

Make the Leap from A/B to Al

How Automated Experimentation Solves Problems For Marketers

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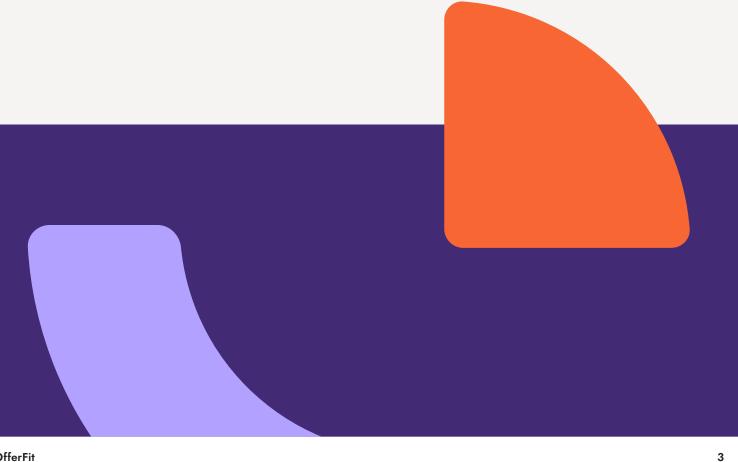
Executive Summary

Today's marketers are more data-driven than ever before, and they are under increasing pressure to deliver ROI from data. The traditional weapon in the marketer's arsenal is A/B testing. But savvy marketers are now realizing that A/B testing doesn't scale - our data is growing faster than our ability to make sense of it.

That's why leading companies across diverse industries are using OfferFit's automated experimentation platform, which:

- Makes A/B testing obsolete,
- Plugs into any existing tech stack as a decisioning layer,
- Complements other applications of machine learning, and,
- Delivers individualized recommendations for every customer.

In this paper, we look at three companies from different industries that found a way to ditch A/B testing they are using OfferFit's automated experimentation platform.



Three Success Stories

Company

IIIIBRINKSHOME

Top 3 US home security brand

WARGAMING.NET

Global videogame company

LIBERTY

Leading Latin American telco

Goal

Contract renewal

Free to paid conversation

Internet contract upsell

Results

↑ **457%**

Growth in NPV per customer

↑ 180%

Growth in conversion rate

↑ **120%**

Growth in incremental ARPU from upsell campaign

Brinks Home

Brinks Home[™], a leading home security company, wanted to optimize contract renewals. Their finance department had developed its own formula to measure the net present value (NPV) of every contract. Brinks Home used OfferFit's platform to maximize incremental NPV per customer. Using OfferFit's AI, Brinks Home experimented with different renewal offers for each customer, varying channel, creative, subject line, and terms of offer.

Brinks Home's business as usual approach was to offer significant discounts to encourage customers to renew. One insight they gained is that some customers were not price sensitive, and would respond well to a rate lock-in or a free doorbell camera instead of a discount. Using OfferFit's recommendations, Brinks Home secured renewals which increased NPV per customer by 457% over business as usual, a \$5M annual bottom-line benefit. This value came not only from increased renewal rates but from higher-value offers chosen for each customer by OfferFit.

Wargaming

Wargaming provides multiplayer online games built on a freemium model — the games are free to play, but players can make in-game purchases. Wargaming came to OfferFit seeking to maximize the number of free to paid conversions from in-game offers. Wargaming used automated experimentation to discover which offers should go to which players and at which point in gameplay to make them. OfferFit's AI learned, for example, that many players are more likely to accept an offer after a victory, while others are more receptive after hitting an in-game milestone.

OfferFit's customized offers performed 180% better than Wargaming's "business as usual" offers.

