

Categorizing Companies for Customer Relationship Management Systems

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Results show that large amounts of company data can be categorized into groups with descriptive labels using k-means clustering and C4.5 decision tree induction. Clients can now search for companies more efficiently.

The company Lundalogik AB supplies a service where users can look up data about companies in Sweden and search for customers. As companies rise and fall, brands and names will change. This means that a person (or company) searching for new customers will have a constantly changing pool of new alternatives. Thankfully, there are recommendation services to assist the user when searching for customers. However, it is not necessarily easy for the user to grasp the overall picture of the companies that were recommended. Are they big? How are they doing economically? It would also be useful to have an idea of why they were recommended. It is clear that there is a need for a system that can supply a helping tool that gives fast insights about companies in these situations. A systemized division of companies into different groups with regards to interesting attributes, such as economy and size, is a sought after feature. This way, a user can pinpoint a particular target group more easily. To address this need, machine learning techniques were used and are proving to be a successful tool when searching for groups and trends in company data. Using the right key figures as attributes brings greater understanding of different groups and helps the user alleviate some of the confusion.

Customer Relationship Management

Customer relationship management (CRM) is a business technique that is about building the best relations with the customers. This is because it benefits both ends as the customer satisfaction becomes greater and the chances of them remaining customers will increase.

This is done, to a great extent, by collecting data about customers and analysing it. Then, clients will have a better understanding of the customer's behaviours and needs. The communication with the customers are adapted thereafter.

Lundalogik AB

Lundalogik AB is a company that provides CRM services to their customers. With these, a user can look for new customers and manage relations with them. The way a user searches for companies is a lot like searching for music in Spotify or Soundcloud. Instead of bands or songs, the user searches for company names or anything resembling a target company. It is also possible to book meetings or look up contact information. The backbone of these services is a database consisting of names, locations, codes, economic figures etc.

Categorizing companies

Lundalogik AB suspected that within the large quantity of data, there were groups that were more alike than others. The results show that, given a large data set, groups can be created and labeled with k-means clustering. Then, predictive models are inducted (using the C4.5 decision trees) that describe each company label. This yields a set of company groups with common intra-group characteristics. Instead of looking at every company's data figures, a user can now save time by looking at what group (or tag) a company falls under and decide whether to contact them or not.