

# Real-time personalization made better with data

## Impact Report: A/B testing with Vue.ai



# The Need for A/B Testing

Personalization solutions are not one-size-fits-all. Every site's strategy - and every page on each site - needs to be dictated by how shoppers interact with it.

eCommerce managers, site merchandisers, and marketers need to be agile in implementing personalization solutions on their site. The pace of retail transactions and the nature of the market make it necessary to be able to iterate fast and at scale and experiment, analyze and implement quickly.

**A/B tests help you remove the guesswork and put in place solutions backed by data and can be used to understand every aspect of your site and shoppers.**

A/B testing is a type of experiment where two or more variants of a page, module, or recommendation are shown to two different sets of users with the intent of testing a hypothesis. Data derived from the test is used to determine which variation performs better for a particular goal.

By A/B testing personalized journeys, retail eCommerce teams can match content to purchase intent and make sound decisions based on data and not just instinct. Experiments that are designed well and measured can replace trial and error-based learning. With A/B testing, data-driven informed decision-making could become one of the central tenants around which any personalization solution for your site is built.

# A/B Testing with Vue.ai

## Crafting winning journeys

At Vue.ai, we understand how crucial A/B testing is for building high-performing shopper journeys, which is why we made this a core part of our offerings.

The goals for the A/B testing feature were:

- **For any retailer with any background, to be able to A/B test.** No expertise is required to test and create winning journeys every time.
- **To be easy and fast to iterate and implement positive solutions** - to ensure shopper journeys deliver value every time.

Vue.ai allows for extensive A/B testing of its personalization solution. It is designed to ensure retail teams can easily conduct and control A/B tests across their shopper touchpoints and gain insights quickly.

By giving your teams the ability to craft their own A/B tests, Vue.ai allows them to take control of their decisions and the goals they want to plan for. Vue.ai understands that the retail teams know best when it comes to understanding the site and customer. We provide you with the data to back your hunches and the tools to take your site to the next level.

# What you can do with Vue.ai's A/B Testing Tool

eCommerce managers face quite a few challenges to consider while determining ideal shopper journeys. Shoppers not engaging with content, dropping off mid-way in their journey, and cart abandonment are just some of these.

A/B tests for Vue.ai's personalization solution can be used for:

- Understanding **page-wise shopper behaviour** and implementing strategies that increase engagement.
- Testing the **impact of personalization on recommendations** like similar products, which surface recommendations that are very similar to the products being viewed.
- Testing for **how the recommendation appears** on the site. Vue.ai powers recommendations as pop-up carousel, carousel, and grid formats. The style of recommendation can depend on device and how shoppers want to continue on their journey on the site.
- Understanding the **strength of brand-affinity** for online marketplaces by testing brand-based recommendations.

# Vue.ai's A/B Testing Tool

## The X Factor

VueX is a single tool that provides eCommerce teams with everything they need to build, test, and optimize personalized shopper journeys. The A.I. does all the heavy lifting so retailers can keep it simple.

With an easy way of A/B testing built into VueX, eCommerce teams can test different strategies, implement data-backed decisions, and optimize shopper journeys with one single tool.

VueX enables retailers to change the parameters and tweak the underlying algorithms to suit their business goals without writing a single piece of code. The different components you can control with VueX A/B test tool are

- Types of recommendations
- Pages to place recommendations
- Template designs to display the recommendations

A/B testing can be done with any portion of the audience, or all of them, based on the retailer's preferences.