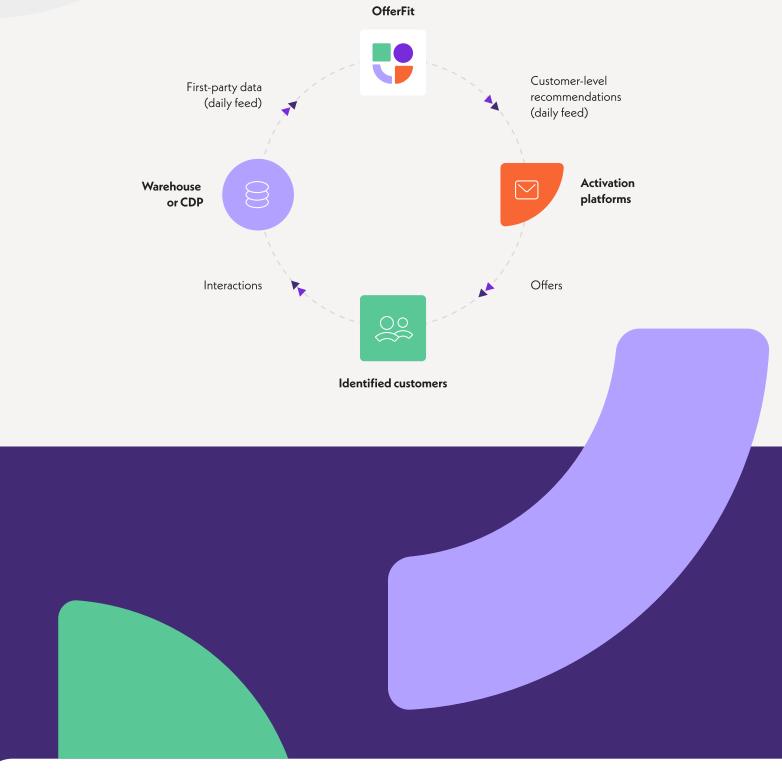
Liberty Latin America

Liberty Latin America (LLA) is a leading telecommunications company with a presence in over 20 countries in Latin America and the Caribbean. LLA sought to upsell customers on upgraded internet plans. Their business as usual approach was to run annual campaigns offering the "next step up" plan to every customer. LLA didn't know which customers might be receptive to "leapfrog" offers, or which customers likely needed discounts or other incentives to upgrade.

LLA used OfferFit to empirically discover the best offer for every customer. OfferFit's Al personalized offers to maximize average revenue per user (ARPU). This lead to a 120% increase in incremental ARPU generated by upsell campaigns, worth \$1M a year to LLA.

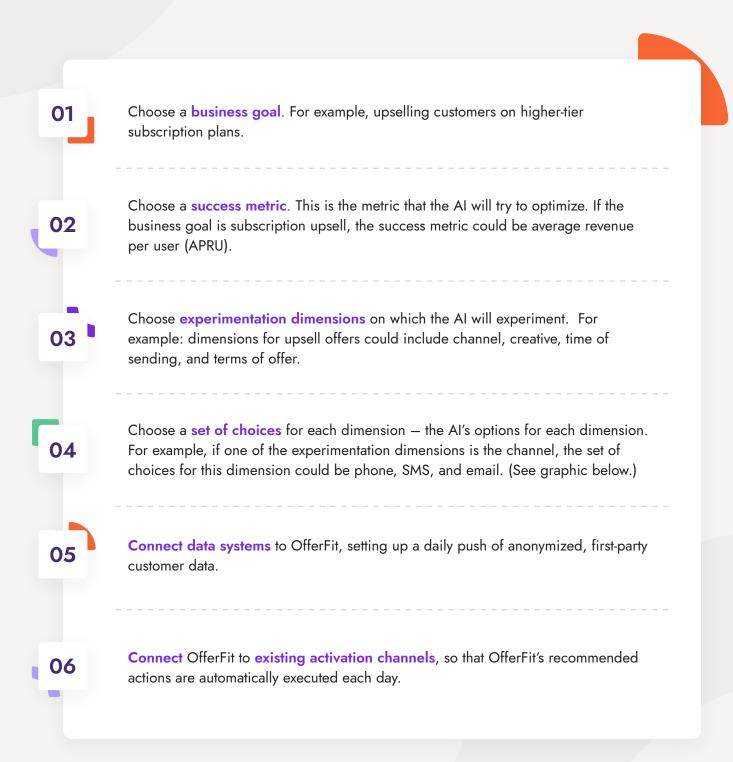
Automated Experimentation

Brinks Home, Wargaming, and LLA achieved these gains by adding OfferFit's **automated experimentation platform** into their tech stack. OfferFit provides a "brain" which sits in between data systems and activation channels and decides the best course of action for each customer.

