with the aim bringing them to a retargeting pool. This is where **second-** and **third-party data** comes into play.

13.08.20

Premedia

Data

Prospecting

- **Content-based targeting**
- **Contextual targeting**
- **Semantic targeting**
- **Behavioral targeting**
- **Look-a-like modeling**

Premedia

Content-based targeting

- **Website content has traditionally been used to target potential customers. E.g. childcare content target to mums.**

- **Content based targeting has a big advantage being cookie-free.**

- **Over time, content-based targeting has evolved to more sophisticated forms, including contextual targeting and semantic targeting**

Premedia

Contextual targeting

- Contextual targeting relies on scanning pages for specific keywords.

- Keywords or categories are chosen by an advertiser, and ads are served on matching pages.

WHAT IS KEYWORD CONTEXTUAL TARGETING?
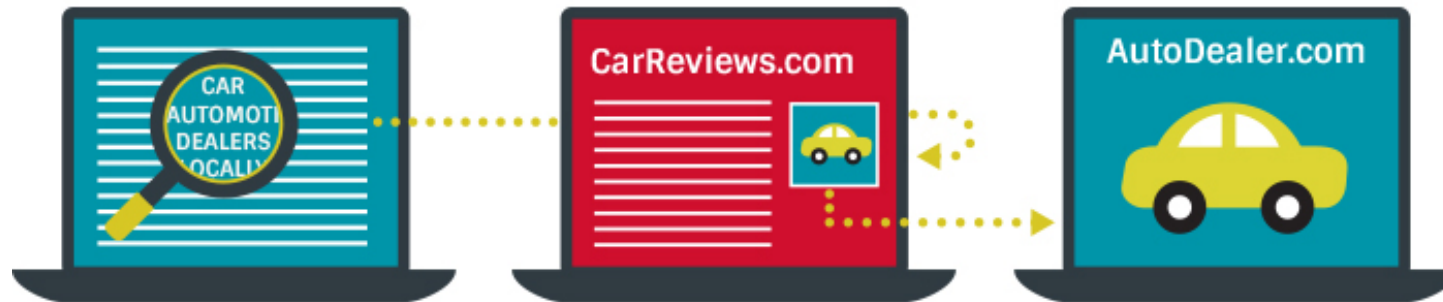
Target users viewing content with keywords that have been designated by the advertiser.

Premedia

Semantic targeting

- **Semantic targeting is a more sophisticated form of contextual targeting,**

- **It uses natural language processing to determine the overall context of a page.**

- **Semantic targeting can recognize the exact meaning of a word on a page, as well as content topic and overall sentiment.**

Premedia

Behavioral targeting

- Behavioral targeting, also known as audience targeting, relies on individual user web-browsing behavioral data.

- Behavioral targeting starts by collecting "signals", regard to user intent, interest or profile. E.g. visited pages, searched keywords, clicks or other triggered events.

- Data management platforms (DMPs) are typically used to facilitate behavioral targeting.

Premedia

Look-a-like modeling

- **Look-a-like modeling could be classified as a special form of behavioral targeting and takes advantage of data processing power available today.**

- **Look-a-like modeling works by algorithmically finding users with similar behaviors or characteristics to a given user group.**

- **This process requires a very large user pool, with enough data points for each user.**

Premedia

Data on mobile

- First-party cookies can usually be set in mobile browsers.

- Some browser (most notably Safari in iOS) forbid third-party cookies.

- A lot of user activity happens in apps where standard browser cookies doesn't exist.

- Apps can take advantage of various SDKs, which enable a very detailed data collection of user behavior within an app.

- However, mobile devices can supply rich additional data such as geo-location data for location-based marketing.

13.08.20

Premedia

Mobile inventory

- Common mobile programmatic inventory types include banners, interstitials, video and native ads.

- Interstitials are full page ads which covers the screen and must be dismissed before a user can return to content.

- Mobile video ads can be served either inline in current environment or within a native player on a device.

- Native ads are designed to blend into the surrounding content.

Banner   Interstitial   Native

Premedia

Location-based Marketing

- Rapid growth of GPS-enabled mobile devices gave rise to location-based marketing.

- For programmatic advertising, the most interesting use of location data is ad targeting.

- Retailers with physical stores also use location data for indoor routing or combined with beacons for indoor marketing.

- A controversial application of location data is behavioral profiling where a lot of insights from a user can be derived from user's movement.

Premedia

Cross-device integration

- Cross-device integration involves the identification of users across their devices.