The screenshot displays the Vue.ai A/B Testing Tool interface. The top navigation bar includes links for Dashboard, Metrics, Experiments (active), Journeys, Experiences, Modules, and Assets. A sidebar on the left contains icons for the Journey Manager, a graph, and a bar chart. The main content area is titled 'Personalised Browsing at Checkout' and is under the 'Manage Experiment' section. Below this, the 'EDIT TEST PROPERTIES' section is visible. It includes fields for 'Audience' (set to 'All Visitors') and 'Journey(s)' (set to '1 selected'). A section titled 'How would you like to split the traffic?' shows a 'JOURNEY' table with two rows: 'Homepage Experience' and 'No Treatment Journey' (marked as 'CONTROL'). To the right of the table are 'TURN OFF/ON' toggle switches and a 'TRAFFIC SPLIT' section with a checked box for 'Dynamically allocate traffic' and two 50% split boxes. At the bottom, the 'Goal' is set to 'Revenue', the 'Metric (KPI)' is 'Revenue per Visit', and the 'Confidence in results' is 95%.

JOURNEY	TURN OFF/ON	TRAFFIC SPLIT
Homepage Experience	<input checked="" type="checkbox"/>	50%
No Treatment Journey <span>CONTROL</span>	<input checked="" type="checkbox"/>	50%

# Customer Story 1:

## Youth-focused fashion company

### About The Retailer

The customer is a large company with unique brands focusing on young fashion-driven consumers. They have over 750 outlets across 100 cities and are growing at ~50% annually. Their store+website omnichannel strategy has driven a significant proportion of their sales.

### Relationship with Vue.ai and Goals

Vue.ai powers the customer's website with recommendations for every shopper on the site. These are powered across multiple brands that are a part of the customer's site. Similar Product and Cross Products are recommendations live on their product pages.

Given the variances across the brands and the different kinds of shoppers they cater to the customer wanted to understand how and if dynamic personalization\* impacts the recommendations on their site.

\*Vue.ai's dynamic personalization takes into account real-time activity of the shopper on the site and recommends products based on that.

### The A/B Test

The goal of the A/B test was to understand the difference in engagement and conversion that dynamic personalization brings. The two test groups were:

A - Similar Product Recommendation without any personalization

B - Similar Product Recommendations powered by Dynamic Personalization



# A/B Test Results: Similar products with dynamic personalization

It was found that shoppers who were shown personalized recommendations were engaging and converting at a much higher rate than the other group.

The customer saw uplift across conversion rate at the user level, improved user engagement rate and improvement in average order value.

## Similar Products: Dynamic Personalization Algorithm Performance

	Without Dynamic Personalization (50% of Traffic)	With Dynamic Personalization (50% of Traffic)	Uplift
Conversion Rate (user level)	2.27%	2.52%	11.0%
User Engagement Rate	10.34%	11.28%	10.2%
Average Order Value	₹1,282	₹1,480	15.4%

# Customer story 2:

## Lifestyle brand

### About the Retailer

The customer is a lifestyle brand focusing on sustainable, modern lifestyle products. They have over 15 stores and an active online platform contributing more than a quarter to its total sales. A growing online presence coupled with a global demand for their products is driving their new omnichannel strategy.

### Relationship with Vue.ai

Vue.ai is helping the customer amplify their design-led aesthetic by providing recommendation systems that merge seamlessly with the site. Similar products, cross product and product bundles are some of the solutions that are active on the site for fashion and non-fashion categories.

The customer was keen to understand how dynamic personalization\* can impact recommendations and if there would be a discernible improvement in the way shoppers saw recommendations on their site.

\*Vue.ai's dynamic personalization takes into account real-time activity of the shopper on the site and recommends products based on that.

