

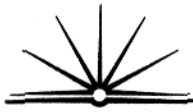
a) Segment 1; Radiowaves. Radiowaves are used because it is only a short distance to the telephone exchange.

Segment 2; Microwaves, Microwaves are used as they are fast and reliable. The only down side is microwave transmitters and receivers have to be placed ~~so~~ every 50 kms and in a straight line.

Segment 3; Fibre optic land line, by far the best medium for transmitting data over a long distance. Extremely quick as it uses light but digital convertors have to be placed at each end.

Segment 4; ~~telephone lines~~ ^{Coxial cable}, not a very large distance ~~get~~ good for transmitting data.

(b) Jill's job involves her travelling to see customers, so Jill gains one advantage by using mobile technology as all the data she collects that day are sent ~~to~~ ~~that~~ straight to the office not transported with Jill until she gets back.



(c) The data dictionary has all the fields of a database. It also has what kind of data each field has, ^{a description of} ~~what~~ ~~of~~ each field, ~~and~~ how many characters each field is allowed to have.