roduct is in a pre-release state and might change or have limited support. For more information, see the <u>product launs</u> (/products/#product-launch-stages).

This topic provides a high-level description of the capabilities of Recommendations Al. For a description of the process of implementing Recommendations Al, see <u>Implementing a Recommendations Al solution</u> (#implementation).

Recommendations AI is in limited Beta release. To become a Beta customer, contact your Google account manager.

Recommendations AI enables you to build high quality personalized product recommendation systems without requiring a high level of expertise in machine learning, systems design, or operations. Leveraging your website's catalog products and user behavior, Recommendations AI builds a recommendation model specific to your company, including optional add-on features such as result diversity, selecting whether you are optimizing for CTR/CVR/Revenue, and shopping feed integration (all available by request to the <u>support team</u>

(mailto:recommendation-engine-feedback@googlegroups.com)). You can then request recommendations for other catalog products to display to your users.

In order to build recommendation machine learning models, Recommendations AI needs two sets of information:

- Product catalog: Information of the products sold to customers. This includes the product title, description, in stock availability, pricing, and so on.
- **User events:** End user behavior on your website. This includes users searching for, viewing, or purchasing a specific item, your website showing users a list of products, and so on.

The Recommendations AI API provides capabilities for two tasks:

 Data Ingestion: You can upload and manage product catalog information and user event logs for your websites. Recommendations Al uses this information to train and update recommendation models. • **Prediction:** You can request recommendations based on your product catalog and user event logs.

tant: Recommendations AI processes data on your behalf. It is your responsibility to ensure that the data you send to mendations AI is collected in accordance with applicable laws.

To integrate Recommendations AI into your website, follow these steps:

Step	Description
1. Set up a Google Cloud project (/recommendations-ai/docs/setting-up)	To use Recommendations AI, you must create a Google Cloud (GCP) project and create authorized and OAuth token (either using a user account or a service account) to access the project.
	You can only host one product catalog per Google Cloud project.
	If you want to create separate environments for testing and production, set up two Google C another for production. Because the two projects are separate, you will need to perform all or including importing your product catalog information.
	Recommendations AI is in limited Beta release. To become a Beta customer, contact your Go
2. Import your product catalog (/recommendations-ai/docs/upload-catalog)	You can add items to your Recommendations AI product catalog individually by using the <u>ca</u> (/recommendations-ai/docs/reference/rest/v1beta1/projects.locations.catalogs.catalogIteproduct catalogs, we recommend that you add items in bulk by using the <u>catalogItems.im</u> (/recommendations-ai/docs/reference/rest/v1beta1/projects.locations.catalogs.catalogIte
	You will get the best results for recommendations if you provide highly-detailed catalog information as up-to-date as possible. Detailed and accurate catalog information results in a better
(/recommendations-	After you have finished importing your product catalog, you are ready to start recording user such as clicking on a product, adding an item to a shopping cart, purchasing an item, and so event data in order to generate personalized recommendations. User events need to be inges behavior of your users.
	You have several options to record user events:
	You can use a JavaScript pixel in your website to record different user events for differen
	You can use Google Tag Manager to tag user events and record them.
	 You can send user events directly to the Recommendations AI API from your back-end set (/recommendations-ai/docs/reference/rest/v1beta1/projects.locations.catalogs.eventS

Step	Description
4. Determine your recommendation types and placements (/recommendations-ai/docs/placements)	The location of the recommendation panel and the objective for that panel impact model tunes recommendation types (/recommendations-ai/docs/placements), optimization objectives (/recommendations-ai/docs/placements#opt-obj), and other model tuning options (/recommendations-ai/docs/placements#tuning), contact your Recommendations AI supportions for your business.
5. Import historical user events (/recommendations- ai/docs/manage-user- events#import)	Your models need sufficient training data before they can provide accurate predictions. Prov you to start model training without having to wait months for enough user event data to be only the start model.
	For more information, see <u>User event data requirements</u> (/recommendations-ai/docs/placen
	After you have met the data requirements, contact your Recommendations AI support represtraining takes 2-3 weeks to complete; then, the Recommendations AI team tunes and evaluations
6. Request recommendations (/recommendations- ai/docs/predict)	After your model has been activated, you can now request recommendations from Recommendations website.
	You can request a recommendation by calling the placements.predict
	(/recommendations-ai/docs/reference/rest/v1beta1/projects.locations.catalogs.eventStorspecific placement. Recommendations AI returns a list of ranked catalog item identifiers in the (/recommendations-
	ai/docs/reference/rest/v1beta1/projects.locations.catalogs.eventStores.placements/predictions.placements/predictions.placements/predictions.placements/predictions.placements/predictions.placements/predictions.placements/predictions.placements/predictions.placements/predictions.placements/predictions.placements/predictions.placements/predictions.placements/predictions.placements/predictions.placements/predictions.placements/predictions.placements/predictions.placements/predictions/p
	You can associate recommendations and user events and Recommendations AI provides repended how incorporating the recommendations is affecting your business.
	You can view recommendation metrics for your project in the Dashboard tab of the <u>Recomm</u> (https://console.cloud.google.com/recommendation).
8. Set up an A/B experiment (Optional) (/recommendations- ai/docs/a-b-testing)	You can compare the performance of your website with Recommendations AI recommendate website without Recommendations AI recommendations. To compare versions of your website randomly partitions a subset of your users into control and experimental groups. The control experimental group sees your website with Recommendations AI recommendations.

Product usage is under Google Cloud's <u>Terms and Conditions</u> (/terms) and customer information will be used in accordance with Google's <u>Privacy Policy</u> (http://www.google.com/intl/en/policies/privacy/).