



# TRUE REAL-TIME PERSONALIZATION

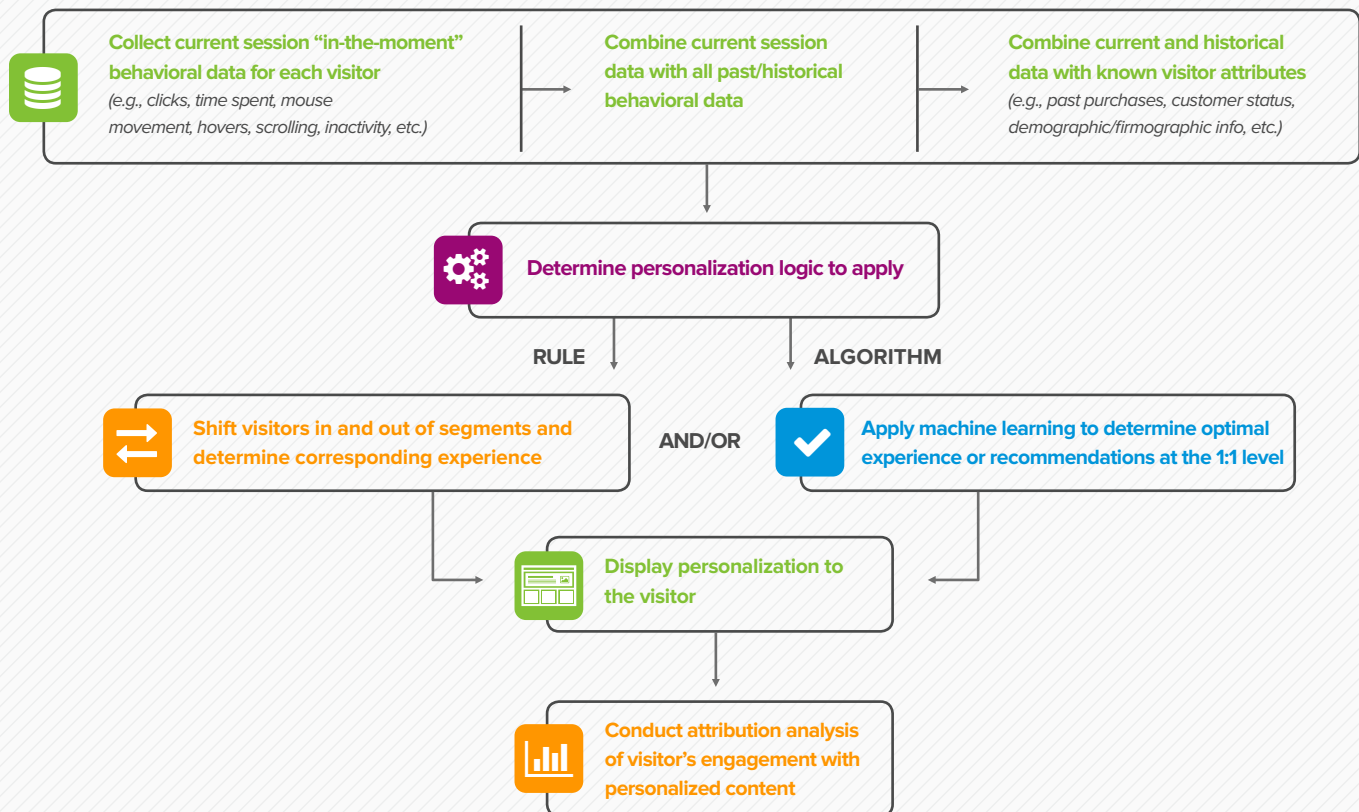
Evergage is The Real-Time Personalization Platform. In the world of marketing technology, however, “real-time” is used so often that it is difficult to know what it actually means.

Since “real-time” is integral to Evergage’s identity, we want to make sure it’s clear what it is and what it is not. This white paper will:

- Set the record straight about real-time
- Define the many facets of real-time personalization
- Explain why it’s important to you as a marketer
- Help you evaluate real-time personalization solutions

## The Key Elements of True Real-Time Personalization

To completely personalize a website or app experience, multiple steps need to occur from the moment a visitor lands on your site to the delivery of an individualized experience. True real-time means doing all of the following steps in a fraction of a second, unnoticeable to the naked eye.



All steps of this process should take less than **20 milliseconds** with a true real-time personalization solution.

# Let's break down each of the steps.

1

## Track behaviors at a deep level and across time to determine "in the moment" intent

Data on all the actions taken by each visitor on your site or in your app must be captured as they occur. To be most effective, however, marketers need to consider more than just clicks and page views.

Time spent by page and category, mouse movement, hovers, scrolling and active (or inactive) time are much richer indicators of engagement, interest and intent.

