PROGRAMMATIC

FOR BEGINNERS

CONTENTS

Robots in Recruiting
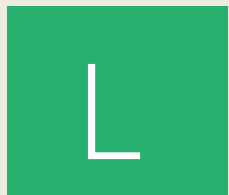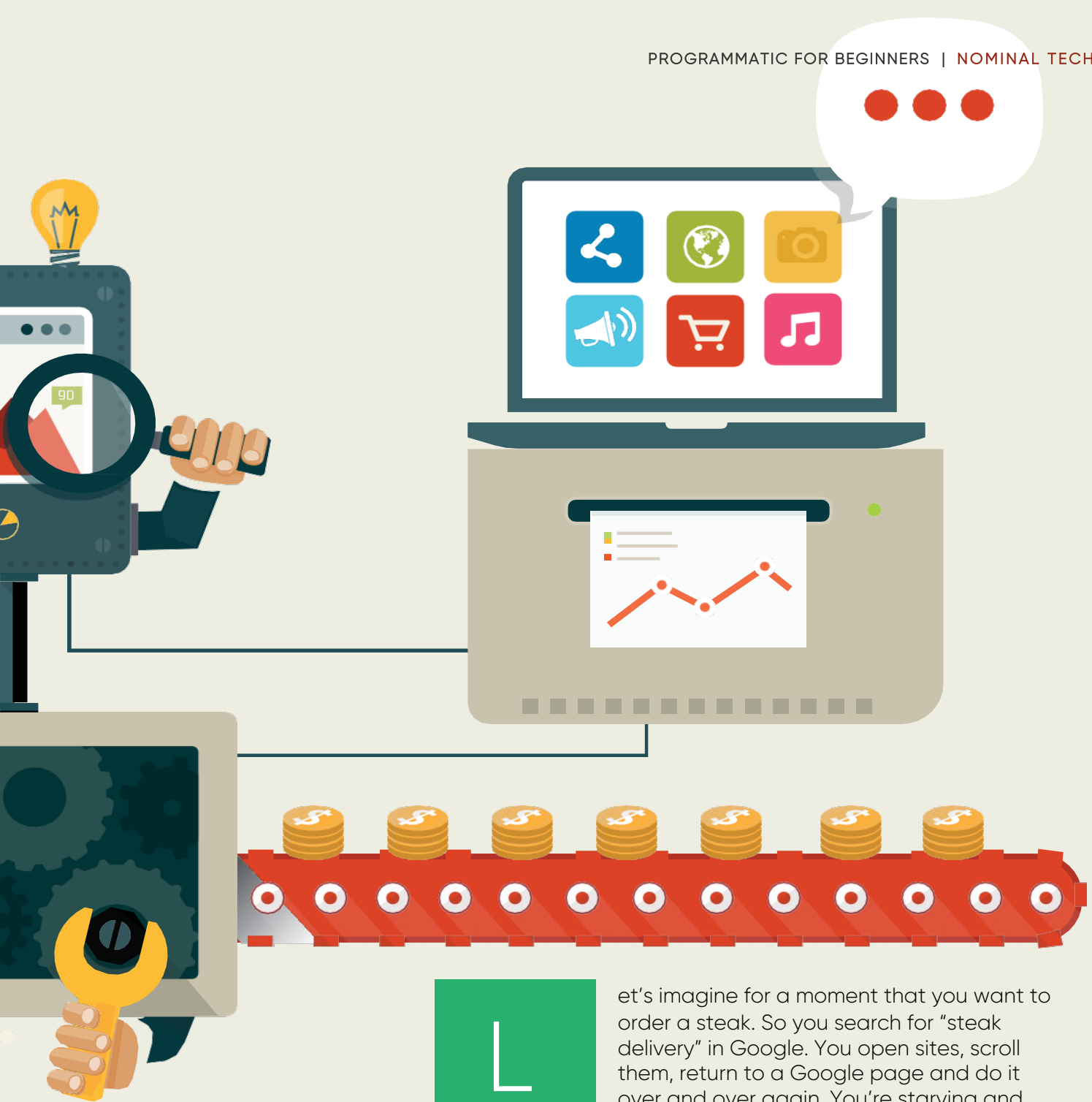
L et's imagine for a moment that you want to order a steak. So you search for "steak delivery" in Google. You open sites, scroll them, return to a Google page and do it over and over again. You're starving and tired of searching. So you close websites and order a well-known pizza. And the next day you see an ad for steak delivery everywhere: Facebook, google page, websites, etc. In the end, you will click a banner and order a steak.

This is how programmatic advertising works. It gets the right message, at the right time, for you, because it understands your interests, preferences, and behavior.

