



Changing The DNA of Recommendations

A TROUVUS WHITE PAPER
October 2014

For senior executives, managers of IT and sales departments
and decision makers of online media, entertainment, video and movie streaming services.

This White Paper explains:

- Why recommender solution is essential for e-commerce, media, entertainment and video streaming services
- How recommender solutions bring benefits to the companies by increasing customer conversion
- How recommender solutions can bring value by improving user's engagement
- What you need to know in order to deploy a recommender system

"Personalized recommendations solution is one of the most important technologies that companies need to adopt if they want to stay competitive."

Recommender systems are essential for creating additional value from customer interactions. In a highly competitive online services market, personal recommendations aligned to customer's choice is capable of producing a unique strategic advantage.

When users come to your site and engage with it by searching, exploring, selecting and viewing media content that your site offers, they leave various footprints. Using certain parameters and data collected from these users' engagement, you are capable of extracting insights that can be utilized in improving users' experience with your web services. Recommendations solutions are meant to achieve this goal by providing personalized content recommendations to the users.

Integration of these solutions to your media content and entertainment facilitate understanding your users' need better, enhance their involvement with your site and create significant value for your business.

Recommendations engines are big data-driven information systems that generate suggestions from the database of items of your web services that most likely have appeal to the users and attract their attention.

WHY DO YOU NEED TO DEPLOY A RECOMMENDER SYSTEM IN YOUR WEB SERVICES?

Overwhelmed with the quantity of content selections available on any entertainment site today, users often complain they don't know what to watch. Finding what to watch on a media site is a very different experience than the usual linear TV channel surfing that viewers are accustomed to doing. On a regular TV channel, the specific time when a particular content will be available for watching gives a viewer a clear picture of what and when to expect their favorite shows or movies. On a media site, it is quite tricky! The site has to create an ecosystem where the visitors get exposed to the most relevant and desirable to them content before they leave the page. Personalized recommendation is the only approach how the site can keep the interest of the user to the available content of the site continuously high.

Another challenge e-commerce sites are facing today due to steep market competition is the eroding brand loyalty of the customers. In the movie and video streaming industry, things are changing even faster! The users in this segment have very little brand loyalty. To keep users interested in your services, you have to provide them with true personalized experience they expect. Mere customization and targeting ads are not the right answer. The company needs to take two very different strategic approaches when it wants to attract visitors and when it tries to convert a visitor to loyal customers. Loyalty comes with satisfied user-experience and trust.

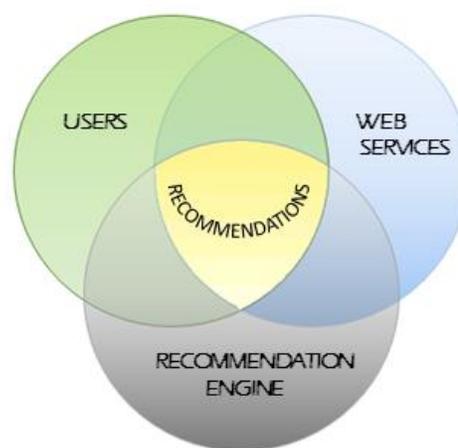


Fig. 1
Interaction of Recommender System Components

Most web services emphasize on attracting new customers. However, getting prospective customers to visit your site is just part of the problem. More important issue is to engage the users in a manner so that the interaction converts into the desired effects such as more purchases; more time spend on the site, better satisfaction for the customer, etc. By deploying personalized recommendation system, you can resolve many of these critical issues.

Most available solutions are complex, cumbersome and consume serious time and effort to integrate.

One more factor that some sites don't pay attention to is inefficient recommendations. Many sites display arbitrary recommendations to their users without giving much thought to the possible consequences. Unprofessional recommendations do more harm than help. People unhappy with the suggestions received from the website in best-case scenario learn to ignore

them or worse leave the site for good. Failure to meet the expectation of the users may cause attrition of the customers to more savvy competitors.

Even if you presently have a recommendations solution adopted that does not mean that you are getting the best possible benefits a latest recommendation engine can offer. Remember, in today's highly competitive online market, personalization can work as a key differentiator for web services only if it is of high quality.

