BSV ACADEMY

WHAT IS BLOCKCHAIN?

Founded by

BSV BITCOIN ASSOCIATION

Chapter 1: The evolution of data software and systems

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To understand the type of data system the blockchain is, let's take a look at the kinds of data software and systems we deal with in everyday scenarios.

A spreadsheet on your computer

When you create a new spreadsheet, you're essentially constructing an electronic version of information so you can store it on your computer's internal hard drive as data. The spreadsheet software, as well as your internal hard drive (the hardware), are designed for a single person to use at a time.

Pros:

- As long as your computer remains secure, you'll be the only one who has access to your data.
- The spreadsheet software allows you to use formulas to automatically calculate values based on data in another data cell or spreadsheet stored on your hard drive. If your spreadsheet software is compatible with your database tool, you'll be able to automate data interactions between the two.

Cons:

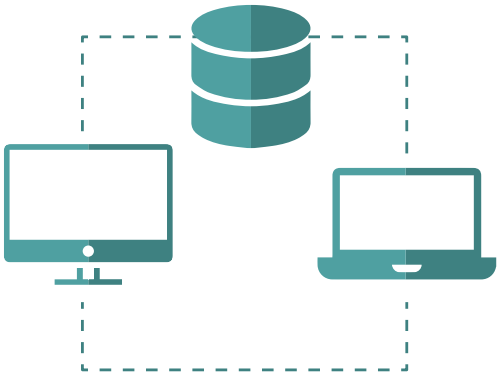
- If your computer is stolen or your hard drive is corrupted, all of your data will be gone.
- Your computer could get hacked, giving unauthorised parties access to your data.
- If you wanted someone else to work collaboratively on the same spreadsheet, you'd

have to send them the file. They would then have to return the latest version of the file. The file will pass to and fro, resulting in many different versions of the same spreadsheet.

A spreadsheet in your company's data management system

When you create a spreadsheet on the computer system at work, the electronic data will be stored on powerful computers (the server) located downstairs in the IT department. Most likely, your company will have backup servers keeping a duplicate of the entire database - either on or off-premise.

Since the company's servers store all the data generated by each person and department, the entire database will be accessible to people with the correct permissions - if they know where to look.



Pros:

- Anyone who has access to the server can be granted permission to read and/or write the same spreadsheet to improve collaboration.
- Depending on the sophistication of your company's software (ERP system), you'll be able to automate data interactions between a number of your software tools. E.g. Should the projected profit margins calculated by one of your programmes fall below a certain level, your email software would automatically send a notification to a relevant individual.

Cons:

- Everyone with access to the data can write, rewrite or erase data, with no record kept of the changes. Should an error slip in or a wilful manipulation of data occurs, it will be very difficult to detect and trace it back to its source to correct and hold accountable the person at fault.
- When audit time comes, you'll need a team of auditors to sift through data stored in various locations on your server to combine it into a single, coherent report. Because they have to rely on the latest version of the file with no record of the changes (legitimate or illegitimate) that have occurred along the way, it will be impossible to guarantee the accuracy of the data they report on. Failing an audit could result in fines and/or other penalties for the company.