Let's talk about programmatic deeper, or robots will do everything for you

Programmatic is the automated process of buying advertising space in real-time with an automated platform. Programmatic uses audience data and Artificial Intelligence algorithms to show ads to the right user, at the right time, and at the right price. Welcome to the high-tech world!

Nowadays, Artificial Intelligence can analyze large amounts of data to choose the most effective ads for users based on a variety of signals. Every time you do anything on the Internet, you leave a trail behind you in the same way you leave a footprint when you walk on sand. These "trails" are cookies that save information about users' behavior, interests, and more. They help websites remember information about your visit. It can both make it easier to visit the site again and make it more useful for you in the future. For instance, an online fashion store can offer you more relevant clothes based on information about your last visit.

Moreover, cookies help programmatic to search for target audiences in the large digital world and show them an advertisement based on their interests and behavior. So advertisements won't be shown to everyone, but only to your potential customer.

Total programmatic ad spending

$725bn in 2027*
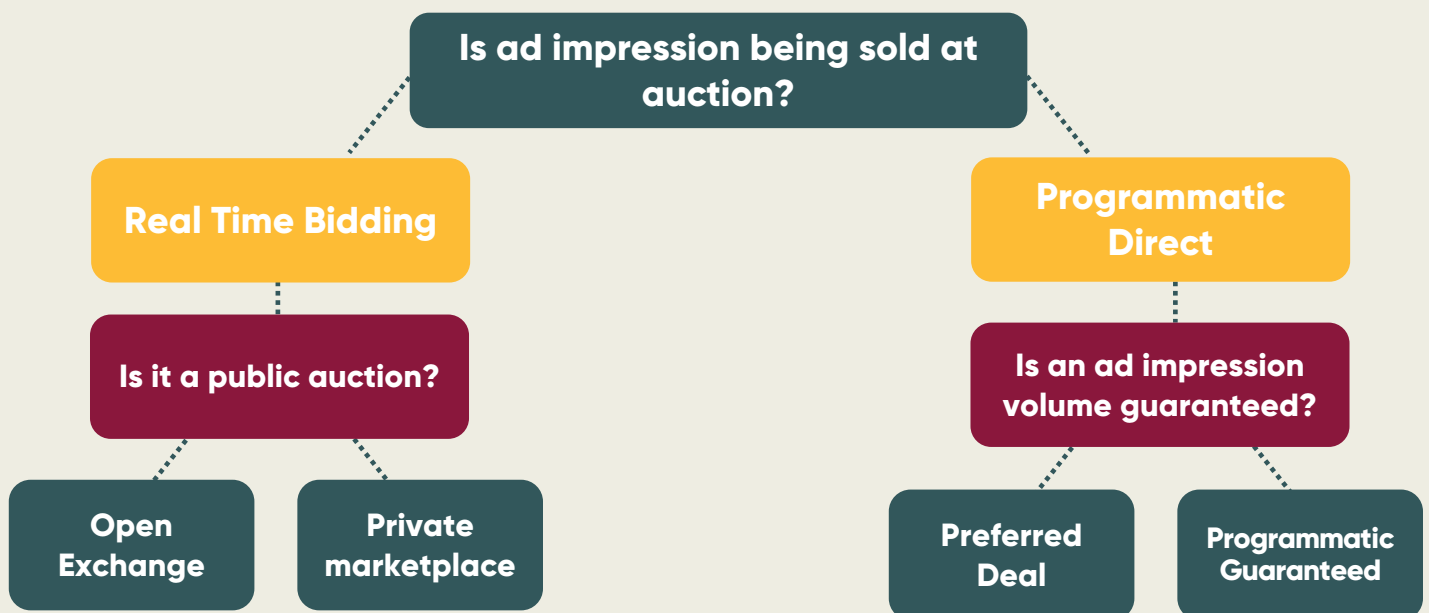
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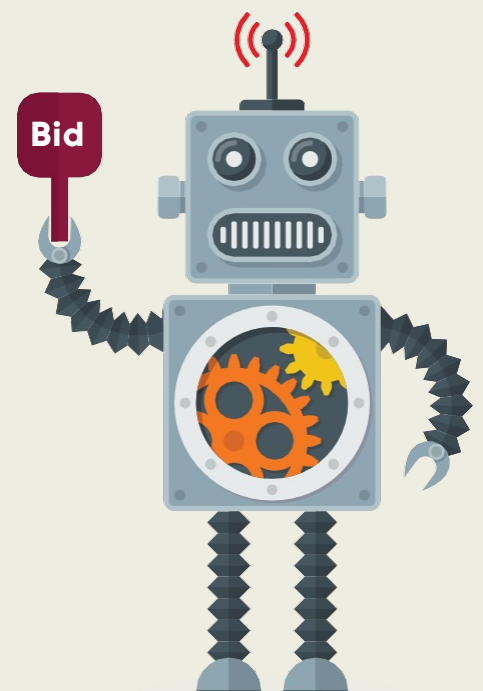
Programmatic and RTB: what is the difference?

