



RECOMMENDATIONS AS A SERVICE

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About the project

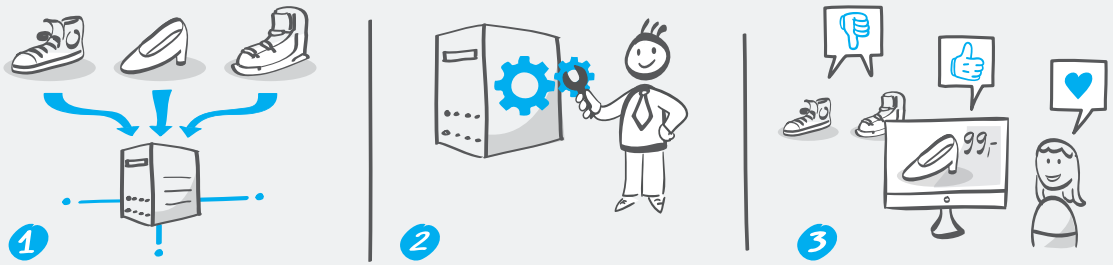
Recommendation engines usually provide a set of powerful algorithms to process a large amount of data. The result is a prediction of the users' behavior, preferences and needs. Taking this into account, buying or usage decisions of end customers become more effective and service providers benefit from maximizing the quantity of sales and winning over their customers.

On the other hand, a system of this nature needed to be developed, adjusted and hosted by technical experts due to its intricacy. The Recommendations as a Service (RaaS) platform assists service providers to start a professional server-side recommendation engine for a variety of use cases and without any programming skills. When you already host an online Book Store, a VoD Portal, an interactive Music Library or similar web services and you want to use the benefits of Recommendation Engines to leverage your service, try the RaaS Platform.

Engines of the Recommendation as a Service Platform were successfully deployed in different Websites and TV Portals recommending live TV programs and VoD content. The Platform offers a powerful set of highly developed algorithms – each can be used as stand-alone approach or in combination. Amongst others the RaaS platform offers a variety of Content-based, Collaborative and Hybrid Filtering approaches as well as Machine Learning algorithms in order to calculate:

- **Similar Items:** e.g. with algorithms using the Euclidean Distance and Cosine Similarity or Association Rules
- **Nearest Neighbors:** Pearson Correlation Coefficient and Data Segmentation with Cluster Analysis
- **Rating Predictions:** improved bi-polar Slope One and Matrix Factorization
- **Automatically recognized behavior patterns:** Neural Networks and Support Vector Machines

Generate your own Recommendation Engine in just three simple steps.



How to create a Recommendation Service with RaaS?

After subscription, service providers can start their own personalized recommendation system on a website, called admin interface, by following three simple steps:

1 Allocate data:

Import existing data, connect external databases or create new users, items and relations between them. The necessary data can be stored in the offered graph database that provides efficient access and a high reliability by distributing the data. It is protected and anonymous, so only the concerned end customer has full control over the data.

2 Create recommendation engines:

Create and adjust engines presenting different well-explained recommendation approaches and select from wide range of algorithms. Load balancers, scalable algorithms and multiple distributed server machines allow a high performance and optimal processing.

3 Build services on top:

Use an automatically offered example user interface or connect your custom application via dynamically generated APIs to the engine.

After following these steps, service providers can analyze their success by retrieving visual illustrations of usage data and customer statistics.

Benefits and areas of application

The usage of the Recommendations as a Service platform makes consumption and buying decisions more effective and the user experience more comfortable by recommending only relevant items. It allows service providers to predict the customer's usage behavior by reusing professional data mining services.

If you are interested in the Recommendations as a Service Platform, please do not hesitate to contact us for a trial access or more information.

At a glance

The Recommendations as a Service Platform (RaaS) provides the ability to create a professional recommendation engine with just a few mouse-clicks and no programming skills.

This platform can persist your item and user data and will host your recommendation engine as a service in the cloud or on your own server infrastructure. Thereby, decision makers can choose whether to use ratings, likes, check-ins or implicit feedback, such as clicks or consumption time. In addition, they can adjust the way, the personalization works by selecting from a wide range of well-explained algorithms.