



# Programmatic Recruitment Technology 101

Understanding the Fundamentals, Terms, and How  
Programmatic Technology Can Impact Recruiting Results

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# Introduction

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With recruiting organizations spending nearly a third — and sometimes more — of their recruiting budget on job sites, getting 10, 20 or 30% additional hires out of the same budget is massively impactful. Today, the fastest route to accomplishing this is by layering programmatic buying technology onto the job-site market. Adding programmatic ensures you get the best reach and the best price on your ad buying, by leveraging the entire market and all its data.

Programmatic is not a new concept; the general advertising world has been using it for years. But recruiting presents its own challenges, and for many employers, the rise of programmatic candidate acquisition has introduced as many questions as it has provided answers.

In this paper, we shall define programmatic, cut through some of the jargon, and provide a framework for recruitment ad buyers to get a better grasp on programmatic as the best way to improve their advertising spend on job sites.

## Clearing Up the Fuzzy Terms

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To begin, let's clear up two definitions that cause the most confusion: Cost-per-Click (CPC) and Programmatic. These terms are often presented in opposition to each other — programmatic versus CPC — when in actuality, the two are inextricably linked.

The fact is, **programmatic technology relies on CPC vendors or some other cost per payment model.** Generally, you layer programmatic technology onto your media buying when you are dealing with job sites that provide candidates via CPC. This is because CPC, unlike standard pricing models, can leverage software to read signals, such as a click, an application (or the lack of a click or an application) in real-time and make adjustments. The software determines the bid price and decides whether to advertise the job at all, to help reach a predetermined goal.

This is still a bunch of jargon, so let's layer in some definitions. For clarity, all terms are explained as they would function in a job board or job site.

## CPC

The acronym stands for "cost-per-click" or is referred to as PPC or pay-per-click (these terms are used interchangeably). CPC is simply a performance-based pricing model. Every time someone clicks on your job ad, you pay a certain amount. That amount may be determined by you, as a "fixed bid" (see below) or it may adjust up or down automatically, a "variable bid" (see below). This "auction" (see below) happens as the job ad is rendered on the computer screen of a potential candidate. At this juncture, however, there is no guarantee that someone will actually click on the job ad. In practice, your CPC bid is designed to be seen on the screen, and you pay only if the click happens.

## Fixed Bid

The flat bid price you are willing to pay for each click (CPC) or application (CPA). If others are willing to pay more, then you will lose that auction. If they are not willing to pay more, you will win. Fixed bids can be practical from a budgeting perspective because you know exactly what you will pay for the auction. However, it also means that you may pay too much for some clicks or applications while missing out on other candidates because someone with a variable bid can easily outbid you. The simplicity of fixed bids means they are especially tempting for a novice or time-constrained buyer. In practical terms, however, fixed bids work best for advanced buyers who have a solid sense of market pricing and conditions.

It's important to note in a fixed bid CPC scenario, only the click bid is fixed; this means that your effective CPA will vary depending on the quality of those clicks. Bid too low or too high and it will take more clicks than you would typically expect to convert into candidates.

## Variable Bid

Also known as Bid Optimizer or Market Rate Bids. Variable bidding allows you to specify the maximum price you are willing to pay for the click or application. The software will select a starting bid and then try higher and lower bids to determine the current sweet spot for that type of candidate for that particular job. Variable bids are most often tied to the auction model where all eligible advertisers bid up in real-time until the highest bid is reached for that click or application. Setting a maximum variable bid or cap means you have some control over the maximum amount you will pay.

## Auction

In a performance environment (CPC and CPA), everything starts with an auction. Understand that job boards do not show ads for every query. For example, when a candidate searches for a "retail assistant" role, there could be hundreds of or even thousands of jobs that match the search term. Yet, there are usually only between 10 and 20 spots on page one of the search results for a job to go into. The auction determines which of the jobs best matches the candidate's search terms, has the highest likelihood to get clicked on (which will generate revenue for the job board), makes the final cut, and determines the order in which they are shown. Auctions also occur as job boards create job alerts to email candidates potential job matches.

## CPA

Cost-per-application, also known as pay-per-application or PPA. Some job boards and job ad exchanges (see below) offer CPA as a performance-based pricing model instead of, or in addition to, CPC. CPA works much like CPC, only in this model, buyers (recruiters/employers) are charged for each completed application they receive. Those applications may be completed on the employer's own career site or within the job site itself. As with CPC, you can buy CPA via a fixed bid for every completed application, or through a variable bid, depending on what the job site or job ad exchange offers. CPA providers don't necessarily use programmatic, but as with CPC, programmatic can make your CPA media buying much more precise and cost-efficient.