Programmatic is an automated process of buying and selling ads, while RTB (real-time-bidding) is a way to buy ads programmatically.

RTB or real-time-bidding is a process of buying inventory through open auction in real time. RTB is not only efficient, but it is very fast — auction passes in a fraction of a second, while the website's page is loading.

Simply put, RTB is a purchasing technology. The programmatic's concept is much broader, it is a collection of technologies, and algorithmic processes, which includes not only RTB, but as well as private auctions and direct purchases as well.

Programmatic Inventory Sales Models

Is ad impression being sold at auction?

Real Time Bidding

Programmatic Direct

Is it a public auction?

Is an ad impression volume guaranteed?

Open Exchange

Private marketplace

Preferred Deal

Programmatic Guaranteed

Brave New World of Programmatic

Within the programmatic ecosystem, there are some participants who play a specific role in the buying and selling of ads: platforms that sell their inventory, advertisers who are interested in them, and website visitors for whom advertisers are bidding for.

Publisher — any platforms that run ads in their apps or on sites. They have their own ad inventory —a place to display ad messages. Advertisers need to buy ad inventory to run their ads.

As programmatic is an automated process of buying ads, publishers and advertisers cooperate with specialized platforms.

DSP-платформы (Demand Side Platforms) is a technology platform that represents the interests of the advertisers, makes a bid, and buys impressions. DSP aims to buy requests that meet the advertisers' requirements at the lowest cost.

Ad Exchange - is an online marketplace where advertisers, agencies, demand-side platforms, publishers, and supply-side platforms can bid on advertising inventory from various publishers using RTB.

Publisher

DSP

Ad Exchange

SSP

DMP
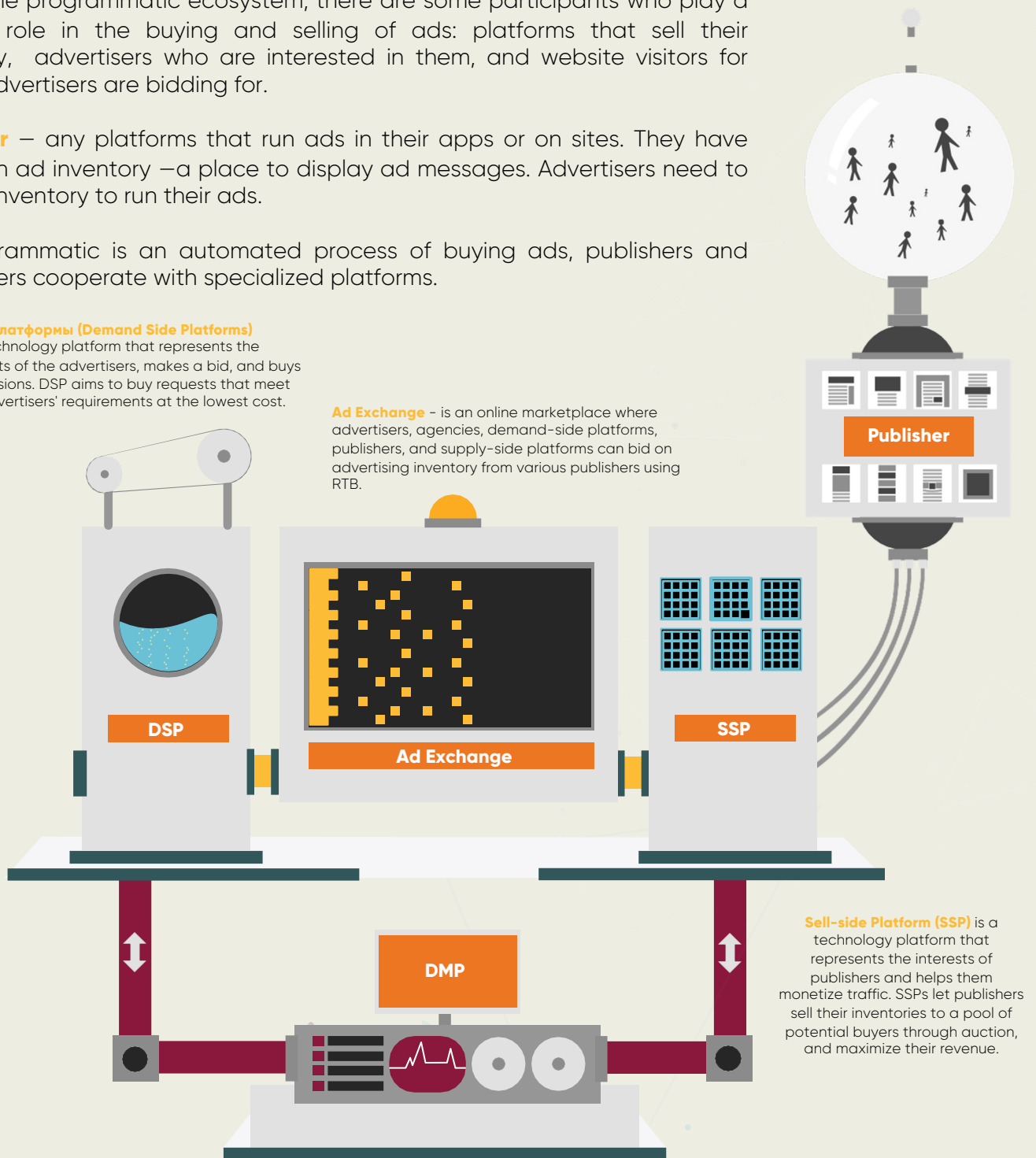
Sell-side Platform (SSP) is a technology platform that represents the interests of publishers and helps them monetize traffic. SSPs let publishers sell their inventories to a pool of potential buyers through auction, and maximize their revenue.

