



**CRO**

**SOLUTIONS FOR**

**CMOs**



## CRO SOLUTIONS FOR CMOs

If you're a CMO, your main goal is to increase the performance of your marketing efforts by augmenting your team and finding solutions that spur your company's growth. In the case of ecommerce and digital marketing, this means increasing your conversion rates, i.e. getting users to take specific actions on your website such as buying items or downloading content. It also means increasing the rate or frequency of these specific actions on your site within a given amount of time. An increase in conversion rates could indicate that the messaging, positioning, or targeting of your content is relevant for customers, or that you delivered a 'delightful' or magic moment which generated the increase. Increasing conversion rates is much easier said than done, however.

You are probably familiar with this quote:

*“Half the money I spend on advertising is wasted, but the trouble is I don't know which half.”<sup>1</sup>*

Organizations often spend an enormous amount of money on customer acquisition but don't spend nearly enough on conversion rate optimization (CRO) solutions that actually increase conversions. Maybe your company is spending a lot of its marketing dollars on traditional A/B testing to optimize user experiences on your site. Perhaps this process is taking too long, or you're just not seeing any wins. Maybe your company has even decided that testing just isn't worth it.

No matter what industry you're in, the competition is fierce which means increasing conversion rates is more important than ever. CMOs need to start thinking about including a CRO solution in their marketing strategy. Here are some things to think about when considering your next CRO solution...

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<sup>1</sup> “Half the money I spend on advertising is wasted, and the trouble is I don't know which half.” First said by Lord Leverhulme and later made famous by John Wanamaker. *Oxford Dictionary of Modern Quotations*, 3rd edition, 2007.

## WHY CMOs NEED A CRO SOLUTION

Not that long ago, conversion optimization meant A/B testing and optimizing a single element on a web page like an add-to-cart button on a product page or the placement of the checkout button on a shopping cart page. It also meant testing one optimization idea at a time, often manually. Testing solutions have evolved in recent years, and while many solutions still include traditional A/B testing capabilities, some are now also able to do full-funnel optimization, the optimization of an entire product checkout funnel from a landing page visit to a checkout confirmation, and all the elements in between. Modern CRO solutions can increase the rate in which customers convert in less time than traditional testing and optimization methods.

Every visitor to a website or application is an opportunity to convert. If an organization owns a website, and that site has 100,000 visitors per month, that's 100,000 opportunities to convert every month. With a CRO solution that automatically optimizes conversion rates and lets marketers test many ideas all at once, companies can achieve more conversions in far less time. If you're a travel service company that could mean more hotel or flight bookings in less time. If you're a lead-gen company that could mean more quality leads in less time. If you're a retailer that could mean selling more products in less time. Companies in nearly every industry can benefit from using a modern CRO solution, and the possibilities for conversion rate optimization are endless.

## CHALLENGES CMOs FACE WHEN IT COMES TO TESTING

- Not enough people to run tests.
- Can't get everyone on the same page.
- Don't know what to test or where to start.
- Don't have a way to organize and prioritize ideas.
- There's no owner for testing and optimization.

One of the biggest challenges CMOs face when it comes to testing is having enough people to come up with optimization ideas and run tests. CMOs also often have problems when it comes to organizational alignment. For example, if the testing and optimization process is owned by not just the CMO and marketing team but also website developers, product developers, ecommerce

managers, and others in the organization, it can be challenging for the CMO to get all of these people on the same page. That page being what the plan is, what the strategy is, and what the roadmap of testing looks like. CMOs usually end up having a number of people from different departments, with differing opinions, butting heads about what's valuable. This could result in testing and optimization processes that aren't picked up by the organization.

Some companies know they want to test but have no idea what to test or where to start. Sometimes companies are already running tests, but they don't have a way to prioritize their ideas and are disorganized. They may end up doing testing manually which wastes time and resources. Organizations need to designate an owner for testing and optimization. That owner could be the CMO and the marketing team or a designated CRO team. Either way, that owner must be accountable for experimentation and be able to execute quickly on a roadmap of testing ideas.

## **WORKING A TESTING SOLUTION INTO YOUR MARKETING STRATEGY**

CMOs that want to work a testing solution into their marketing strategy must consider budget and whether or not they have enough people to come up with ideas and run tests. It is also crucial that CMOs pinpoint and solidify their goals. There's no point in doing A/B testing or using a CRO solution if you don't understand what metric(s) you want to try to maximize.

When you're setting up a test, think about your goals and what you want users to do. Think about the elements of the web page or application that are prohibiting users from doing what you want them to do. For example, are you trying to optimize the entire funnel of your travel site so that more users complete bookings? Think about what could be preventing users from going through with bookings on the site:

- Are there too many steps?
- Are the steps not in the right order?
- Is your value proposition not as strong as competitors?