## Job Ad Exchange

A job ad exchange is a layer of technology that sits between your career site (your job ads) and all of the job boards. It gets all of your jobs to candidates, and facilitates candidates getting to those jobs and applying. Behind the scenes, it tracks where jobs are placed, at which bid at which time, and ensures proper payment to each job site that generates activity, both clicks and candidates. Job ad exchanges often have thousands of integration points allowing the seamless movement of jobs from the ATS or CRM and candidates to make sure the right job gets to the right candidate and the right candidate gets to your job, and the right payment is made. The job ad exchange is the piping that ensures the movement of all entities and data is interconnected.



## Programmatic Technology

Programmatic technology consists of:

- ▶ A set of tracking technology that understands what is happening (clicks, candidates, quality candidates, hires, etc.) often called a pixel. This can also be accomplished through an API or file integrations (more below)
- ▶ A web interface that an employer enters their goals, rules, and budgets. This may include how many candidates you need, what you are willing to pay or when to stop spending money
- ▶ A large data set, collected over time, that allows the technology to know things, such as which job sites generate which kinds of candidates and at what price, and how many clicks a specific job or company requires to get a candidate
- ▶ Technology that makes the decisions of which sites which jobs will go to (based on the data), at which price (based on the goals, budgets, and data), and when to pull the job out of circulation (based on the tracking, rules, goals, and budgets)

In the context of job ads and hiring, combining the above elements, programmatic technology is the automation of these different elements to accomplish a set of hiring goals you might have. It can sit across a number of job sites and job ad exchanges and understand the interplay of all of these sources to ensure an effective strategy that drives the candidates you need, across the jobs that you need candidates for.

➔ Programmatic technology is a layer that employers can add on top of their job sites to make their media buying more precise and cost-efficient, but is not required in order to purchase CPC or CPA job site media.

# How Programmatic Improves Performance-Based Pricing

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Starting with a base understanding of programmatic, and breaking out the different elements (below) that are required to make programmatic technology work for recruiting you can see all the various levers that you have to start driving incremental improvement in your hiring strategy.

- ▶ Tracking = measuring what happens to your jobs
- ▶ Rules = goals you provide to the software
- ▶ Data = big data or artificial intelligence
- ▶ Ad buying = how much you bid
- ▶ Placement = which sites your job(s) go to
- ▶ Software = automation of all of the above

Programmatic technology is a control layer of technology that sits on top of job sites and ad exchanges that dictate which jobs go to which sites at which bids, which are determined by the market data and rules that it has been equipped with. It operates as the decision point if a job continues to generate candidates (or not) and how to adjust pricing to hit goals it has been provided. Much like an autopilot in a plane, auto-adjusts speed and the degree of the wings to reach the goal altitude and arrival time.

When you layer programmatic technology across multiple performance-based models, you essentially are allowing software to make key buying decisions for you, such as:

- ▶ Where (which job sites) to place your job ad to reach your ideal candidate demographic
- ▶ What bid you should use on each job site to make sure your job advertisement is displayed in key positions (top 10) on a job site
- ▶ Changing bid or site choices based on other factors (age of job, number of candidates, etc.)

Programmatic can also be used to determine when to stop spending money on a job ad, for example:

- ▶ When you already have enough candidates, in total, to make a hire
- ▶ If you're not getting any conversions (i.e. clicks aren't turning into applies) , which is a waste of money

## The Role of Software

Programmatic software automates a variety of manual tasks, some of which could be done by a person with enough time and patience. However, many of the tasks performed by the software are beyond the computational ability of the average person and/or could not be performed fast enough within a real-time bidding environment to improve the employer's outcomes.

Some of the things that software automates include:

### Jobs

The ingestion and distribution of the jobs to every job site, all associated updates, refreshes and changes, and understanding of what type of candidate each job is targeting.

### Tracking

Automated tracking of the number of clicks, applies, quality applicants, and hires that any job might have.

### Rules

Automating the application of the rules that you have set (more on rules below). The software applies the rules regardless of the day of the week, working hours, and without vacation time or weekends.

### Data

Collecting mass amounts of data across the market to understand current bid averages, receptive/reactive candidate pools, to determine appropriate job site placements and bids (more below).

# Programmatic Technology Requires Tracking

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Programmatic technology leverages what has happened against the goals it's been given to help make decisions. Getting the tracking in place to create that real-time data set is essential. For most companies, the data lives in your applicant tracking system (ATS) or your candidate relationship management system (CRM). Getting that data, as close to real-time as possible is the trick.

For most programmatic technology systems, a pixel is placed on the job pages of the ATS or CRM. In addition, for ATSs that can support down funnel data exchanges (such as quality applications or hires), an integration via an API or a file transfer of information is layered on top of the pixel data. Below, find the various types of technology leveraged for programmatic data transfers.