- Cookies are not very useful when it comes to cross-device integration.

- The deterministic approach takes advantage of a unique ID, typically login or email-address.

- Cross-device integration enables marketers to track the entire customer journey across all digital touchpoints.

- It is a prerequisite for proper one-to-one marketing.

Premedia

Current issues
Brief introduction

Premedia

Current issues

- Fraud
- Viewability
- Ad blocking
- Attribution
- Privacy

Premedia

Fraud

- The most common type of fraud is nonhuman traffic (NHT), where deceptive computer programs (bots) mimic desire behavior of real users on the web.

- For example bots are used to automatically fill out forms or to register impressions or clicks on banners.

- Bots often run on internet user's computer, in the form of malware operating in the background.

Premedia

Viewability

- Ad viewability is broadly defined as the opportunity for an ad to be seen.

- It has become an important issue, as many advertisers realized that a large proportion of impressions they pay could never been seen by human users.

- Ads can be for example served stacked on top of each other, or in tiny 1 x1 pixel frames.

ABOVE THE FOLD

BELOW THE FOLD

BEHIND A WINDOW OR TAB

Premedia

Ad blocking

- Ad blocking is an increasingly common practice of using a program to remove advertising while browsing the internet or using apps.

- The ad blocking trend has accelerated since 2013 because of too many low quality and annoying ads.

- Ad blocking is a major issue for many publishers and add developers, who depend on advertising as their main source of revenue.

13.08.20

Premedia
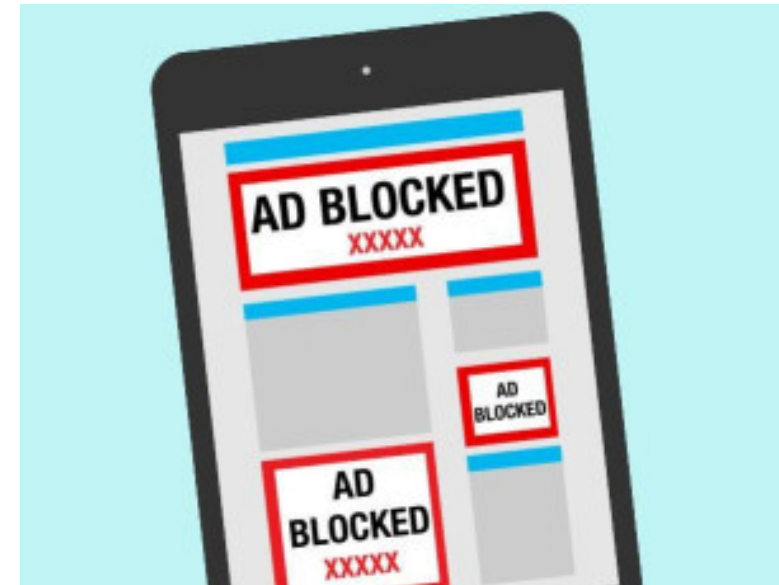
Attribution

- It is helpful to view attribution as a tool for optimizing the marketing spend to a maximize return on investment.

- Most attribution solutions available today enable attribution across the digital media channels (social, search, display, etc.) on a single screen.

- Attribution across multiple screens is a whole new game and attribution across online and offline is reserved only for the most sophisticated advertisers.

- Common models are last touch, first touch and positional.

Premedia

Privacy

- Online privacy is a very complex topic, involving technical, legal and ethical aspects.

- Most of private data is owned or controlled by a few companies and can be potentially accessed by government agencies as well.

- Personal data is very precious, if the information is unique, valuable and on a large scale.

- From the user perspective, some level of privacy has been lost, often without conscious consent.

- From the marketer perspective, user data can significantly improve the efficiency and the quality of customer relationship.