Develop a hypothesis and brainstorm to come up with ideas that could solve these issues; ideas that you can test with a CRO solution and optimize for maximum results.

## TYPES OF TESTING AVAILABLE TODAY

The three most common types of testing available today are traditional A/B, full-funnel, and multivariate.



### TRADITIONAL A/B TESTING

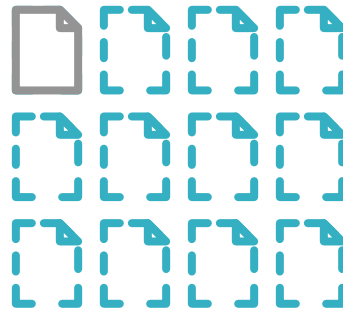
Traditional A/B testing can take weeks, sometimes even months to complete because the solution only allows a few ideas to be tested at a time. With A/B testing you're testing two variants of an element on a single web page. Plus, some testing tools use rules-based machine learning and legacy A/B testing methods which aren't an efficient use of traffic. A/B testing may be a cheap method of testing, but it's just not as efficient as multivariate testing solutions. The most significant reason that A/B testing is the least effective type of testing is that about only 1 in 7 tests is a clear winner.



### FULL-FUNNEL TESTING

When it comes to full-funnel testing, it takes a lot of time to test each feature, and you have to define a goal then work backward to figure out how to

improve the user's journey. Let's say you have a four-page funnel for a checkout flow that includes a homepage, category page, product detail page, and a checkout page. The conversion goal is the user loading the order confirmation page. A/B testing is not effective since each page is tested individually and not together as a group. Plus, a change on the home page could potentially negate the lift from a change made on the category page or product detail page. The only way to know how a variation on one page will change interactions on other pages is by testing the entire funnel. Unlike A/B testing, with full-funnel testing you can see how changes on one page can impact interactions happening on other pages in your funnel.



## MULTIVARIATE TESTING

Multivariate testing (MVT) produces better results than both traditional A/B testing and full-funnel testing. This is because you can test many elements on a web page simultaneously to find the best combination of all those elements. The more variations you can test in a single experiment, the better your odds of finding a winner and significantly increasing conversion rates. However, due to the large amount of traffic required to execute a robust test, traditional MVT can be time-consuming and cost-prohibitive without advanced techniques such as evolutionary computation (more on that later!).

## TESTING AND OPTIMIZATION—KEY TERMS AND DEFINITIONS

**A/B Testing (Single)** – Also referred to as split testing. An A/B test is specifically testing two variants of a single element on a web page. For example, image A and image B for a background image on a landing page. The test aims to see if the variant performs better than the original content.

**Audience Filters** – Many CRO products include audience filters where a product user can select what type of traffic on their website they'd like to serve an experiment to. For example, the experiment could be served only to mobile visitors, Chrome browser users, or a specific traffic source like Google paid search.

**Auto Segmentation** – The process in which AI automatically identifies certain groups (mobile vs. desktop users, morning vs. afternoon shoppers, etc.) and assigns them different design experiences, based on their behavior patterns.

**Conversion Rate Optimization (CRO)** – The process by which new ideas are tested on a website to find better-converting designs. Ideas can take the form of minor changes (like button color) or large ones (like wholesale page redesigns) and generally, companies will try optimizing sites for a particular metric like add-to-cart, lead generation, or average order value.

**Full-Funnel Optimization** – Full-funnel optimization is optimizing a specific user flow or customer journey that spans a number of different web pages. This requires that you optimize all of the elements on a page, and throughout a series of pages, for the best results. For example, on a travel site, full-funnel optimization could be optimizing the journey from selecting the dates of travel to booking the flight at the checkout page. Full-funnel optimization also includes the idea that changes made on page two or page three of your buying funnel shouldn't be discounted. For example, a call to action on a landing page could impact the rate in which people check out on a checkout page. It's impossible to test how an interaction on one page can impact interactions on other pages without testing the entire funnel. It's important to find the interaction between changes on each respective page.

**Multivariate Testing** – Multivariate testing is the process of testing many elements on a web page and trying to find the best combination of all those elements together. For example, the combination of changes to the headline text, the fonts, the colors on the page, and other page elements that increases the conversion rate most effectively.

**Massively Multivariate Testing** – In the case of Ascend, it is using AI to quickly identify winning candidates and prune poor performers by going through a large search base in less time and with less traffic than a traditional multivariate test. It is testing every variation you can think of in a single experiment and letting the AI find the best performer.

**Non-Full Factorial Multivariate** – Non-full factorial multivariate is testing every single permutation instead of testing only the permutations relevant to the testing goals.

**Personalization** – “Personalization” has become an overused, marketing buzzword with little meaning. Just about every website, web and mobile application feature some type of personalization. Personalization can mean algorithm-driven or user history-based recommendations, advertising, and content presented to the user based on their specific interests.