## Pixel

A pixel is a bit of code that transmits information to the system that is tracking. That information generally is limited to an event such as a click has happened or an application has been submitted. In addition, the device (mobile or desktop) may be recorded. Pixels may fire with or without the help of cookies (see below).

## Cookies

A cookie is a bit of information that is stored on a computer that helps a website operate during a user session. Cookies help websites understand if the same user has returned (by recognizing that the cookie is already on their browser), which pages on a site the user visits and in what order.

## API

Application Programming Interface (API) is a method for computers to authorize and transfer certain information to each other. In the case of programmatic technology for recruiting, the data is often limited to candidate IDs and which status they are in (interview, offer, hired, etc). This can be done in real-time or near real-time.



## File Transfer

File transfers allow a company to automate sending certain information to another organization via email or FTP. Typically through a CSV file, the data contained within is completely controlled by the company transmitting the data and in the programmatic technology for recruiting includes candidate ID and status data.

# It's the Rules That Matter

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To a programmatic buyer, rules may seem like the simplest of concepts, but they actually are the most nuanced. Rules are your instructions to the software, covering details like:

## Budget

How much are you willing to spend? With programmatic, you can set budget allocation rules at an individual job level, at a grouping of jobs level (for example, all customer service jobs), during a particular time period (a month, five weeks, and so on), at the division level, or in total. As an extra tier of complexity, you can establish all of these budget limits at the same time.

## Conversion Rate

How many clicks does it take to get to an application or a quality application? If a particular job's conversion rate is far below normal, you may want to stop spending on it and remove the job from job sites. Alternatively, a low conversion rate may be a sign that you are bidding too low and increasing the bid per click or application could yield dramatic improvements. A low conversion rate is also quite often a result of the job being hard to fill, or of an overly complex and frustrating application process. Either way, it's a metric for you to pay attention to.

## Target Volume

Whatever the job or industry, you require a finite number of people to complete your application process in order to find a hireable candidate. Allowing more people to apply when you reach that number has a very real cost in a performance-based environment as you are wasting your budget on clicks or applies that you do not need (and creating a bad candidate experience for candidates who waste their time unnecessarily applying to your job). Having application volume targets allows the software to stop spending on jobs that have enough candidates, and reallocate the budget towards your harder-to-fill positions that still need more candidates.

# Driven by Data

In a programmatic environment, data is used to help you understand the market conditions you are competing in and help the software understand what it should do.

## Job Sites

Some job sites thrive as generalist boards and have every type of candidate. Others attract larger audiences of a particular kind of candidate, such as hourly workers, professionals, industry-specific workers (restaurant, retail, nurses, truck drivers, construction, and so on), or new college graduates. Programmatic uses job-site level data to help you understand where the candidate traffic is currently coming from. With thousands of job boards to choose from, data can help you focus your adverts on the most valuable options.

## Bids

In the context of bids, the data set can help you to know where to start bidding for any given job, in any given location, on any given month or day of the week, and for any given job site. When you are bidding where the pennies can matter, knowing the right price can be daunting. Software that bids up and down (variable bidding) is invaluable here, as it "hears" what is happening based on the bids it is putting out to market.

# Optimization: Where the Magic Happens

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The combination of **software, tracking, rules, and data** is where programmatic magic happens — optimization. Of all the jargon associated with programmatic, optimization might be the toughest to pick apart.

At its core, optimization is the use of software, rules, and data to achieve an objective. This definition is somewhat circular but for most companies using programmatic candidate acquisition, all it really means is getting candidates — quality candidates — for a greater proportion of their jobs and ideally at the right price. It also means the removal of human bias in your decision-making.

The outcome from programmatic optimization is that you experience far fewer jobs with zero or very few candidates, and far fewer runaway jobs where you're wasting money on excess clicks and applicants. It also means that for some types of candidates, you will pay a higher individual CPC, but that will, in turn, increase your conversion rate resulting in a lower CPA. Conversely, in some cases, you may find a higher than expected CPA, but you will get candidates where previously you may have received none. When it is all said and done, it means that you have a far better chance of hitting the volume targets or other objectives that your business might have.

## Conclusion

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Put this all together and you can see that programmatic uses software, combined with your rules, to determine which CPCs or CPAs should be used, and on which job sites, to get you to the right amount of applicants within your budgets. To return to our opening statement, it is not a "versus" concept when compared to CPC. Rather, programmatic allows you to get the most out of your CPC and other performance job sites by providing those sites with better guide rails to align their delivery of clicks that turn into the candidates you want and need. Simply put, programmatic empowers you to get the most out of your investment in your job sites.



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