"Guided content discovery experience that a recommender system can deliver will make customers keep coming back for more."

WHAT DOES ENGAGING CUSTOMERS WITH PERSONALIZED INTERACTION EXACTLY MEAN FOR E-COMMERCE SITES?

It means to know your customers, consider their needs and guide them to discover the right content. The personalization service provided by your website has to be intuitive and multidimensional at the same time. The customer must feel comfortable in understanding and using the service. The result from this could be staggering! Personalized recommendations system will contribute to metrics directly related to your web service's success such as order size, quicker purchase decision, conversion, loyalty, retention, etc.

The four key strategic issues that you need to focus on while adopting a recommender system include the followings:

1. Evaluate your requirement. What type of the recommender system will satisfy your present and future need?
2. Use recommender system across the board. The selected system should be deployable for all your available content
3. Select metrics that will provide necessary data that you can use in further decision-making
4. Monitor, test and benchmark to see what impact the solution is having on your key metrics

PERSONALIZATION AS A BUSINESS STRATEGY

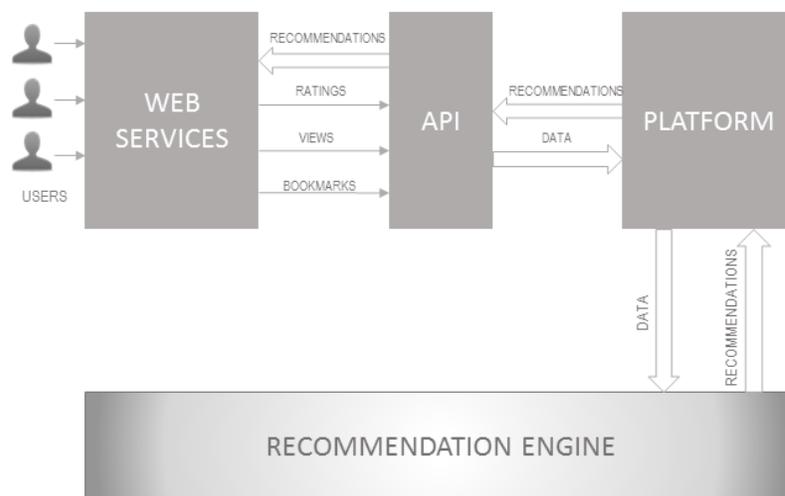
Although, each business and each web service are different, there are certain elements of user and website interaction that are similar. These elements can be optimized by using proper tools and techniques and bring substantial benefits. The right strategy in planning and deploying the related processes will help you to reach this goal. Integrating a recommender system to your web service should be just one step, albeit, an important one, of your personalization strategy. Once your company decided that the personalization is the right strategic fit, you need to lay out a broad plan, which is aligned with your company's business strategy. The goal is to improve customer engagement by connecting them with the best available and most relevant content the site owns.

According to Unruly Media and Decipher Media, viewers enjoy a content 14% more if it is recommended by the site as oppose to found by browsing or accidentally.

TROUVUS RECOMMENDER SYSTEM

Ever since the first web service used a recommender system, these solutions bolstered with many new technologies, have come a long way. Like many other advances in technologies, recommender systems are transforming and improving faster than you can imagine. A recommender system implemented just a few years ago might not have the same robustness as the ones developed using the most recent technologies.

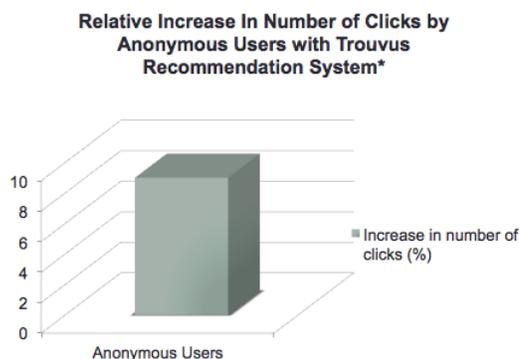
Trouvus recommendations solution not just allow you to integrate the engine to your web services using simple API and cloud-based platform, it is created based on the most advanced algorithms available today.



WHAT TROUVUS HAS TO OFFER?

