

Questions:

4) What did Jacquard's textile weaving device have to do with the development of data?

Jacquard's device used a series of cards with holes punched in them to store patterns that allowed strands of fabric to be interwoven and reproduce certain patterns.

5) Choose what you believe to be the:

- a) One most important
- b) Two most important
- c) Three most important landmark events in the history of data. Defend your choices.

One important landmark in data was Jacquard's weaving device as it set the foundation for many future devices based on its concept. While not necessarily the best device itself, without it, the others would likely have no basis. Another important landmark in the history of data was Hollerith's tabulator as it allowed for far easier and more efficient calculations of census data. Powers's invention of a machine that could automatically print results was monumental to data history as it gave a way to input and then see a physical output of the data.

Exercises:

4) Invent a fictitious company in *one* of the following industries and list several ways in which the company can use data to gain a competitive advantage.

- a) banking
- b) insurance
- c) manufacturing
- d) airlines

An airline company that wishes to use data as a competitive advantage would need to provide the ability to compare your price up-to-the-minute with other airline prices so that you could get the best possible deal. Another data driven function that would benefit customers, especially those that are business customers, would be an up-to-the-minute flight time feature that would allow customers to switch to earlier or later flights as long as a plane was available at that time.

5) Invent a fictitious company in *one* of the following industries and describe the relationship between data as a corporate resource and the company's other corporate resources.

- a) banking
- b) insurance
- c) manufacturing
- d) airline

In banking, data is king and as such data as a corporate resource must take a good level of precedence over some other corporate resources. With the management of accounts, client names, addresses, phone numbers, levels of client statuses (i.e. clients who invest but do not bank, clients that invest and bank, VIP clients who invest a certain amount, etc), and the amounts in each account, data is the driving factor of banking and as such it should be elevated as a higher focused on corporate resource. It could be said that data would be the base line resource that all other corporate resources would be built on top of. Not much else could be done in a bank unless the data part were well taken care of to begin with.