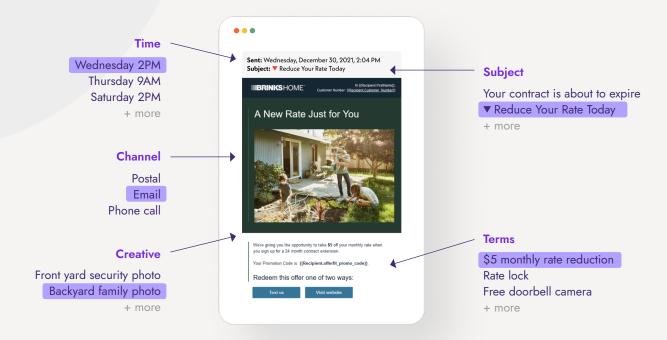


To use OfferFit, companies choose a business problem, or **use case**, that they would like to optimize through experimentation.

To implement a use case, companies take the following steps:

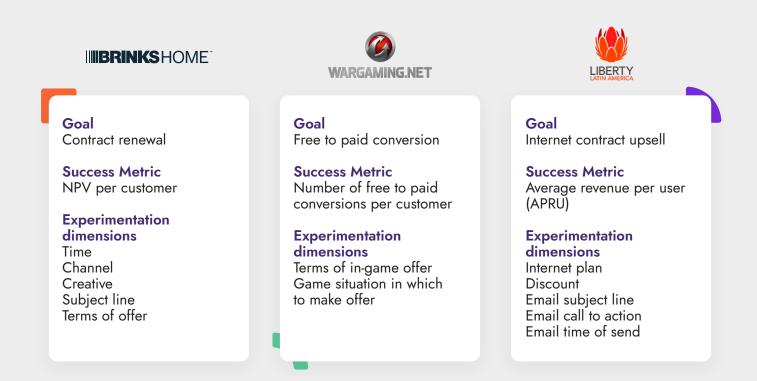


For each customer, OfferFit's AI makes a **choice** for each **dimension** with the goal of maximizing the chosen **success metric**.



Brinks Home emailed this offer to a customer. OfferFit's AI selected from a **set of choices** for each of several **experimentation dimensions**. For example, the chosen **channel** is email and the chosen **time of sending** is Wednesday at 2pm.

The table below shows the success metrics and experimentation dimensions for each use case described above.

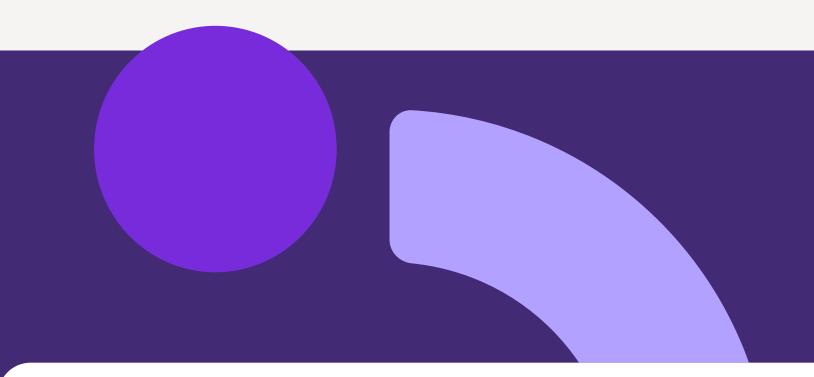


How automated experimentation works

OfferFit's platform is based on a type of machine learning called **reinforcement learning**, or **self-learning AI**. Reinforcement learning models, called **agents**, choose optimal **actions** to generate the highest **reward** from their environment. Based on the reward, the agent learns, and updates its policy for selecting future actions.



