1. What is “search engine optimization”? Who benefits from it?

Search engine optimization (SEO) is an algorithm designed to filter through pages upon pages of data to bring forth a requested result. As to who benefits from improving SEO, that would be anyone who has data on the web. The greater the optimization, the more discoverable one would be to somebody hunting for a specific topic. If you’re looking to buy a chainsaw, being shown articles on how to raise bunnies wouldn’t be very efficient.

2. What are the things that help Web pages rank higher in the search engine results?

Many aspects go into ranking, but the greatest aspect (in my opinion), comes from keywords. As the book describes, sure we can cross-link and involve our webpages with others to increase traffic, but if you’re not including the right phrases and keywords then people searching for you won’t be able to find you no matter how high the level of SEO of a search engine is, you can’t be found if you’re hiding. Of course, one way that I’ve learned over the years is through simple housecleaning. Removing broken links, fixing optimization and load times (people drop websites like a plague due to load times), and general maintenance will keep your site in quality shape. Also, as the book mentions, keeping your site relevant. Updating it often, especially if you’re involved in trends, is a good way to keep your site populating and ties into the keywords mentioned earlier.

1. What are the two most commonly used methods for search engine optimization? What is the difference between these two SEO activities?

There are two methodologies in SEO rank boosting: white-hat and black-hat SEOs. White-hat SEO involves following search engine protocols, staying in good standing with search engines. Black-hat SEOs invoke methods that go against the search engine’s protocols. Some such methods would be embedding keywords that are not detectable to humans to draw more people in, sneaky redirects, or cloaking a page from search engine bots. Essentially, black-hate SEOs attempt to artificially boost their rankings over competitors by cheating the system in hopes of boosting their rank.

4. Explain the relationship among data mining, text mining, and Web mining.

Data mining is the way of the future. Information is power, and power is generated every time we visit a site, research/search a certain topic, or buy something online. Data, text, and web mining all serve the same purpose, which is to gather information on the user using that specific medium. Text mining, as the book mentions, is one of the fastest growing fields in BI. This is the process of extracting information from text-based sources. Likewise, web mining performs the same function but through the websites themselves. As a result, over time web mining can reveal the search/browsing habits of individuals and their preferences. Web mining and text mining are the resources that companies use to gather intelligence on current and potential customers. Both web and text mining are subsets of data mining. These two processes all help to establish trends and patterns in customer behavior that may guide companies’ decisions on their products performance. The relationship between the three is symbiotic, in that all three work together to gather information and translate that information into usable data.