Data Management Platform extracts, collects, manages, and analyzes data. DMP is the depository for users' data gathered from different channels: geo, ID devices, and web browsing history.

Platforms can buy some missing data from DMP. For example, DSP can buy specific audience segments for more accurate targeting.
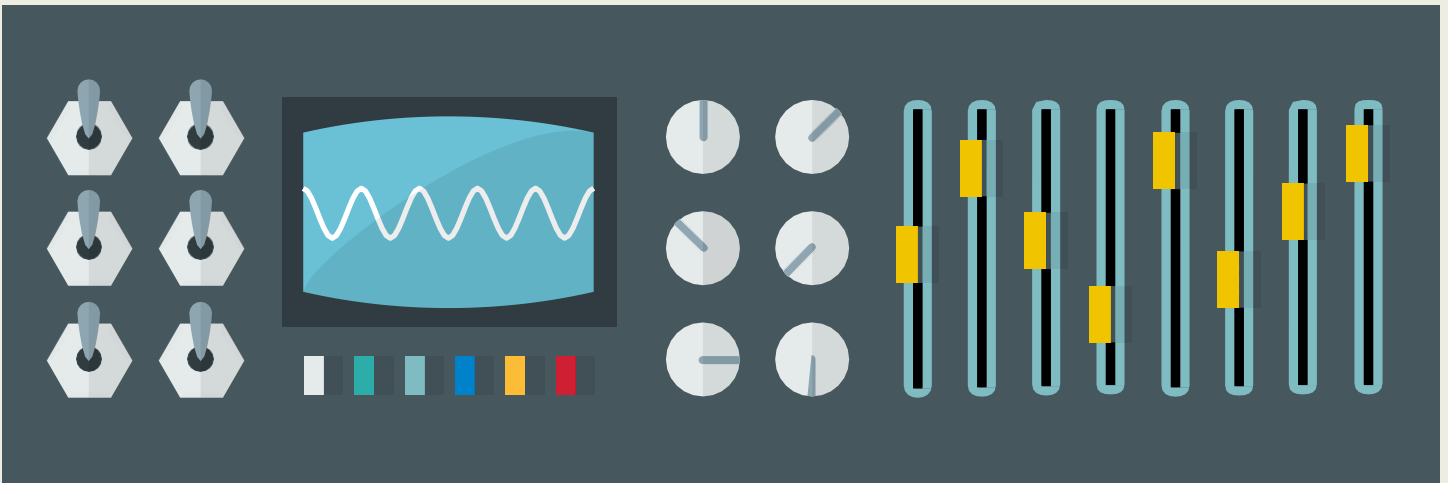
The main benefits of programmatic ads

It is time to admit that Programmatic is a real evolution in the advertising world. The mechanism of work guarantees transparency and implementation of key tasks. Moreover, it's beneficial for advertisers, publishers... and even users.

1 Advertisers no longer need to send their ads out to a broad audience and hope the right people see it. As programmatic always know where brands' target audience is. With programmatic technology advertisers pay for the right audience instead of an ad place. Ads will follow a target audience around the internet: on Facebook, on YouTube, on Google and any sites that they will visit. Brand Safety will minimize the possibility of ads being run in an unsafe environment by creating black and white lists of inventory where advertiser's ads may or may not be shown.