### The A/B Test

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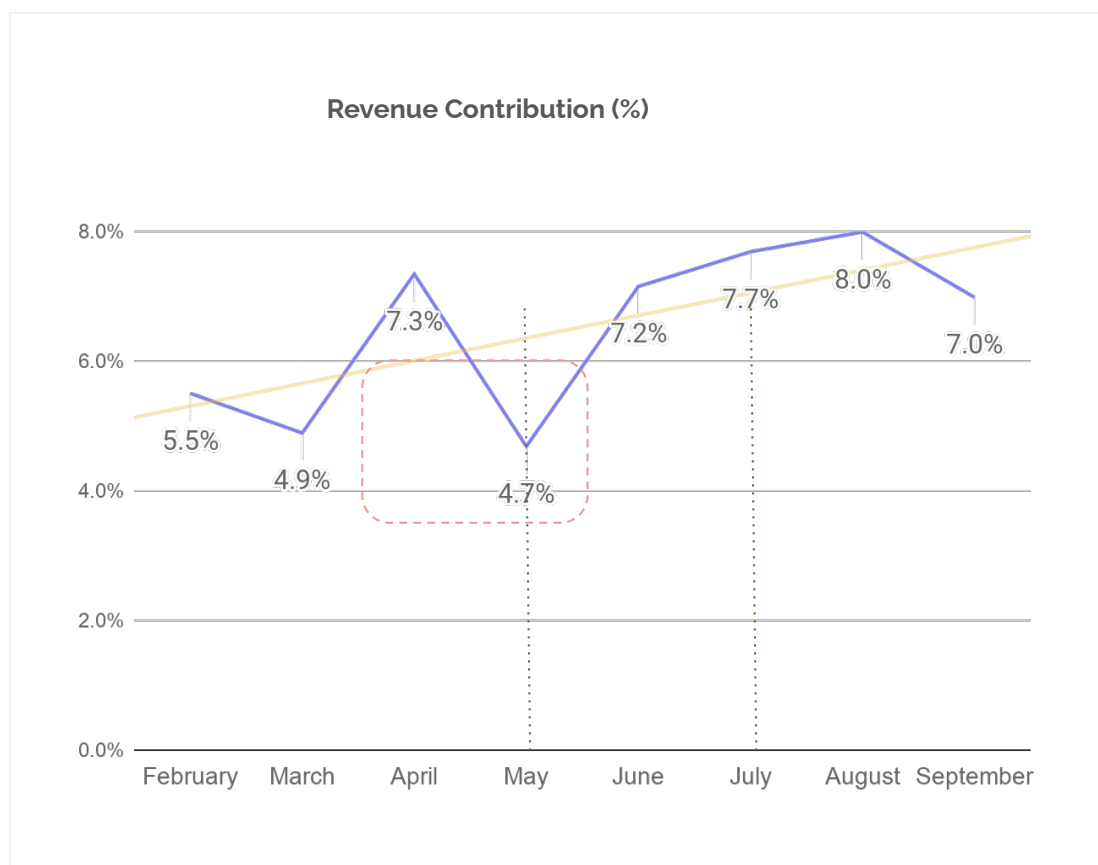
# Revenue contribution from Similar products with dynamic personalization for customer 2

