

a) * Parity Correction

• After agreeing on a odd or even parity the computer analysis the data being transmitted. If a byte of data contains an even number of 1's and the parity is set to even then a '0' is added to keep the byte even. If however the byte contains an odd amount of 1's then an extra '1' is added to ensure that the byte transmitted contains an even number. The receiving computer realises that all bytes received should be even with error detection picking up those that are odd for retransmission

* Cyclic Redundancy Check

A packet of data is sent to the receiving computer. ~~with~~
Before transmission the number of bits is calculated and then put through a formula to extract a 16 bit remainder that is also sent with the packet.

The receiving computer receives the packet and calculates the number of bits. This number is then put through the same formula ~~to ensure~~. If the remainder calculated matches the remainder sent then the

transmission was successful!

b) Data Warehouse

Madison could organise its data into a Datawarehouse

Data can then be used to gather reports about the database for analysis. Comparing ~~future~~ data to historical data within the Warehouse may help Madison to gauge the success of its initiatives

E.g. After implementing a new marketing campaign aimed at Young women Madison wish to evaluate the success of the new campaign.

By comparing data gathered since the release of the campaign regarding sales to young women to previous sales in the same periods Madison can gauge the success of the campaign.

Data Mining

Searches of the data warehouse for patterns and trends to uncover links in the data.

Eg. After using Data Mining for in their

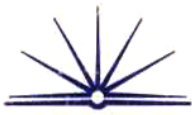
Data Warehouse Madison ~~realised~~ found out that most people bought a scarf when they bought a hat. Using this data Madison could exploit the relationship by offering such things as 50% of a scarf with the purchase of a hat.

c) Access to the email system is disadvantaging John because he ~~is not~~ does not have an account. The abuse of messaging systems can be seen here as damaging notes and personal slurs are being sent rather than business notes. ~~It~~

The fact that the message wasn't spoken means that it may be taken out of context. Pat and John could be great mates and the notion of John being retrenched could be a joke.

Messaging systems may receive a lot of junk mail. Sam in this case may be sick of receiving stupid messages from Pat as it is distracting him from his work.

The lack of social interaction security of



The messaging system is also highlighted here as
Pats message if read by other people could get him
into trouble.