

Exercise: Discussion

Consider the following situation:

You are hired by a 10 year old company with 5 employees. The company develops software for customers.

Information about customers, offers, contracts, project planning and controlling, bills, support contracts, purchases of hardware and software, employee salaries and contracts are partly stored on paper only, partly in Excel or Word files.

All employees have read and write access to this data, with the exception of the employee contracts and salaries which are stored in a binder at the secretary's office and locked away in a filing cabinet.

The company has and uses no DBMS (not even Access).

You start a discussion about whether a DBMS should be acquired and the data migrated into a database.

Your task:

Split up in two large groups.

Choose a moderator for each group.

One group will collect and discuss reasons in favour of the database solution.

The other group will collect and discuss reasons against the database solution.

After some time, we will have a discussion in the plenum where the two groups explain their reasons to each other.

Exercise: Discussion

Here are some reasons that can be found:

Reasons for DBMS	Reasons against DBMS
More security because of easier backup functionality, and easier restoration of old data	
Better functionality for data analysis, preparation of reports => faster	
higher data consistency because of integrated data model and central storage, DBMS provides more functionality to ensure consistency	
central management of user privileges, role-based security	
better access from remote locations	
consistent management of parallel data access	
better support of collaborative work: possibility of concurrent access	
better availability of up to date information, updates are immediately visible to other users	
fewer staff needed to administrate data because the data is centralized	
	major restructuring of computer environment costs time and money
	The old system is working nicely, so it is not necessary to change anything
	Costs: training of employees, installation of the new system, system administration, license fee for the system and possibly support contract, possibly need to hire someone new to do system administration, migrating the data into the database
	If we rely on an external system, we will be less flexible to adjust data management to our own needs.

Reasons for DBMS	Reasons against DBMS
<p>Summary:</p> <p>After initial effort, things will be much more efficient and save a lot employee time. Data will be more consistent => fewer mistakes will be made</p>	<p>Summary:</p> <p>Major cost of data migration (system cost plus work time), and requires time</p>