2 In addition, programmatic ads allow brands to make adjustments to campaigns at any point, in real-time to increase their efficiency. Although programmatic ad buying automates much of the buying process, brands still have access to the purchase price of the ad, the platform it's running on, the number of impressions, clicks, and other interactions. So you can optimize strategies and redistribute budgets at any stage of a campaign. Platform analyzes the campaign and, based on results, chooses an optimal bid by itself. All advertisers need to do is set bid limits, set audience segments and targetings, etc.
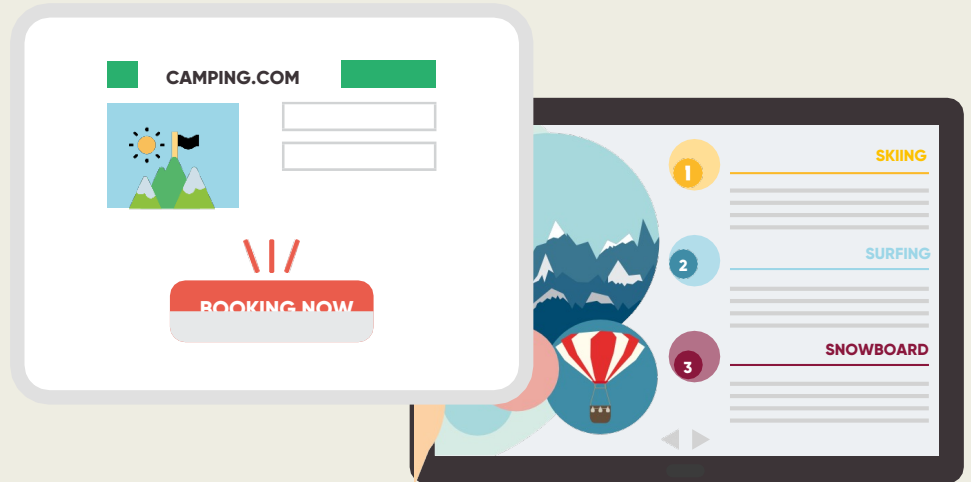
3 Another benefit of programmatic ads is improved targeting capabilities. Through programmatic advertising, you can easily target the specific audience you want to reach using all target opportunities. Rather than trying to reach sports car fans on an auto site, brands have the opportunity to create an audience segment of sports car fans and reach them across hundreds of websites, wherever they happen to be online. Programmatic targeting is much wider and more versatile than classical digital tools. So it helps reach any specific user on any platform and at any time.

4 Finally, the programmatic reach is huge. For a short period of time with improved targeting capabilities, the technology analyzes a large amount of data to find target users and choose the most relevant ads for them. With access to ad inventory across billions of sites, programmatic opens up the opportunity to find and engage brand audiences wherever they are. So the programmatic reach of the audience is almost 100%.

Automated advertising. Automated profit growth

Programmatic technology is a powerful tool that automates all processes of buying ads. Millions of ad impressions are bought in a fraction of a second. That is too fast for a person to react. So the element of human presence remains necessary for programmatic — even if it is a high technology development sphere. Despite the automated process of searching and choosing an audience for advertising, advertising campaigns couldn't be changed without specialist intervention. Ultimately, effective programmatic advertising depends on the people behind the setting of the campaign.

Working with experts can help brands get the most out of their programmatic ad campaigns across various digital channels. In this case, **managed service** from NT Programmatic Platform is a perfect solution to achieve your goals.

NT Programmatic Platform.
The innovative engine of your sales

NT Programmatic Platform offers advertisers managed service. Managed service means that a programmatic-platform team will handle all aspects of running the successful ad campaigns: media planning, ad creative development, campaign launch and optimization, post-campaign reporting, etc.

We create a team of experts focused on complete solutions for every project to ensure your business will succeed. They develop a programmatic strategy, an individual media buying algorithm for specific clients' tasks.

Account Manager

Ad campaign management and support

AdOperation specialist

Management and campaign optimization

Technical Designer

Creative development, A/B creatives testing

Data Analyst

Strategy, insights, report

Our AdOps specialists have already launched **40000+** programmatic ad campaigns for **3000+** clients from different business spheres.

Why is NT Programmatic Managed Service?

Constant support. Regularly communicating and answering client's questions, resolving issues arising in the work process with developers for making optimal decisions.

Work for results: forecasting and guarantees of KPI. Through an advertising campaign, we are responsible for the quality and results of a campaign. Automation capabilities of RTB optimization allow us to avoid stagnation periods and achieve all the KPIs planned.

Personal approach. We know everything about our platform, so we can customize it for each clients' needs in order to achieve more with AI-powered advertising.

