



# The Predictive Growth Playbook

How to Acquire Your Most Valuable Customers  
on Meta, Google, and TikTok



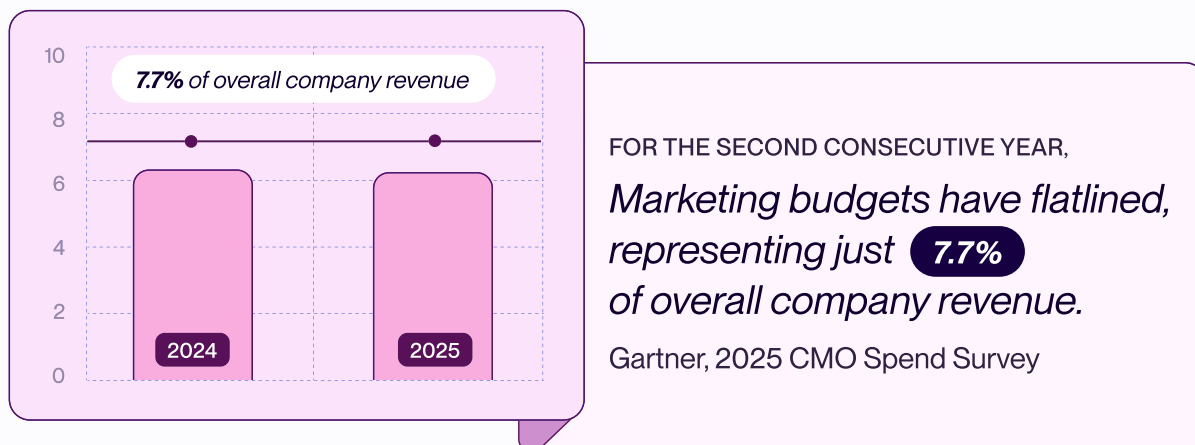
# The Growth Marketer's Job Has Changed

You've seen it firsthand... the various levers of campaign management once available in Meta, Google, and TikTok – bid control, segmentation, ad placements – have been condensed by automation. Instead of manual optimization, you're now tasked with a more strategic question.

How do you train the algorithms to find your best customers?  
*It sounds simple, but rarely is.*

As an industry, we've come to rely on deterministic events or conversion values like first purchases or trial sign-ups to signal to ad platforms what our ideal audiences look like. While easy to measure, these proxy metrics don't always reveal who will stick around long-term, and often teach platforms to fill the funnel with quick wins instead of the right customers. By the time revenue reports catch up, the budget is already spent.

Gartner's 2025 CMO Spend Survey confirms what many teams are feeling: budgets are flatlining. Paid media still claims the largest share, but price inflation means growth teams are getting less for every dollar spent. The result is an endless cycle of declining efficiency.



If the most influential growth lever left is the signal you provide ad platforms, it's time to rethink how and when to define value. Most businesses already have the data to identify their best customers and predict their value weeks or even months in advance. The real challenge is turning the insight into high-fidelity signals that ad platforms can act on. This practice, called Signal Engineering, is often the missing piece in a predictive growth strategy.

In this guide, we'll take predictive growth from theory to practice with actionable frameworks and success stories from teams outperforming peers to inspire your strategy.

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# Why Now Is the Time to Bet on Predictive Signals

The traditional discovery funnel is collapsing. Sixty percent of Google searches now end without a click, and the cost of traditional paid search acquisition is rising. At the same time, ad platforms are creating a more automated market, where algorithms anticipate user intent before they even show it.



**Mark Zuckerberg**  
Chairman & CEO of Meta

"Any business will be able to just tell us what objective they're trying to achieve, like selling something or getting a new customer, how much they're willing to pay for each result and connect their bank account, **and we just do the rest for them.**"

These shifts have ushered in a more streamlined approach to campaign optimization. But for many, they've also absorbed the day-to-day strategies growth teams have come to rely on.

