



Raising traffic on a web page by adapting the service automatically to the customer's demands

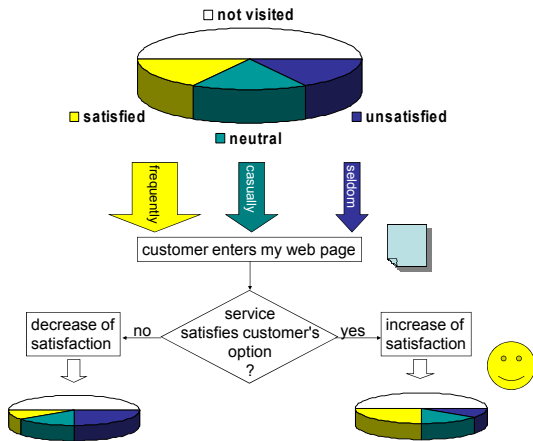
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1. How to increase the amount of visitors on your page?

consumer satisfaction



You will increase the amount of visitors, if you fulfil the desires of them!

2. How to fulfil the desires?

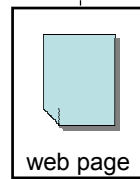
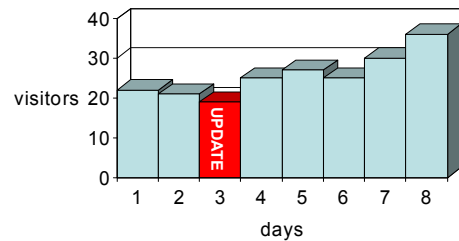
Every visitor expects up-to-date and interesting information but not unnecessary and trivial information. So the frequency of information updates is important! An information update will be rated positive if the number of visitors rise thereupon, negative if not.

You will fulfil the desires of the visitors, if you perform positive updates only!

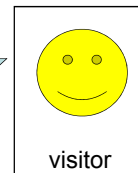
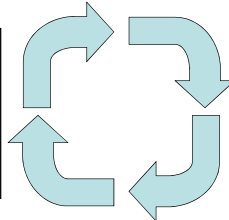
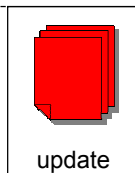
3. How to perform positive updates only?

You have to be able to predict whether an update will have positive effects or not. Therefore you have to learn a pattern that predicts the future development of the traffic. Such a pattern can be found by learning from the past. Every update in the past will be evaluated related to its positive or negative effect. So, whether it caused an increase of traffic or not.

positive example



5. What method is suitable to learn to predict from this data basis?

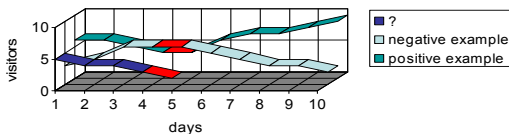


You will perform positive updates only, if you learn to predict whether an update will be positive or not!

The "Support Vector Machine" provides a method for both, learning from the past and predicting into the future. Based on the evaluated examples it predicts whether an update will gain more traffic or not.

This is done by finding a relation between the development before the update and afterwards. A relation between the numbers of visitors in every behaviour profile during the days before the update and the traffic development after the update.

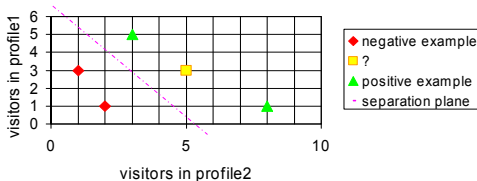
how to predict?



The more rated examples the better the prediction. So the longer you learn the better is your prediction.

With the SVM you can compute an optimal plane to separate the positive from the negative examples. With this plane you become able to predict whether an update will be positive or not. With such a method you can optimize your update frequency. With this optimization you will improve your traffic on the web page.

rated examples



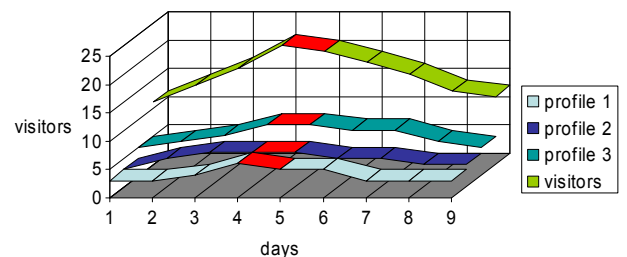
4. How to learn to predict whether an update will be positive or not?

Which attributes are relevant to predict whether an update will be positive or not?

In our project we used the behaviour of the visitor on our web page. We stored this behaviour by dividing the whole amount of visitors per day into certain behaviour profiles. Such a profile is for example, all visitors who leave the page just after entering. By counting the visitors in every profile for every day, we received a suitable basis for prediction.

The last thing missing is a method to learn to predict from this data.

negative example



You will increase the amount of visitors by using the Support Vector Machine to optimize your update frequency!

You will predict whether an update will be positive or not, if you have a method to learn to predict from a data basis!