You can leave the complications to us. The NT team will achieve your business goals and report to you about them.

Are you looking for an efficient solution for your business?

NT can power your success with unique data for precise targeting, a wide range of advertising formats, cross-device synchronization and fraud detection solutions. Through our years of experience and advertising technologies powered by deep learning algorithms, we help advertisers achieve their branding goals across all channels to attract the right audience, with the right message at the right time.

See for yourself how it can take your ad campaign to the next level — leave a request and we'll create a media plan for you. Need more information? Contact us **info@nt.technology**

NT Programmatic: the glossary

1st Party Data – advertisers' data from the interaction with the website: name, address, phone number, e-mail.

2nd Party Data – data from other ad campaigns (activity, views, clicks, etc.)

3rd Party Data – a type of data that provides information like browsing history, offline data, and internet requests. Third-party data is data that can be bought from outside sources that are not the original collectors of that data: DMP, Data Providers, etc.

A/B testing (Split testing) – comparative test by which you find out which combination of elements works best by splitting elements (usually in half) and comparing. For instance, testing how to influence the different sizes of elements of websites on conversions.

Ad Exchange – an online marketplace where advertisers, agencies, demand-side platforms, publishers, and supply-side platforms can bid on advertising inventory from various publishers using RTB.

Ad Fraud – a type of scam in which the perpetrator fools advertisers into paying for something that is worthless to them, such as fake traffic, fake leads, or misrepresented and ineffective ad placement.

Ad network – aggregate ad inventories from supply sources and help them to sell it for advertisers.

Ad Operation – specialist who is responsible for managing the trafficking, delivery, optimizations, testing different ad formats and reporting of digital ad campaigns, etc.

Ad Tech – software created for the maintenance of the advertising environment. It provides brands the ability to engage people across digital properties to achieve marketer-specified outcomes (e.g., brand awareness, engagement, consideration, conversion) and provides media owners selling and yield tools to better monetize their inventory. For instance, it can be DSP, SSP, or DMP.

Agile – development methodologies are based on iterative development, where requirements and solutions evolve through collaboration between self-organizing cross-functional teams. The result of every iterative is a finished product.

AI bidding algorithm – AI-powered algorithm which analyzes every ad placement considering a lot of factors influenced by quality of ad impressions to a specific user (previous users behavior, type of content, times of day, advertisement content etc.). Such approaches help machine learning algorithms learn from data and a wide range of parameters to understand potential performance and choose the right bid for a specific user on sites at the current time.

API (Application Programming Interface) – description of classes, methods, functions, and variables that the application uses to perform its tasks. In the PHP case, AI for accessing databases utilizes extensions of PHP.

Attribution Modeling – the rule, or set of rules, that determines how credit for sales and conversions is assigned to touchpoints in conversion paths. It helps determine which channels and messages had the greatest impact on the decision to take the desired action (such as click or conversion).

Audience buying — creating audience segments from impersonal users' profiles to show them advertisements. The seller (TD/Buying Platform or DSP) aggregates data which helps in buying ad impressions.

Bid Factors AI Engine — automatically assigning multipliers for bid requests based on the conducted analysis of post-click and post-view events.

Bid Factors — a multiplier that is assigned to the most essential targeting parameters.

Bid Factors Manual — a multiplier for bids that are adjusted manually.

Bid Request — a request sent by Ad Exchange, Ad Network, or SSP for assigning a bid for a given impression. Bid requests include data points about ad placement, an ad showing time, and information about the user (IP address, a cookie file, etc.)

Blacklist — a list of websites where advertisements may not be shown (or a list of sites on which an advertiser doesn't want to run an ad).

Bot Fraud — artificial increases the number of impressions of an advertisement or traffic or leads using bots.

Bounce Rate — a metric that describes the percent of people who visit a website and leave almost immediately without any leads. It helps marketers evaluate the effectiveness of the content of any website's page.

Brand Lift — a tool that allows marketers to measure an ad's impact on the main brand metrics: brand awareness, ad recall, and brand interest.

Brand Safety — keeping a brand's reputation safe when they advertise online. Brand Safety minimizes the possibility of ads being run in an unsafe environment and helps protect brands' data.

Call-tracking — technology that lets marketers track offline conversions, their amount, and channels where it comes from. It is used for ads with payment models such as "pay per call". It can tell what ads, web pages, and even the keywords helped drive a call. The process of tracking and analysis of calls is similar to tracking online conversions. One of the differences is considering calls instead of clicks.

CMS (Content Management System) — a system for managing content. It is software that helps marketers work with content for the target audience. It is used for creating, managing, saving, optimizing content, and tracking its efficiency.