13.08.20

Premedia

New formats and channels

New engaging and highly visual formats

Premedia

Channels & formats

- Programmatic video ads
- Programmatic native
- Programmatic TV
- Programmatic print
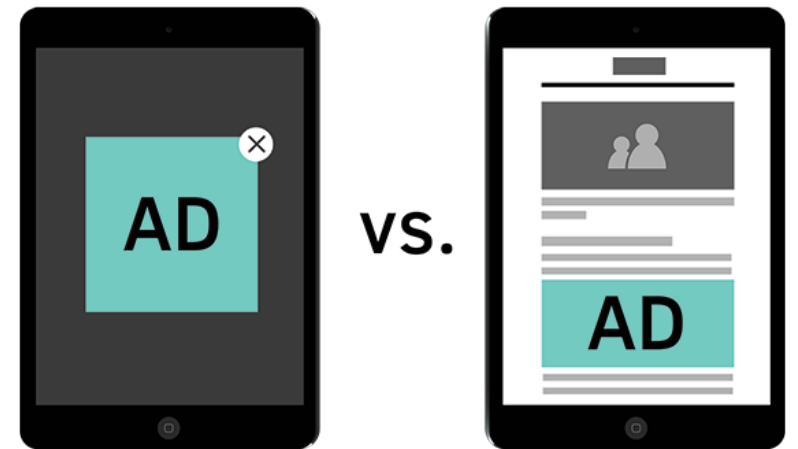- Programmatic audio
- Programmatic out-of-home

Premedia

Programmatic video ads

- Programmatic video ads are quickly becoming a standard part of digital campaigns.

- With precise targeting, high impact video ads can be delivered to a responsive audience.

- Standardization was critical for programmatic video growth. There are three standard protocols: VAST, VPAID and VMAP.

- There are two categories of programmatic video ads: in-stream and out-stream.

- The most common in-stream format is pre-roll. Pre-roll Video ads can be skipped after a few seconds.

Premedia

Programmatic native

- Native advertising is one of the hottest trends in programmatic advertising

- Native ads are designed to blend into the surrounding content and strive not to feel like advertising

- There are six broad native formats:
  in-feed units, paid search units, recommendation widgets, promoted listings, in-ad with native element units and custom units

- The first approach of standardization is called "OpenRTB Native Ads API Specification."

- Native ads are handled as collection of assets (such as ad title, logo icon, video, descriptive text, price, etc.), delivered and assembled for each impression according to the bid request specification.

Premedia

Programmatic TV

- TV comprise traditional linear TV and increasingly popular video-on-demand platforms or streaming services.

- Two aspects are critical when we talk about programmatic TV: automation and audience data.

- When it comes to automation, digital video inventory is much easier to prepare for programmatic trading than linear TV, where progress is slow so far.

- Also in data linear TV doesn't offer much audience data or household data yet. Unlike digital video where programmatic is already thriving.

13.08.20

Premedia
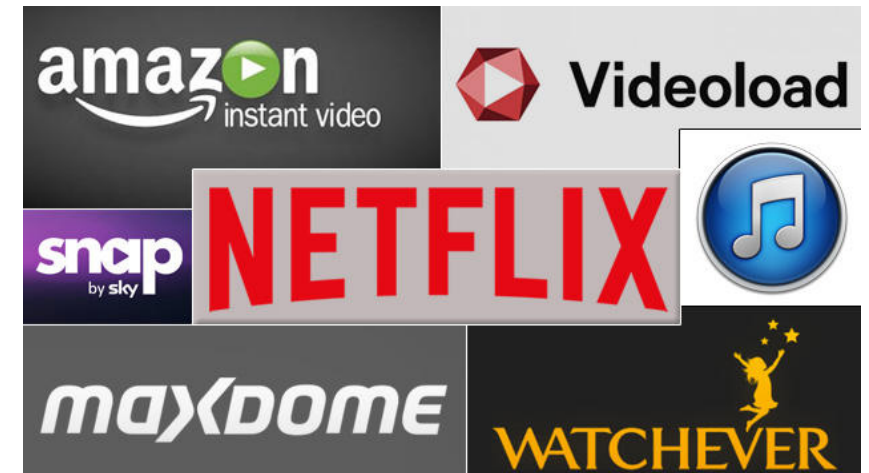
Programmatic print

- Print publishers are starting to experiment with programmatic trading technologies applied to print ads.

- MediaMath, a demand-side platform, allows advertisers to purchase print ads in a similar fashion to digital advertising.

- There is even an option to target specific audiences based on magazine reader surveys.

- Although using programmatic ecosystems to trade print ads, some major issues like high operational and logistical costs of personalizing print or impact measurement remains.

Premedia

Programmatic audio

- With the rapid growth of music streaming services, podcasts and digital radio there is a ripe opportunity to make audio ad trading programmatic.

- A huge advantage of audio is the potentially undivided attention of listeners. While display ad might appear along with several other ads, audio ads are exclusive within an audio stream.

- Just like display ads, audio programmatic can support the use of data for audience targeting.

- Costs and complexity of personalization can remain relatively low.