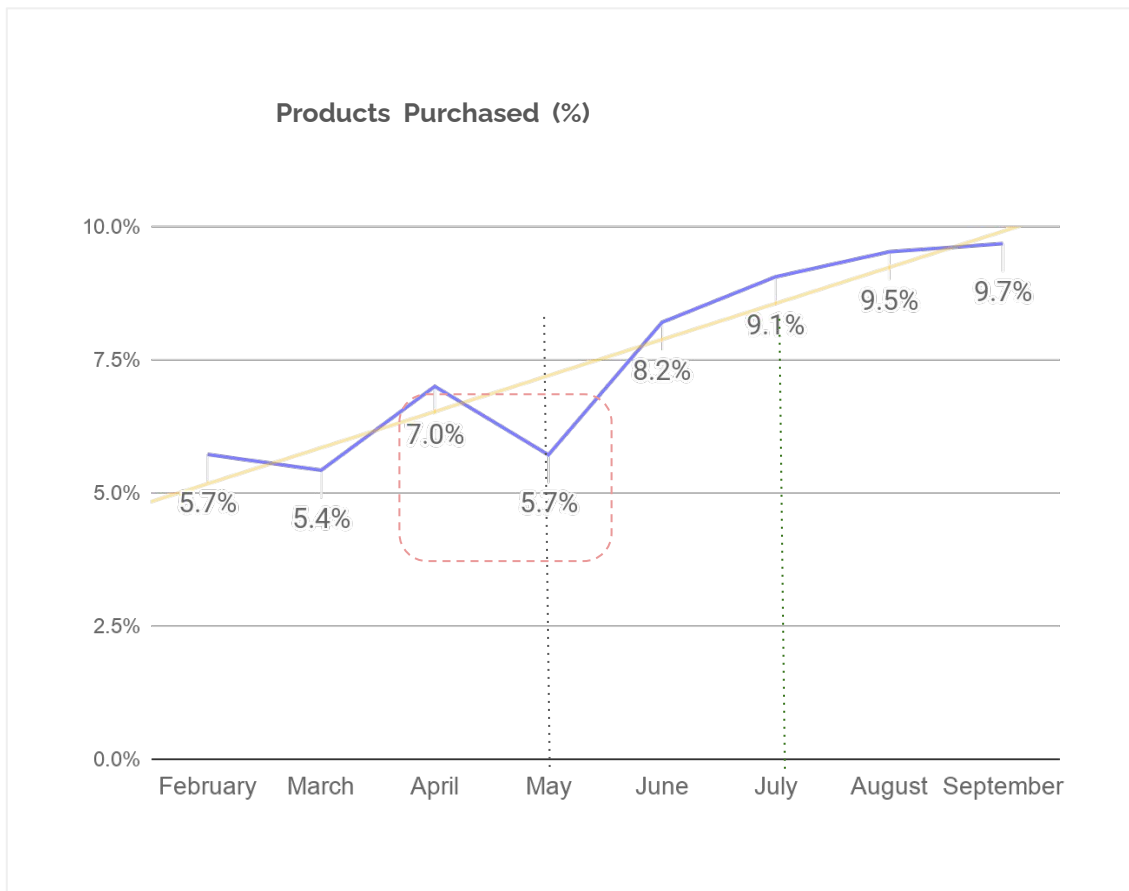
A data-led understanding of customer behaviour built on top of a deep understanding of product makes it easier to assess critical touchpoints where similar products can help engage shoppers.

The A/B test showed a 2X uplift in conversion rate with dynamic personalization.

	With Dynamic Personalization	Without Dynamic Personalization	Uplift
Conversion Rate	4.50%	2.20%	2x

The customer saw an increase in both products purchased and Vue.ai's revenue contribution post applying the insights from the A/B test.





**Inconsistent behaviour in April & May** can be attributed to lockdowns due to **COVID**

# Key takeaways

A/B testing is the key to building personalization strategies that work. Data today—about the customer and product—is a veritable gold mine that retailers learn to collect and harness in meaningful ways. Every data-backed implementation of a recommendation solution on the site, increases the chances of seeing a positive impact on the ROI. Whether it is through better engagement on the site or improved conversions, A/B tests done with the right tools add a lot of value for a retailer.

Customer experience and meaningful shopper journeys have become critical to building an eCommerce site that stands apart from the rest in a crowded retail space. True personalization with data-backed recommendations can help deliver journeys for every single shopper every time. A 360-degree view of shopper and product adds to making the entire site experience memorable and useful. With a dynamic personalization solution and a recommendation engine that is tweaked to analyze and implement solutions backed by data, every shopper on the site is ready to step in and step out and come back again to the site. Customer retention becomes easier.



## Intelligent Retail Automation

*Process Automation & AI solutions for the Retail Industry*

Vue.ai is an end-to-end retail automation platform that is redesigning the future of retail with Artificial Intelligence. Using Image Recognition and Data Science - we extract catalog data, analyze it with user behavior and help your marketing, product and cataloging teams get actionable insights that **improve customer experiences, drive conversions and reduce costs**. We help you digitally map your products' DNA to create **one-of-a-kind retail experiences** for your customers and translate product information into the language that your teams can understand and make business decisions with.

## Making Retail Teams AI-Ready

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