

Data Miners

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What Is Data Mining?

In the past, mining was a dirty and dangerous job. Miners extracted coal from the earth. Now there is a new kind of mining. All you need is a computer and some special training. This new kind of mining is data mining. Instead of coal, these miners extract information. In fact, that is how the name data mining was first made.



◀ Computer data



Coal ▶



A coal miner



Discussing a project

Data mining is an area of computer science. Data miners help businesses. A data miner usually works for a data mining company. The company receives many projects. The projects come from all kinds of different companies.

But what exactly is data? Data is a set of facts. These facts can be numbers or words. An example of data is this: 10 students got 100% on a test, 8 students got 90%, and 3 students got 78%. A data miner can take data like this and tell a teacher or a school things about these students.



Analyzing a problem on a computer

Why do companies need to use data miners?

Companies gather data every day. For example, at the end of every day, a store knows how many sales it made. It knows how many people bought things. It also knows what people bought that day. All of this information is data. Sometimes stores ask their customers questions to get their opinions. These opinions are another kind of data.

Customers' opinions ►

Check List	
<input checked="" type="checkbox"/>	Excellent
<input type="checkbox"/>	Good
<input type="checkbox"/>	Average
<input type="checkbox"/>	Poor
<input type="checkbox"/>	Very Poor

A data miner has to please the client, and each client has different needs. The data miner does not actually look for data. Instead, he or she takes data from the client and analyzes it to find useful information. That information is used to help solve problems the client has. Data miners even find answers to problems the clients may not know about yet.



Making a sale at a store



What to do?



A lot of information

A company can quickly build up a lot of data. But companies do not know how to use their data. That is why they need the help of a data miner.

A Day in the Life of a Data Miner

How do data miners analyze data? They use computer programs. The computer programs find patterns in large sets of data. Then the data miner explains the patterns and makes a report for the client.



Analyzing data to make a report

Comprehension Questions

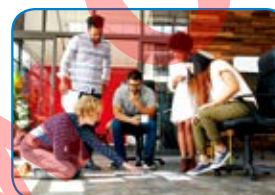
- What does a data miner do?
 - Create machines
 - Mine coal
 - Work underground
 - Analyze information
- Which of the following does a data miner probably NOT do at work?
 - Learn about computer programs
 - Use numbers
 - Write stories
 - Talk to clients
- Which is true about data miners?
 - Their work is dangerous.
 - They have to be good at math.
 - They get a lot of time off.
 - None of the above.
- Which of the following might use a data miner?
 - A school
 - A store
 - The police
 - All of the above
- Why is data mining useful?
 - It helps us understand information.
 - It helps us find better jobs.
 - It keeps computers running well.
 - It is a good way to make errors.

Key 1. (d) 2. (c) 3. (b) 4. (d) 5. (a)

Glossary



■ **analyze** (v.) to study or examine something in detail in order to understand or explain it



■ **brainstorm** (v.) to discuss ideas with a group of people



■ **client** (n.) a person who uses the services or advice of a professional person or organization



■ **coal** (n.) a hard black substance that is dug from the ground and burned as fuel to provide heat



■ **conference** (n.) a large meeting, often lasting a few days, where many people make presentations