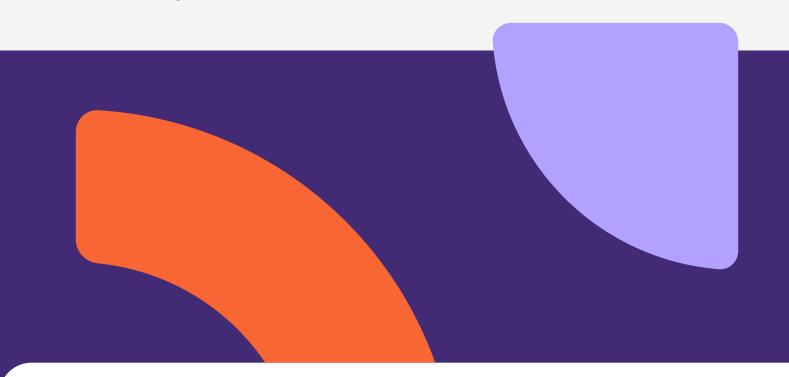
For OfferFit's machine learning agents, the **actions** are the set of choices for each dimension — for example a choice of channel, subject line, creative, and time of sending. The **reward** the agents receive is determined by the success metric chosen by the company implementing OfferFit.



Advantages of automated experimentation over manual A/B testing

Automated experimentation can be a powerful tool to help marketers test at scale. But the experiments carried out by a self-learning AI are not simply manual experiments done more quickly. Experiments driven by machine learning are fundamentally different from, and offer significant advantages over, traditional A/B tests.

- Automated experimentation is faster and easier than manual A/B testing. There is no
 need to set up segments, design experiments, analyze the data, and implement the results. Instead the
 process is automated, and the AI continuously learns and improves.
- There are no segments: automated experimentation uses a segment of one. Reinforcement learning agents make the best decision for each customer individually, making customer segments obsolete.
- There is no global "winning" option the AI finds a "win" for every customer. A traditional A/B test concludes by saying "70% of customers in segment X preferred option Y." But a self-learning AI can make decisions across many dimensions for each customer. The "winning" option for a particular customer at a particular time depends on all the data the AI has at the moment it makes the decision.
- No need to administer new tests when conditions change automated experimentation
 provides continuous learning. A traditional A/B test is static, giving a snapshot at a moment in time.
 If marketers want new insights as market conditions change, they need to set up and administer a new
 test. Unlike a traditional A/B test, a reinforcement learning agent is always learning and adapts as the
 market changes.



FAQ

How easy is it to start using automated experimentation?

Companies can get going with OfferFit in a matter of weeks. They typically begin with a single use case — a business problem they wish to optimize through automated experimentation. OfferFit helps you select an appropriate success metric and experimentation dimensions for that use case. Once an initial use case is chosen, OfferFit typically goes live within eight weeks. The AI learns quickly, and companies typically start to see uplift in their chosen success metric within two months.

Does automated experimentation require extensive new creative?

Companies can get started using automated experimentation with the assets they already have — existing creative, email templates, phone scripts, etc. The AI will automatically test out different combinations of choices and implement those that are most effective.

Over time, insights from experimentation can suggest possible avenues for new collateral. For example, a company might learn that different customers react positively to very different kinds of creative in an email campaign, suggesting that it would be profitable to experiment with a greater variety of creative.

What kind of data is necessary for automated experimentation?

The most common applications of OfferFit's platform are in **lifecycle marketing** – marketing to existing customers. OfferFit's self-learning AI relies on anonymized first-party, customer-level data.

- Must have: success metric. The most important piece of data for any experiment is whether or not it
 was successful. For an Offerfit use case, this data is whether or not the customer took the desired
 action. If the goal was repurchase, for example, it's crucial to know if the customer repurchased. This is
 how the AI learns and improves the "reinforcement" in the reinforcement learning model.
- Nice to have: other anonymized customer data. The more information the AI has about each
 customer's behavior, the faster it can learn, and the more specifically it can target each customer.
 For example this data could be translation data, purchase history, email clicks, or customer profiles –
 whatever can be readily tied to the customer action of interest.