## 01

**Bid control is a thing of the past.**

We used to meticulously manage bids, setting caps and adjusting them daily to find the perfect balance between cost and scale. Now, platforms take a broad goal and use AI to bid in real-time, deciding what a conversion is worth.

## 02

**Hyper-segmentation can actually hamper performance.**

We used to launch dozens of narrowly targeted ad creative sets. This offered a sense of control, but it also limited reach. Now, platforms take a broad signal and use their AI to explore a massive universe of customers, often in places we wouldn't have looked.

## 03

**The placements aren't fully up to you.**

We used to manually allocate spend across platform inventory. Now, Google's Performance Max and Meta's Advantage+ automatically push budget toward the formats their AI predicts will perform best.

If ad platforms are now designed to make their own inferences, our job is to train them with the clearest, most accurate **signal of customer value**.

## THEN

### Manual Control

Dozens of levers to pull, from bid adjustments to A/B testing to audience segments.

### Intent Detection

Algorithms relied on keywords and clicks to match ads.

### Short-Term Focus

Optimization was for quick conversions and clicks.

## NOW

### Most Influential Lever

Condensed optimization, leaving signal quality as the most powerful lever driving campaign performance.

### Intent Detection

Algorithms anticipate needs before users even take action.

### Long-Term Growth

Algorithms are trained toward predicted LTV and retention.



# The Spectrum of Predictive Impact

Predictive growth isn't one-size-fits-all. Some teams see modest lifts, while others see exponential returns. The bigger the gap between your proxy events and actual long-term value, the more you stand to gain from predictive growth.

Let's look at how this works in practice with Miro

01

## Frustration

The team's paid media campaigns were initially optimized for a free trial sign-up. It was an easy metric to send to Google, but the team found that they were wasting a good portion of their budget on customers that subscribed but churned quickly.

02

## Approach

Miro used predictive modeling to gauge which trial users were most likely to upgrade, scoring each user by their "buy" and "stay" potential. They then used these scores to shift Google campaigns from standard tCPA optimization to value-based bidding.

03

## Outcome

Through this shift, the team increased plan upgrades by 30% without investing any additional budget. They taught Google exactly what their most valuable users looked like, which then enabled Google to go out and find them.

“



Robbert Smit

Head of Marketing, AI & Automation, Miro



“Not only have we brought more paying accounts with the same media spend, **we brought accounts with higher value.** We also acquired teams with a higher number of members for each account.”

# Understanding the Uplift Opportunity for Your Business

The easiest way to see how much your business stands to benefit from predictive growth is to measure how early conversion events correlate with true customer lifetime value (LTV). A stronger correlation means your proxy metrics are already a good indicator of long-term value. A weaker correlation? That's where predictive signals can drive a huge performance uplift.

Here's a way to quickly map your opportunity

01

**What event are you optimizing for today?**

A free trial, a first purchase, a sign-up?

02

**Among users who complete that event, how wide is the spread in LTV?**

Look at the mean vs. median, percentile spreads, and the stabilization curves to find the full range of value.

03

**How closely does early value correlate with long-term value?**

Do users who make an initial large purchase stick around? Are your highest-value customers early birds or late bloomers?

The wider the gap, the more leverage predictive signals give you to train your algorithms toward high-value users instead of quick wins. Brands adopting a predictive growth strategy see a **20-40% average ROAS uplift.**

**Map Your Opportunity**

[Book a Call](#)

Discover the potential uplift for your business with a custom opportunity analysis. We'll help you activate your customer data to see if you're leaving value on the table.

# Under the Hood of the Ad Platforms

Before digging into the nitty gritty of implementation, let's look at how predictive value-based bidding strategies change how platform algorithms behave in real time to optimize your campaigns.

## Bidding Strategies

### Binary

Optimize toward a specific event or conversion without considering its value. All users who trigger the event are treated equally.

### Value-Based

Optimize for the value of a conversion. Instead of chasing all purchasers, the algorithm focuses on users most likely to deliver the highest value.

When you shift to a value-based bidding strategy rooted in LTV predictions, you'll see the payoff in the numbers, but you'll also have confidence in the very systems that decide your growth.