**Single-Page Optimization** – A single page application (SPA) is a web app that is loaded as a single HTML page and updates dynamically based on user interaction with the app. Ascend can test and optimize websites, mobile apps, and single-page applications.

**Statistical Significance** – Often used in [statistical hypothesis testing](#). Statistical significance is a method of proving that a statistic is most likely the result of the difference between a given variation and the baseline instead of just random chance.

**Visitor Segmentation** – A process where visitors to a website or application are divided based on specific criteria. Criteria could be based on a variety of attributes related to demographics, behaviors, and technologies used.

## EXAMPLES OF CONVERSION RATE OPTIMIZATION SUCCESS

Any company in an industry that has a significant online presence or uses websites to entice users to take specific actions—e.g., downloading content, entering their email information, or purchasing products—is ideally suited for conversion rate optimization. For example, credit card companies like American Express and Chase have landing pages where people can apply to get a credit card. Let’s say you’re someone looking for a new credit card and you’ve landed on one of their pages by clicking the “apply now” button after going through a research journey on their website to learn about the credit card. This is a great example of a user converting after going through a full-funnel user experience on the website.

CRO solutions are also ideally suited for companies in the online travel industry because the funnel is very complex and there are many different steps. When it comes to travel services, it’s easy to see when full-funnel optimization kicks in and conversions are obvious. For example, the consumer either did or did not book a travel service like a flight, cruise, or hotel room.



Here are some examples of company case studies that have used Sentient's CRO solution, Ascend:



Company tested hundreds of ideas on a single form widget.

Test Duration	<b>8 Weeks</b>
Possible Designs Evaluated	<b>380,000</b>
Conversions	<b>45% Lift</b>

[Download case study](#)



Company tested four different website elements simultaneously, and fifteen different changes across those items.

Test Duration	<b>7 weeks</b>
Possible Designs Evaluated	<b>160</b>
Conversions	<b>38% Lift</b>

[Download case study](#)



Company tested changes that would improve its product page.

Test Duration	<b>6 Weeks</b>
Possible Designs Evaluated	<b>77,760</b>
Conversions	<b>18% Lift</b>

[Download case study](#)

## TESTING AND CONVERSION OPTIMIZATION SERVICES OPTIONS

Here we look at some of the options CMOs have regarding testing and conversion optimization services.

### FULL-SERVICE AGENCIES

Traditionally most CMOs would think of conversion optimization services as groups of people and not necessarily products. This is because historically the term conversion optimization has often referred to agencies or groups of people that are specialists in A/B testing. There are still plenty of full-service agencies around like [WiderFunnel](#) that help companies formulate a branding strategy, discover their goals, and then execute those goals.

A full-service agency can be a good option if your company doesn't have the people to come up with ideas and run tests. Some companies don't have the budget to use an agency and end up using a cheaper solution like traditional A/B testing software. To see more agencies that may be able to help with CRO, visit [sentient.ai/ascend/partners](https://sentient.ai/ascend/partners).

### A/B TESTING

In-house, do-it-yourself A/B testing may be cheaper than using a full-service agency (which also might use A/B testing). However, it takes a very long time to complete, and there is much room for error and misguided conclusions. A/B testing is the least effective type of testing—only 1 in 7 tests result in a clear win. A/B testing can still be beneficial when you're trying to confirm a single hypothesis between two elements. In the case of Ascend, you can use A/B testing to validate certain candidates you may want to deploy as the default version of the page.

Although MVT solutions are faster and more efficient, many SMBs may not have the budget to use a full-service agency or a sophisticated multivariate testing solution. DIY A/B testing can help improve conversion rates, just not as well nor as fast as other testing services available today.

### MULTIVARIATE TESTING

With multivariate testing, you can test many ideas at the same time rather than only one idea at a time, as with traditional A/B testing. However, a big limitation

of multivariate testing is that the more variations you add, the more traffic or time you need to get to statistical significance. Furthermore, adding full-funnel optimization into the mix dramatically increases this limitation as you're testing more features throughout an entire journey that takes place within several pages. Additionally, MVT—like A/B—still requires that bad ideas be tested to significance meaning that you're driving good traffic to bad designs.

## MASSIVELY MULTIVARIATE TESTING

This is a term to describe advanced testing products like Sentient Ascend, which use evolutionary algorithms to locate and test the best designs throughout an entire funnel. With *massively* multivariate testing (MMVT), we can not only test more ideas across the entire funnel more quickly but also prune bad designs away, which helps improve average conversion rates over the length of the test. MMVT is a faster, more efficient, more effective version of multivariate testing. In other words, MMVT is like multivariate testing on steroids. MMVT may seem to be a more expensive solution than traditional A/B testing and agencies, however, when calculating the amount of time, money, and error it saves, it is well worth the investment.