Real-time recommendations:

One of the biggest challenges a recommender engine faces is how to compute the enormous volume of data, and at the same time produce an instantaneous recommendation to the customer. Trouvus resolves this issue by combining module-based and in-memory algorithms. While a large part of the computation is done a priori the most vital part is calculated real-time so that the personalized recommendations of the best content can be delivered instantly.



Integration with your services:

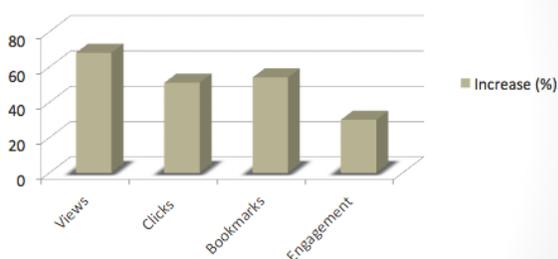
The deployment of our recommendations solution to your site takes minimum time and effort. The users' viewing preferences and other online activities that your system is collecting overtime is used as the core of the database required for incorporating our solution.

Companies that will be able to predict the need of the customer and meet each person's expectations by offering content that is tailored to her taste and desire will have true competitive advantage before others.

A/B testing:

To capitalize on the huge opportunities recommendations system can offer you need to have a sound business strategy aimed at selecting and adopting the right solutions and tools. You also need to evaluate and monitor the progress you are making in your personalization endeavour by using clear metrics. One of the metrics that demonstrates clearly the real benefits you are receiving from the use of a recommendations solution is A/B testing. The concept of

Relative Increase in the Use of Personalized Recommendations Among Registered Users in Trouvus A/B Test Results**



A/B testing is fairly basic. We setup two different versions of the same services for different group of visitors for a certain period. One is your previous version and the second one with our recommendations solution incorporated. This controlled experiment after the set period will show the difference achieved in various parameters. We will provide you with a platform for testing the capabilities of the recommender system and discover yourself the improvement it brings to your services.

If your business model is subscription based what can you expect from deploying a recommendations solution?

1. Reduced attrition
2. Improved user engagement
3. Growing subscription renewal
4. Up-sale to premium subscription

The best thing a true recommender system provides can be called “Automated Serendipity”. Thanks to the solution sometimes users discover and enjoy content that induces an aha moment. Content that they know in their mind that they are looking for but did not realize until it was magically suggested to them by the system. For users, this experience creates a special bond with the site that easily converts to a deep loyalty. Loyal customers that trust your web services are not just faithful buyers; they become advocates for your brand as well.

Studies show that if a visitor clicks through an item recommended by the website on its home page, the chance of conversion goes up 20 percent.

Recommendation solutions allow web services like yours to take advantage of the big data sitting in your repositories and extract immediate values for your business and for the customers. More companies are discovering that delivering recommendations are not costlier than running an advertisement campaign. On the contrary, it is affordable, and it directly affects the revenue growth while the whole process takes only several days to setup.

A Forrester research study shows that

- More people prefer buying products through recommendations
- Majority of the users check out recommendations
- Recommendations can increase sales significantly

CONCLUSION

There are great benefits a website can extract from a proper recommendations solution. The Trouvus recommender system's API based platform produces and reflects on your website the most relevant recommendations according to the customer's unique taste. The website will achieve a significant improvement in conversion rate thanks to better user experience. The integration of the recommender system will also enhance the site's ability to monitor and understand user preferences better and enhance the services in accordance with the customer's true need.

The best part of Trouvus recommender system is that the interface is easy to integrate and costs very little.

Contact us to deploy a revolutionary personalized recommender system to your web services. Make your customers happy and reap profits.

Based in Toronto, Canada, Trouvus is a young technology company specialized in recommendation systems. Trouvus Recommendation System is designed and developed using most advanced artificial intelligence and semantic web technologies. www.trouvus.com

Trouvus Inc.

312 Dolomite Dr. Unit 229 Toronto
ON Canada, M3J 2N2
+1 (800) 317-0805
info@trouvus.com

Copyright © 2014, Trouvus and/or its affiliates. All rights reserved. This document is provided for information purposes only and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.