Conversion — a metric of efficiency in an ad campaign. It is a percent of users who completed the desired action (sign up, make a purchase, fill in a form, etc.) in response to an ad compared to all website visitors.

Cookies — a parcel of users' data that is stored on the user's computer after visiting websites. A cookie is used for authenticating, session tracking, and storing information about specific users, such as site preferences or buying habits.

Cookie matching — a way to match different cookie IDs belonging to the same user. It helps to avoid duplication of information about the same user during the integration of data from multiple sources.

Cost-per-action (CTA) — a price for a target action, i.e. a purchase, a form submission, a completed booking.

Cost-per-click (CPC) — a payment model when an advertiser pays for every click on their ad.

Cost per Lead (CPL) — a payment model when an advertiser pays for each lead generated — filled in form with users' contact information.

Cost per Mile (CPM) — a payment model when an advertiser pays for thousand ad impressions.

CPM(V) (Cost per mile (view) — a price for 1000 video views.

CRM (Customer Relationship management) — a system for managing all your company's relationships and interactions with customers through software. It helps automate interaction with clients, optimize marketing strategy and more.

CTA (call to action) — elements that prompts users to take an action. For example, a CTA for an online store can be a button with text "Buy Now".

CTR (Click through rate) — the rate or frequency at which users click on advertisements. CTR is calculated by dividing the number of clicks on an ad by the number of impressions served.

Data analysts/ Business Data Analysts (BDA) — a specialist in dealing with Data mining, whose tasks are to gather and interpret data; convert data for statistical analysis and statistical analysis; reporting, etc.

Data-Driven Analytics — using collected data to provide the baseline for the analysis and decision-making. The main peculiarity is a right gathering necessary data for improving work.

Data Management Platform (DMP) — a platform that aggregates and processes data (1st, 2nd, 3rd) that provide insights into audiences and targeting buyers and sellers of ads.

Data Provider — a company that collects data about users, and makes the information available in a safe and data compliant way for advertisers to better understand and serve ads to their audiences. It can be mobile operators, websites, internet providers and others.

Deal Id — a unique number for a programmatic deal to transfer of individual parameters and purchase settings.

Demand Side Platform (DSP) — a technology platform that represents the interests of the advertisers, makes a bid and buys impressions. DSP aims to buy requests that meet the advertisers' requirements at the lowest cost.

Digital advertising — a type of advertising when brands use online channels for running their ads such as websites, social networks, and others.

DoubleClick Bid Manager (DBM) — the Google's advertising platform that offers brands access to the world's most exclusive collection of display, video, and mobile inventory available in real-time.

E-commerce — the buying and selling of goods and services through the internet. Also, it includes online payment, money transfer, paid online subscriptions, and others.

Fraud — a scam with digital ads. It is a cheating with clicks, traffic, leads, and conversions in order to gain benefits. Too much high CTR is an obvious sign of fraud.

Fraud free — a scam protection technology for the digital advertising sphere.

In-house Programmatic — an implementation of all programmatic activities by the advertiser independently. It is the most effective, economical, and safe way.

Inventory — an inventory for promoting products and services. It includes various ways of attracting potential customers. The most popular online inventories are search optimization, display ads, advertising on social media, email marketing, viral advertising, etc.

Kanban — is a method of managing projects based on the principle of "just-in-time". It helps streamline the working process on a project and optimize that. Work items are represented visually on several stages: to do, in process, checking and done. It allows the team to see the state of every piece of work at any time and work more productively.

KPI (Key Performance Indicators) — measurable indicators that demonstrate how effectively a company is achieving key business objectives.

Landing Page — a standalone web page that a person "lands" on after clicking through from an advertisement.

Lifetime Value (LTV) — a prediction of the net profit attributed to an ongoing relationship between customer and product. By providing a running estimate on how much a particular consumer is likely to spend on brands products and services, LTV helps set advertisers budgets and ensures that companies pursue the most effective users.

Look-alike — a targeting with using machine learning to identify a similar audience to a brand's target audience to show them ads as well.

Managed service — a type of managed ad campaign when a programmatic-platform team handles all aspects of running ad campaigns: media planning, ad creative development, campaign launch and optimization, post-campaign reporting, etc.

Media Trader — a specialist in dealing with launching and managing ad campaigns through DSP in real time. His tasks are setting parameters of ad campaigns, interactions with publishers and ad networks, post-campaign reporting, etc.

NT Programmatic Platform — a set of programs and processes for forecasting, buying, managing, optimizing and analyzing programmatic ads.

Open RTB — the communication protocol that enables real-time bidding. It was designed to spur growth in RTB marketplaces by providing an open industry standard for communication and interoperability between buyers and sellers in the digital advertising industry.