This data on in-the-moment behaviors must be combined with behavioral data collected from past sessions as well as known attributes (such as demographic/firmographic info, past purchases, loyalty status, plan level, etc.).



A **non-real-time solution** is unable to combine all in-the-moment behavior, historical behavior and attributes. Some non-real-time solutions only factor in a limited set of current session activities and ignore past sessions. Some can only combine past session and current session activities after a 4 to 24 hour delay. Some only focus on what is known from past sessions or attributes alone.

A **true real-time solution** will leverage not only current and any/all historical session data and attribute data, but also use deep behavioral analytics to determine the true intent of the visitor in the moment.



## DETERMINE PERSONALIZATION LOGIC

Personalized experiences rely on either rules or algorithms (or both). The appropriate rule or algorithm for a given situation must be determined instantly. Given the number of people that may be on your site at any one time and the volume of data available on each person, that's a complex decision to make within a fraction of a second.

**Rule-based personalization** allows for manual creation of rules, generally using specific criteria and boolean (and/or) syntax, that are applied to groups or segments of visitors (e.g. if visitor meets criteria A, Y and Z, then show him a particular experience).

**Algorithmic personalization** uses machine learning and predictive analytics to present the most relevant experience or recommend the most relevant products or content to each visitor (e.g. if visitor has shown a preference for a particular category based on time spent, then automatically show him the most relevant article/product in that category with the highest likelihood of conversion).

2

## Seamlessly move visitors in and out of segments and determine corresponding experience

Throughout the course of a session, visitors often qualify for new segments and no longer fit in to others. Because of this, they need to be seamlessly and immediately moved in and out of segments when their behavior justifies a change.

Once a visitor qualifies for a segment, his or her corresponding experience must be determined instantly.



A **non-real-time solution** may require processing time of 8 hours or more for a visitor to be moved into a segment or taken out of an irrelevant segment.

A **true real-time solution** can shift visitors in and out of segments immediately to capitalize on in-the-moment behavior and provide the most relevant experience.

3

### Apply appropriate algorithms to determine experience and most relevant recommendations at the 1:1 level

If algorithms are to be applied for one-to-one personalization scenarios, the appropriate experience and recommendations must be selected instantaneously. Pre-launch testing and tuning of algorithms is also a must.



A **non-real-time solution** will provide generic recommendations based on overall product or content popularity or perhaps what the visitor clicked on. It may even recommend items that are out of stock or irrelevant. A non-real-time solution will also often not allow marketers to refine and test algorithms before they are launched on the site, and even then, they can't adjust them on the fly if things are going poorly.

A **true real-time solution** will continually update product and content recommendations based on what a visitor has been most engaged with (e.g. brand, category, keywords, etc.). It also updates the catalog automatically to account for the latest offerings and inventory levels. A true real-time solution empowers marketers to create and tune algorithms, instantly see and test their results prior to launch, and even adjust them on the fly post-launch if necessary.

4

### Instantly and seamlessly deliver personalized experiences for each visitor

All the previous steps must be completed before a personalized experience can ultimately be displayed to a visitor.

After all that work, it's critical that the visitor not notice anything disruptive. Great personalization is not easily spotted by a visitor, as it should not look and feel any different from anything else on site.



A **non-real-time solution** could show a visitor an older or default experience before the personalized experience loads. Or, a page or section of a page could take too long to load or flicker — causing concern and disruption.

A **true real-time solution** will display the new experience instantaneously and without disruption. The visitor should not even know that he is seeing a unique experience.

5

### Immediately access data for testing, analysis and attribution purposes

Finally, data should be accessible immediately for analysis — you should not need to wait hours or days or rely on IT for data and reporting on behaviors and campaign results on your site or in your app.

The ability to access real-time data allows you to better optimize your experiences and measure your performance and marketing effectiveness.



A **non-real-time solution** could make you wait up to 48 hours before activity on your site and personalization campaign results are available for analysis.

A **true real-time solution** allows you to analyze data on the activity on your site as it's happening. The data does not process in batches. You can measure the performance of your campaigns or analyze behavioral data as it happens, improving decision-making, accelerating benefits and reducing risk.

# Let's look at an example of non-real-time personalization.



## Scenario: **John** the shopper



John visits a sporting goods retail site, his second visit in two days.



John then spends 1.5 minutes viewing an article about road biking.



John viewed 2 mountain bikes and a free-standing basketball hoop during his previous 1-minute site visit.



John lives in the greater Chicago, IL area. It's currently springtime.