## ABOUT SENTIENT ASCEND

[Sentient Ascend](#) is an AI-powered massively multivariate testing and conversion rate optimization solution. It lets CMOs and marketing team members test all their ideas at once, test across the entire funnel, and speed up the testing process to get to results faster. You can test dozens, even hundreds, of ideas up front in a single experiment. Ascend optimizes based on the ideas that are inputted into the system. Therefore, nothing generated by the system will go outside a company's branding guidelines as long as those guidelines are defined within Ascend.

Ascend is far more than a traditional A/B testing solution or even a full-funnel testing solution. Ascend is a massively multivariate testing solution that uses evolutionary computation, or AI, to automatically generate novel new versions of web pages based on the ideas users have entered into the system. Ascend is essentially an AI-powered testing organization all in one product and compresses months of testing down to just weeks.

"The benefit of Sentient and what they call 'massively multivariate testing' is that it solves some of the cons of traditional multivariate testing by using AI to identify winners and push more traffic to the highest performing combinations of changes both within the same page, and across funnels," says Nick So, Director of Optimization Strategy at WiderFunnel.

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**– Nick So**

*Director of Optimization Strategy, WiderFunnel*

## WHY AI IS THE KEY TO EFFECTIVE CRO

In recent years, the term artificial intelligence has become a marketing buzzword and can have different meanings depending on the industry. But for many companies, including Sentient Technologies, AI is far more than just a buzzword to sell technology products. At a high level, AI is a branch of computer science that involves making machines or computer systems that can perform tasks that typically require human intelligence—tasks such as natural language understanding, visual perception, reasoning, and problem-solving. Marketing, advertising, social networking, and many other industries are already being hugely impacted by AI. Companies like Sentient Technologies are building products like Ascend that use AI to speed up the process of conversion optimization and increase conversion rates far beyond what could be done by humans alone.

Many similar CRO solutions use rules or rule-based algorithms to choose what version of the page to serve to users. However, Ascend runs through a specialized kind of AI called evolutionary algorithms that uses data from the system to determine what version of the page to serve next. For most CRO solutions, the “logic” must be fed to the system by humans. However, with Ascend, the system is self-learning and evolves based on interactions with users. Ascend learns from experiments and makes better decisions over time using transfer learning. Transfer learning is what makes each experiment more effective over time by ‘learning’ what works and what doesn’t. During an experiment, the system sees what’s working well on each page in the funnel and automatically prunes away poor performers. The system also directs traffic to the design variations that are performing well. The secret sauce of Ascend is [evolutionary algorithms](#)—an AI-based system that automatically moves and adjusts based on real-time information.

Sentient Ascend is just one example of a product built on top of Sentient’s AI platform which uses evolutionary algorithms developed by a world-class team of AI researchers and machine learning PhDs. The Sentient platform is continuously being fine-tuned and developed with the specific intent to build these types of products on top of it, serving a number of different purposes—such as personalized recommendations, website optimization, and CRO—across a variety of different industries.

## CREATIVITY STILL MATTERS

Conversion rates have a massive impact on the bottom line for businesses in just about every industry. The more ideas you can test, the better the chances you can increase conversion rates and boost sales. Creativity still matters, even if you're using a CRO solution powered with AI. You still need to come up with ideas to test. The AI speeds up the testing of your optimization ideas, but it doesn't come up with ideas for you. So make sure you keep coming up with and testing your ideas. In this day and age, competition is fierce for pretty much every company in every industry. Even small tweaks on a website or application can mean the difference between consumers completing your funnel and making a purchase or simply deciding to move on.

## CRO SOLUTION CHECKLIST FOR CMOS

Here is a checklist of some of the things CMOs should think about when it comes to choosing a CRO solution.

- What is the CRO plan and strategy?
- Do you have enough people to run the tests?
- Do you have the budget for a CRO solution?
- Do you want CRO to be handled in-house or by an outside agency?
- Have you designated an owner for testing and optimization?
- Is everyone in your organization on the same page when it comes to CRO?
- Does everyone in your organization understand the importance of CRO?
- Do you have a way to organize and prioritize ideas?
- What does the roadmap of testing ideas look like?
- What metric(s) do you want to try to maximize?
- What are your goals, e.g. what do you want users to do?
- Do you have ideas about how to fix the problem or maximize the metric(s)?

Ready to talk CRO? [Schedule a free consultation](#) with one of our experts.

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## ABOUT SENTIENT TECHNOLOGIES

Sentient's mission is to transform how businesses tackle their most complex, mission-critical problems by empowering them to make the right decisions faster. Sentient's technology has patented evolutionary and perceptual capabilities that will provide customers with highly sophisticated solutions, powered by the largest compute infrastructure dedicated to distributed artificial intelligence.