Pixel Tag — invisible tag to track users data. When the pixel loads, the third-party server can record information such as the IP address of the user's computer, URL of the page, and time the page was viewed.

PLC (Product Life Cycle) — the amount of time a product goes from being introduced into the market until it's taken off the shelves. There are four stages in a product's life cycle—introduction, growth, maturity, and decline.

Post-click analysis — an analysis method that is used to evaluate all channels by which users come. It helps understand which channels work better and evaluate the effectiveness of ad campaigns.

Post-click conversions — a goal action taken in a 90 days period by a user after clicking on an ad (often a decision-making process takes a time). Post-click conversions include last-click and assisted conversions.

Post-view conversions — a goal action taken in a 30 days period by a user after seeing an ad without clicking.

Post-view attribution — a model of tracking users' behavior after seeing an ad to determine real value of traffic source.

Pre-bid analysis — an analysis of user parameters, websites browsing history, URL and other before buying an ad impression for a specific user. If some parameters don't match with necessary, the impression purchase will be blocked.

Programmatic Buying — a buying process of selling and buying ads through automated systems based on data.

Programmatic Direct — an automated process of buying ad impressions when a deal for buying and selling inventory is made directly between the publisher and advertiser.

Publisher — an ad platform owner where advertisers run their ads.

Reach and Frequency — 1. Reach —share of the audience who are exposed to ads during an ad campaign. 2. Frequency — the number of times advertisements are shown within a period of time.

Real Time Bidding (RTB) — a process of automated buying and selling ad impressions through open auction in real time.

ROI (Return of Investments) — a metric that shows how much profit brands make for investments in ads. It helps to evaluate the efficiency of investments in ad campaigns or channels.

Self-service — a type of managed ad campaign when an advertiser has complete insight and control of the advertising process. They can set targeting, reach, control the process of ad campaign, bids and a budget, and more via platform.

Sell side Platform (SSP) — a technology platform that represents the interests of publishers and helps them monetize traffic. SSPs let publishers sell impressions to a pool of potential buyers through auction, and maximize their revenue.

TV sync — a technology that allows for the synchronization of digital ads simultaneously with TV ads.

Viewability — a metric that is used to measure how visible brand ads are to a user. It helps make advertisers sure that advertisements were seen by users.

VTR (View-through rate) — a metric of the effectiveness of video advertising. It is the ratio between the number of impressions and the number of views.

Web analytics — a system for the measurement, collection, analysis, and reporting of web data to understand users' behavior and optimize website usage.

Web crawler — a search robot that browses web page content. It is used with Brand Safety technology to minimize the possibility of ads being run in an unsafe environment.

Assisted conversions — all conversions in which some channel was a non-last interaction but leads to conversions.

Audience insight — an unique information about an audience, behavior patterns and tendencies on a way to conversions. It helps improve programmatic strategies.

Branding ad campaign — a campaign with the goal of increasing brand awareness, interests, etc.

High frequency requests — requests, which are most often entered into the search bar. Usually it consists of one or two words. For example, a window, buy socks, etc.

Dynamic search — search ads that show based on users search requests and the content of brands' sites.

Dynamic remarketing — a technology of showing unique and personalized advertisements to users that contain products and services they viewed.

Macro Conversion — the main goals of websites. For example, completed purchases on e-commerce web sites.

Micro conversion — small users' interactions along their path towards completing a primary conversion goal. For example, downloading an user's catalog.

Native ads — an advertising format which merges with the website content and looks like a part of editorial flow of the page. The key feature of native ads is that they are non-disruptive for the reader and therefore get more user attention.

Invalid clicks — clicks that provide no value to the advertiser, such as the miss-click, or a double-click.

Attribution window — a period of time from the first click or an impression led to conversions.

Search retargeting — an ad impression on search engines for users who visited advertisers' sites.

Advertising agency — a creative or strategical media buying company that dedicates to creating, planning, and handling advertising and sometimes other forms of promotion and marketing for its clients.

Retargeting — the opportunity to target and show ads to users who visited advertisers' websites or engaged with a mobile app.

Targeted advertising — a type of ad that lets advertisers show advertisements to a particular audience segment. This is generally done by using customer data to segment audiences by factors such as basic demographics, shopping interests, or browsing behavior, and then creating unique advertisements tailored to each audience segment.

Ad tracking — monitoring the intermediate results of ad campaigns. It is used to learn insights into audience behavior and preferences to serve more relevant ads, track KPIs and optimize an ad strategy.

Feed — a file CSV, TSV, XLS, or XLSX format that includes information about each brand's product on websites (ID, price, image, etc.) The information is used by the system for dynamic ads.