

**“How Silicon Chip Design is enabling consumers to use the latest Technology – Touch is the New Click”**  
**Dr D Wollen - Innovision**

The last Cirencester Science & Technology Society lecture of the season was given by Dr D Wollen. Dr Wollen is CEO of Innovision, a Cirencester based company at the forefront of silicon chip design, gave the audience a fascinating glimpse of what is to come in the field of communication in its widest sense.

Innovision is a leading player in the development of devices that will enable the new generation of mobile telephones to communicate with a range of devices by touch or very close proximity scanning - in other words “Touch is the new Click”.

Such devices are active and transmit instructions/data by radio waves. The simplest examples of such devices that are already in use are the tags used on CD's or items in shops. However the size of the tags has now been reduced and their capabilities increased to the point where almost anything can be tagged and the information used for almost any purpose. An example given was a red shirt that would be able to tell a washing machine that it was being put in a white wash! Some tags need no power where as others will need batteries.

Devices that use magnetic induction rather than radio waves operate over much shorter distances or by direct contact (**Near Field Communication**). These NFC devices are very small and may occupy only a very small proportion of the silicon chip in equipment such as mobile telephones, digital cameras etc. or even credit cards. The development of this type of device means that Innovision have to design components that will work with chips designed by the major manufacturers such as Sony, Vodafone etc. Banks are backing this type of development because of the added security that can be built into such devices. New generation mobile telephones will become an electronic wallet capable of transactions such as purchases and cash withdrawals and the ability to transfer images to electronic photoframes or information to printers. In combination with tagging of such items as posters, tube maps, rail timetables etc. it will be possible to access a vast range of information by just touching the object with your telephone or credit card. This leads to the concept of “physical browsing”.

One of the keys to the success of such developments will be their ability to operate anywhere in the world. Dr Wollen explained that Innovision is one of only thirteen companies that make up the forum that ensure common standards are applied to enable this to become a reality.,

*Given on Wednesday 13 February at the Royal Agricultural College*