### Auction Weighting

Platforms bid differently depending on your strategy. Binary strategies favor users likely to convert at all, while value-based strategies favor users likely to drive higher-value purchases. This means your spend is concentrated on the conversions that truly matter to your business.

### Audience Expansion

Stronger, predictive signals guide platforms toward more precise lookalike audiences. Instead of casting a wide net for any potential purchaser, algorithms explore people who resemble your predicted high-value users.

### Learning Efficiency

Predictive signals deliver cleaner, more informative feedback. This shortens the "learning phase," reduces wasted impressions, and gets your campaigns to efficiency faster.

### Value Calibration

By feeding predictive signals tied to customer lifetime value or downstream conversion probability, you effectively reprogram the algorithm's reward system. The platform learns not just who will convert, but who will deliver lasting value.

# 4 Steps to Make Predictive Growth Work for You



**Itai Kafri**

Head of Product Growth, Voyantis

"Now that you don't have direct control over the auction, the most influential lever impacting who sees your ad is ***the signal you feed into it.***"

The biggest wins in predictive growth come from knowing who your most valuable users are and bringing that clarity to the ad platforms' black-box algorithms. Doing this well is both a technical and organizational challenge.

## 01. Align on your North Star Value Metric

In a budget review, CFOs don't care about CPA or short-term ROAS. They want to know whether campaigns will generate meaningful revenue over time. Without a shared definition of value, it's easy for teams to talk past each other. To align what marketing can measure and what the business truly values, start by defining a measurable signal of your most valuable users (MVU), your North Star metric.

01

### Pull a representative cohort.

Include both converters and non-converters over a relevant time window based on your optimization event.

02

### Track user activity over time.

Capture key actions (revenue, orders, sessions) across D1, D7, D30, D90, and D180.

03

### Analyze patterns.

In addition to early vs. long-term value, consider returning user curves (second or third purchase), milestone-based LTV, early birds vs. late bloomers, and churn curve flattening for subscription businesses.

This process often reveals surprisingly simple insights that predict long-term value. For example, a streaming app realized that users who stayed subscribed for three months almost always remained for the year. A fintech company found that "high-risk" fintech customers were actually the most profitable once retention and repayment behavior were modeled.

These "aha" moments transform a vague conversation about value into a clear campaign target.

## 02. Build the Models

Once you've defined a measurable signal of a most valuable user, the next step is turning that insight into a system of models that predict who they are early in their journey. In most cases, 1,000 conversions per month offers enough data to activate predictive models.

### *The Fuel Behind Predictive Models*



Customer data is your competitive advantage. Platforms can't read your business intelligence dashboards, and you wouldn't want them to either. This is the proprietary insight that fuels your predictive advantage, and it comes in a variety of forms:

01

#### **Declarative Data**

Onboarding questionnaires and survey responses can tell you about intent, preferences, or readiness to convert. These signals are often the clearest predictors of future value.

02

#### **Engagement Data**

How users interact with your product or content, including visits, sessions, clicks, and product usage, can reveal a lot about their long-term value.

03

#### **First-Party Data**

Even without direct input, users leave direct insights: geolocation, device type, transaction history, and browsing patterns. These anonymized signals help forecast behavior without compromising privacy.

04

#### **Performance Data**

Which ads and channels actually drive revenue or retention? Tracking this over time allows your model to understand not just who is valuable, but how to reach them efficiently.



Mojo, a men's well-being subscription business, tapped into their onboarding questionnaire responses to identify users most likely to subscribe. This early data gave their predictive models a significant head start, allowing them to identify not only users likely to convert after a 7-day trial but also those most likely to renew quarterly.

The approach drove a 7% increase in trial conversion rates, along with a 14% reduction in cost per subscriber.