- Measurement and attribution is still a bit tricky because the used listen-trough rate metric doesn't necessarily capture active user attention.

Premedia
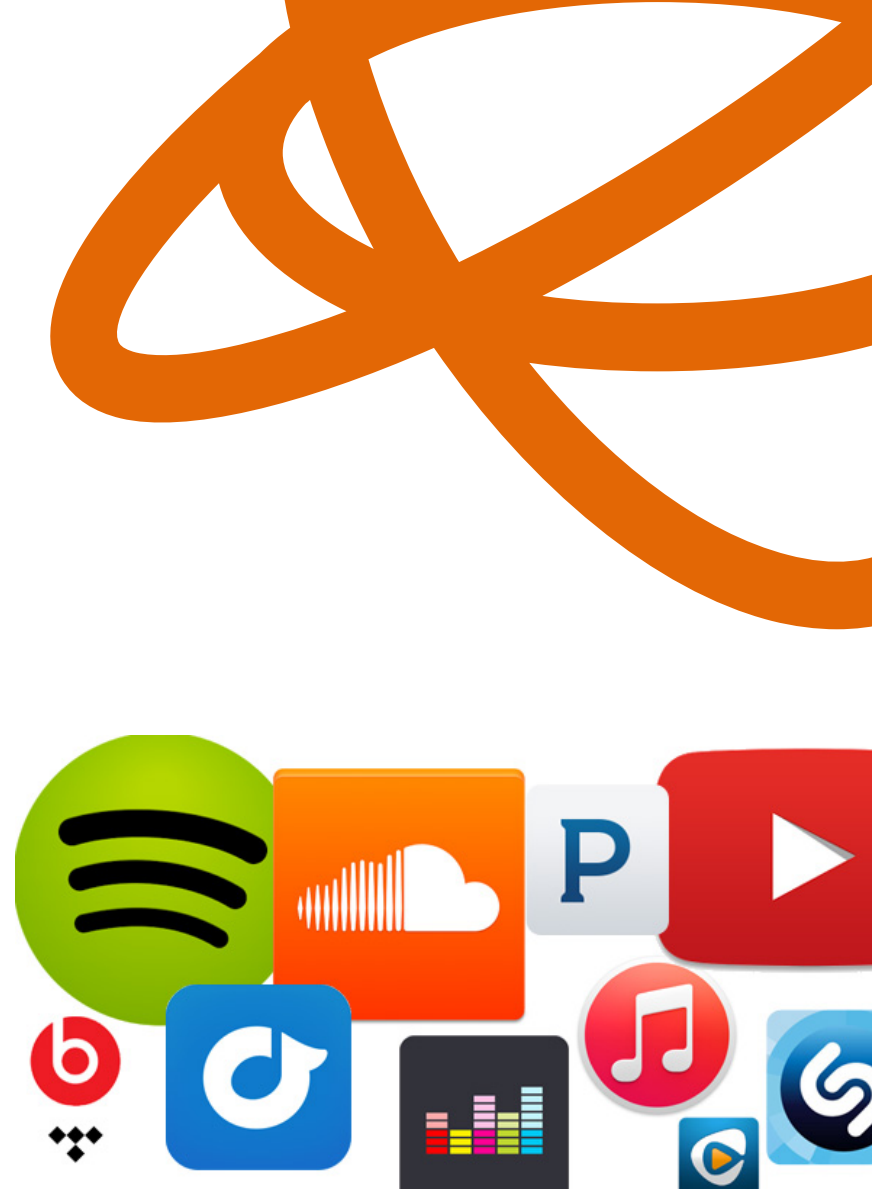
Programmatic out-of-home

- Another frontier where programmatic ad trading is gradually making progress is digital out-of-home (DOOH).

- E.g. digital screens in public places, stadiums, or gyms

- Ads can be precisely targeted in terms of location and time combined with other data such as current weather or facial recognition one-to-one personalization.

- DOOH impressions are traded in bundles based on screen's current audience size estimate on a CMP (Cost per thousand) basis.

- DOOH is closely linked to location data collected from smartphones or in-store beacons.

Premedia

Your marketing can do
so much more

Manuel Mayr

Head of Business Development

———

manuel.mayr@premedia.at

+43 664 5161625

WELS

Maria-Theresia-Straße 41

A-4600 Wels

T +43 7242 94040 - 0

WIEN

Ullmannstraße 16

A-1150 Wien

T +43 1 94040

PREMEDIA