

# eBay Recommender Systems

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## Introduction

Having had a bad experience with eBay brought me to read more about the company, understand their targets, how they operate the business as well how their recommender systems work. This time and for the purpose of learning (together with the assignment), try to look at their systems more in a scientific way rather than just as a disappointed customer to gain more insights and make some recommendations.

## Scenario Design

### Who are target users?

Looking at the wide range of product available at its website, eBay has a very wide range of target users (marketing). Millions of items like collectibles, appliances, computers, equipment and many more miscellaneous items are listed, bought or even sold on a daily basis. Thus, eBay generally target online auction and shopping communities.

### What are eBay key goals?

The overall eBay aims are to increase the gross merchandise volume and net revenues from the eBay marketplace.

eBay's main goal is to augment its revenue from the eBay marketplaces, to increase number of customers. First of all, they

### How can I help them to accomplish those goals?

eBay's strategies to provide an online marketplace seems to be chosen correctly. As the "world's online auction and shopping website. They have been able to direct their strategies toward acquisition, that's it, attracting new users and increase the number of customers. They aim to active more users to bid by imposing alluring regulations, such as lowering fees for listings items and offering proper incentives and discounts for their customers, and they wish to mount up the gross merchandise volume and value of transactions which are conducted by every single active user. This help them to raise the revenue.

However, fragility of eBay Inc. endangers company's performance and profitability. eBay should undertake more precautions monitoring arrangements in order to reduce risk of fraud, since the company is exposed in danger of negative public attention. I have a personal experience about it as a their "customer" which I am not anymore. Efficient monitoring is costly as the company has to incur considerable expenses to eliminate deceptive actions, although, innovative security procedures appears to be vital. In addition, eBay should build a great recommender systems which will only suggest significant items to customers and also reduce the possibility of irrelevant recommendations.

## Reverse Engineering

From the site interface, I'd attend to reverse engineer the eBay template. Thus, reverse engineering an eBay template from eBay listing. This should be something that larger sellers on eBay should do to allow them not to make every single listing by hand but using tools that are advanced and allowing them to focus on each core element of the listing separately. eBay Templates enable businesses that use 3rd party tools to sell on eBay to crucially separate their product data from their eBay templates. The fact that some software tools allow you to template the templates, the boundaries of what can be done with templating can be taken in a high level. One can create some complex structures of product templating & data allowing exceptionally slick data input methods for businesses in the background and what the customer sees as in the eBay listing looking different and way better.

## Recommendations

It is understandable that eBay's recommendation systems face challenges since it is a semi-unstructured market place, but they should consider building recommender systems in the way that can find the nearest categories (related categories) constrains the search space of possible recommendation candidate items significantly and also reduces the possibility of irrelevant recommendations. The standard collaborative filtering techniques applied in their recommender systems should be more effective.

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