## 03. Engineer the Signals



Eric Seufert

Independent Analyst

"The topic of signal engineering is newly relevant (and organizationally critical) as a function of platform automation tools like PMax and Advantage+ taking a greater share of budget. This trend will not abate: advertisers should expect that **every channel they deploy budget to will apply some end-to-end automation framework at some point.**"

Once you have models that can reliably predict a user's value, the next challenge is teaching the platforms to recognize them. Ad platforms were built to optimize for deterministic data: specific, real-world events that have already happened. To maximize the impact of probabilistic values, you need to translate them into signals platforms can actually understand.

### What is Signal Engineering?

Signal engineering is the process of generating high-fidelity signals – events, conversions, and conversion values – that translate predictive customer lifetime value into signals ad platforms can act upon. These signals are timely, intelligible, and tied to the platform's learning logic.

Done well, signal engineering pushes campaigns toward tomorrow's high-value users instead of the cheapest conversions. **There are three core dimensions of it.**



#### Timing

*When should the signal be sent?*

Send a signal too early, and it may inflate conversions for users who won't stick around. **The right timing depends on factors like user behavior maturity and the number of prior signals.**



#### Cadence

*How often should the signal be sent?*

Platforms don't need to know exact numbers, but they do need to understand how valuable a user is relative to others. **Calibrating values keeps algorithmic learning stable and efficient.**



#### Value

*What value should you send, and how should it be framed?*

A user's total expected value can be delivered as one signal representing the full amount or multiple signals that add up to the total. **It takes testing to determine which formatting strategy performs best for each platform, cohort, and campaign goal.**

## 04. Maintain Your Models

A model that worked perfectly yesterday can drift today. This happens for many reasons—changes in your pricing scheme or onboarding flows, data pipeline issues, campaign evolution, or even platform API updates.

Monitoring, recalibration, and troubleshooting should be a routine part of your workflow.

### THE COST OF A STALE MODEL IS HIGH

A monthly campaign spend of \$1M could see a

**20% - 50% increase**

in CAC if left unattended.

### Continuous Monitoring

Closely monitor models to identify any data deviations, shifts, or anomalies. This ensures they are always training on the most reliable, trusted, and robust data set.

### Adaptive Systems

Build out automated responses for unusual activity. Interrupted conversion feed to the ad network even for a day can quickly impact performance.

### 4 Pillars of Model Maintenance

### Fallback Models

Create simplistic models designed to operate efficiently with minimal data points and fill in the blanks. This ensures campaign resilience and continuity in diverse operational scenarios.

### Hands-On Expertise

Have a team in place that understands how to keep signals fresh and calibrated as customer behavior, campaigns, and platforms evolve. Updates should reinforce learning, not reset it.

## *A System of Models*

It's important to note that a single model is typically not enough. You need to develop a system of models, each optimized for a specific dataset, network, lifecycle stage, or business scenario. This ensures a nuanced valuation of customer interactions, leading to more effective network training for reporting, optimization, and analytics. A system of models will keep your strategy relevant regardless of how the platforms, your business, and the market evolve.

# Navigating Platform Nuances

Each ad platform learns differently, which means the same signal won't have the same effect everywhere. Timing, cadence, and value need to be engineered with each platform's rules and learning logic in mind. In fact, what works on Google may actually hurt performance on Meta.

Here's a breakdown by platform of what you need to know to craft meaningful signals.



## Timing

Send signals early, even if they are slightly noisy.

Send signals after enough data has accumulated to avoid underweighting small values.

Prioritize accuracy over early delivery. Signals should reflect confident predictions.

## Cadence

Create new signals as predictions mature to avoid flooding the system.

Maintain moderate to high cadence to teach the algorithm about variability.

Avoid sudden spikes or drops that could confuse learning.

## Value

Distribute value across signals, so the algorithm can learn from increases and decreases in predicted LTV.

Ensure values are large enough to register meaningfully to avoid underweighting.

Send micro-signals to emphasize high-value users since only increasing values are accepted.

## Bottom Line

Prioritize early delivery.

Use scaled ranks to ensure the platform registers meaningful signals.

Threshold your top users before sending signals.