How does automated experimentation integrate with an existing tech stack?

OfferFit's platform plugs in easily to any modern system. Typically OfferFit receives anonymized customer data from a CDP (like mParticle) or data warehouse (like Snowflake) and transmits recommendations to activation systems such as Adobe Campaign or Braze. OfferFit's platform acts as a "brain" that sits in a martech stack between a company's data systems and their orchestration and activation systems. OfferFit typically delivers new recommendations every day.

Can automated experimentation help a company that is already using sophisticated AI?

Marketers are now using machine learning models to solve many problems. Perhaps the most widely implemented are models that **predict outcomes**, for example **churn** or **category affinity**. These models typically use a type of machine learning called **supervised learning** to train on historical data and make predictions about new data.

Such supervised learning models are typically combined with if-then rules. For example:

- Churn prediction: "If a customer in segment X has a high propensity for churn, do Y." These rules
 help prevent churn, but will not necessarily discover the best action for every customer. A marketer
 might retain a customer by giving them a discount, when that customer would renew at a smaller
 discount, or even upgrade with the right offer.
- Category affinity: "If customer X shows affinity for category Y, send them offers for Y." This model
 is helpful, but doesn't determine the best way to market to that customer. Maybe the customer will buy,
 but only if offered a discount of the right size. Or perhaps that customer is prepared to buy without any
 marketing effort at all.

The fastest way to discover the right course of action for each customer is through automated experimentation. For this reason, **predictive models and an experimentation platform like OfferFit are additive**. A company might use its churn prediction scores, for example, as input to OfferFit's platform and get insight from the recommendations OfferFit makes for customers at risk for churn. Predictive models and automated experimentation complement each other and solve different problems.

Is it better to build an automated experimentation platform in house?

Companies who see the promise of an experimentation platform may be inclined to build one themselves. In-house data science teams typically have experience building models based on supervised and unsupervised learning, such as churn prediction or cluster analysis. These types of machine learning models are well supported by "off the shelf" tools, and can be stood up relatively quickly.

Reinforcement learning models, like those that power OfferFit, are a different story. Before deciding to build, companies should consider:

- Time to value. Building an automated experimentation platform from scratch, even one intended
 for only one application, might take a dedicated engineering team a year or more. OfferFit typically
 launches in 8 weeks.
- Cost. Standing up an engineering and data science team is expensive, and their time is scarce and valuable. Marketers should consider not only their in-house capacity to build, but their capacity to monitor and maintain new systems over time.
- Likelihood of success. Reinforcement learning is a relatively new and specialized field of machine learning. Marketers should be sure they have the necessary expertise in-house before deciding to build.

Partnering with a reinforcement learning expert like OfferFit will often get results more quickly and cheaply, and give a solution that's easier to maintain over time.

How does OfferFit ensure data security?

OfferFit only accepts anonymized customer data and does not accept personally identifying information (PII). In cases where even anonymized data might identify a customer, such as credit card transactions, OfferFit will accept only aggregated data for each customer, such as spend per category. Because there is no PII and no use of data that could be de-anonymized, information security reviews typically grade implementation of OfferFit's platform as low risk.

Want to learn more?

Visit us at offerfit.ai or email us at hello@offerfit.ai!

About OfferFit

OfferFit accelerates the creation of knowledge. Trial and error has always been the core of human progress. At OfferFit, we automate experimentation using reinforcement learning, a type of self-learning AI, to make knowledge creation faster than ever before.

A/B testing can be effective for lifecycle marketing, but it's slow and doesn't scale. Lifecycle marketers use OfferFit to radically accelerate experimentation. Marketers choose options for multiple dimensions such as messaging, creative, incentive, channel, and timing. Then OfferFit experiments to discover the best-performing recommendations for each customer.

OfferFit's Automated Experimentation Platform lets marketers unlock the value in their first-party data and maximize whichever KPIs are most important to their business.









Make the Leap from A/B to AI

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About the Authors

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