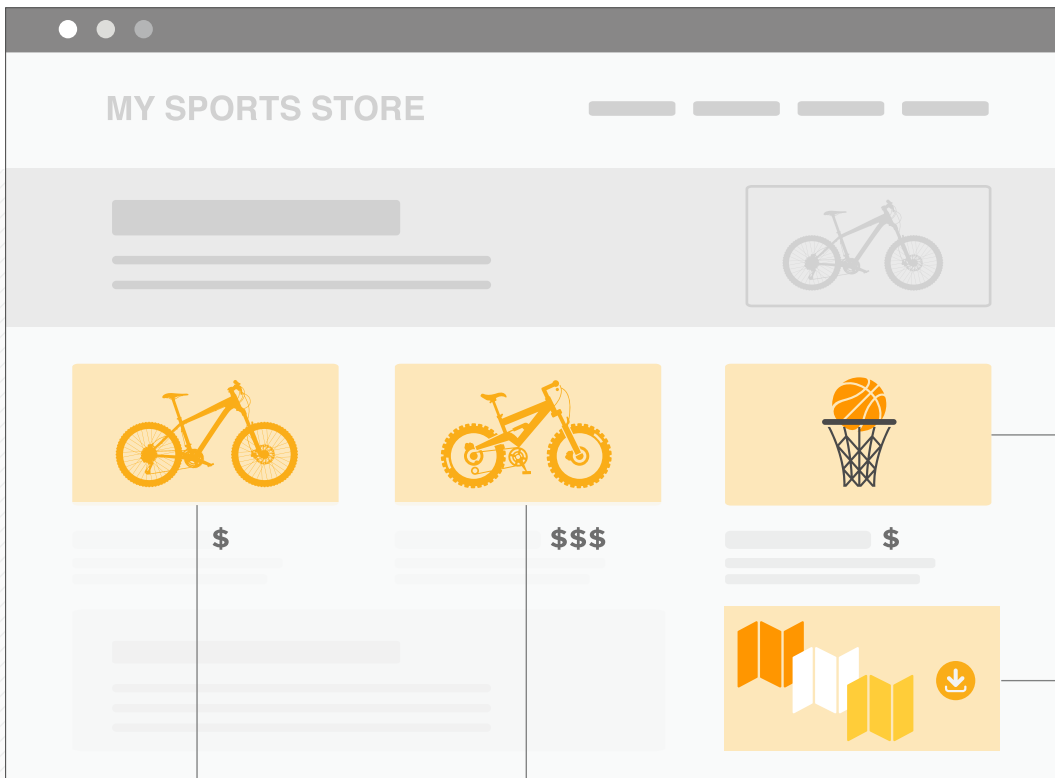


In the current session, however, John spends 8 minutes viewing multiple road bikes including 2 different model bikes for 3.5 minutes each.



John last purchased a bicycle plus accessories this time of year 5 years ago and spent \$1042 total.

## John's not-so-relevant experience



John sees recommendations for basketball hoops, even though he's shown no interest in them this session and only minimal interest in the past.

John sees a download for multiple mountain bike trail maps from across the U.S. (instead of a single road bike map for the Chicago area).

John ordered a bike via the company's call center, but when he goes to the site to look for accessories for his bike, he's offered the bike that he just purchased.

John sees recommendations for a bicycle well outside his preferred price point.

John's behavior is not available for analysis until it is batch processed 24-48 hours later.

---

# Checklist

Not all personalization solutions are the same. Use this checklist as you evaluate your options and to understand if you're getting a true real-time platform.

## Does the solution...



Allow automated response within milliseconds to current session behaviors to personalize experiences for your visitors?



Combine current session behavioral data with past session data plus attribute information (e.g. CRM and third-party data) and crunch it all in milliseconds?



Instantaneously move visitors in and out of segments that involve historical data and current session data?



Apply rules and/or algorithms "in the moment" to determine and render the optimal experience for each visitor?



Allow for A/B testing of different experiences and of customizable algorithms?



Provide 1:1 recommendations from a catalog of products or content that is always up-to-date?



Deliver visitor experiences without flicker?



Provide access to up-to-second results for testing, lift and attribution analysis?

# TRUE REAL-TIME PERSONALIZATION

Some personalization platforms use the term “real-time,” yet they cannot complete all the steps required in a single session, nevermind within 20 milliseconds. Only Evergage can do this. When you think about how much is involved in each of these steps, it’s no small feat!

When considering a personalization vendor, be sure you understand the implications of “true real-time.” Don’t settle for less when it comes to choosing your personalization platform. Go with a true real-time platform to give you a competitive advantage!



## WANT TO KNOW MORE?

Evergage is passionate about personalization. (Can you tell?)  
We've developed a unique and comprehensive real-time platform  
that delivers personalization without compromise.

**Get a free 15-minute consultation!**

<http://bit.ly/Evergage-Consult>