# Where Teams Go Wrong

Even with advanced automation, predictive growth is not plug-and-play. Teams often stumble in ways that slow or even stall results. Here are three common pitfalls and how to avoid them.

01

## Thinking You Have to Sacrifice Scale for Quality

Most growth leaders assume that a better funnel means a smaller funnel. But when you optimize for quality and train platforms to hunt for high-value users, they often can find the same volume of opportunities, just in a completely different audience pool than they would have originally targeted. Scaling what matters most to your business impacts the bottom line far more than scaling everything.



Before you build a single model, rally your team around a clear, quantifiable business goal that everyone agrees on, and then work backward to determine the models to achieve it.

02

## Using An Existing LTV Model Alone

It's tempting to repurpose the models your BI team has already built, but those models are designed for financial planning and reporting, not for real-time optimization. To work inside ad platforms, predictions need to be engineered into signals for shifting APIs, continuously retrained, and validated against campaign goals. Teams that underestimate this “last mile” work often see models stall out before they deliver impact.



Make signal engineering a common practice, and validate before scaling.

03

## Assuming Rising CAC Means Failure

When you shift to predictive signals, CAC can rise in the short term. But those higher-cost users may be the ones who generate significantly more revenue over time. The key is to focus on your LTV:CAC ratio. Without the right testing discipline and budget guardrails, teams can pull the plug too soon and miss the lift that comes once models stabilize. Effective change management is just as important as the model itself.



Define a dedicated testing window and give your models time to stabilize before judging success.

# The Road to Efficient Growth

The automated ad market might be consuming the traditional levers of campaign optimization, but the shifts happening today have elevated the role of the growth marketer in ways we haven't seen before.

For far too long, marketing has been seen as a cost center. You've been measured against metrics you can't optimize for in campaigns, while stitching together different insights across channels to prove bottom line impact.

Done right, predictive growth empowers you to fill the pipeline with high-value users, creating a powerful ripple effect across the entire organization:



**Finance gets more efficient budget spend.**



**CRM teams gain insight into which customers are worth engaging across the lifecycle.**



**Product teams benefit from more engaged users.**

Most importantly, predictive growth quite literally makes growth predictable. You can confidently prove your impact (and secure your next promotion), while leadership can confidently invest in the next generation of products without stalling growth in the short term. It's a win-win.

**Ready to lead the shift?**

# Your Partner in Predictive Growth

If you're not ready to tackle predictive growth in-house, no worries. Voyantis has already done the hard part. And for many, the smarter move is to invest in solutions that already work, with the infrastructure and adaptability needed to make AI production-ready from day one.



**Ido Weisenberg**  
Co-founder & CEO of Voyantis



*"There's a dangerous narrative that building in-house is easy. Tools are widely available, pilots look impressive. But the real test is **embedding models into workflows where they actually touch revenue, customers, and operations**. Real-world data is messy, integrations fail, and day-to-day processes are more complicated than any demo suggests."*

We've worked side-by-side with Google and Meta for years to reverse-engineer their algorithms, building a predictive growth platform that empowers our customers to stay aligned with what works today and also what will work tomorrow.

## Prediction Engine

Using advanced mixed modeling to activate your non-PII first-party data onboarding survey responses, engagement events, purchases, sessions, and more. We build thousands of models to forecast which users will drive long-term value for your business, before the revenue ever shows up.

## Adaptive Infrastructure

We continuously monitor, recalibrate, and adapt. Our proprietary fallback models, real-time monitoring, and proactive alerting ensure every update reinforces learning, instead of resetting it.

## Signal Engineering

We translate those predictions into structured signals that plug directly into Meta, Google, and TikTok, steering their algorithms toward predicted value.

## Continuous Innovation

Our dedicated team is at the forefront of experimentation and development, pressure-testing new models and pioneering methods to anticipate platform shifts before they happen. By choosing Voyantis, you're plugging into a flywheel of innovation that keeps your team ahead, long after internal builds or off-the-shelf solutions fall behind.



# Let's Talk Predictive Growth

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in Predictive Growth

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