

## ***Information “On Tap” in the High Street***

**W**e are in the Information Revolution, but only just starting what could be the biggest and most exciting area of human advancement. The advantage of the Information Revolution is instant access to any information in quantities that you have never dreamt of before. In fact, in quantities that might even be the stuff of your worst nightmares!

The “hot topic” today is Broadband. The liberating fact about these connections is that you are connected to the service all the time and only use it when necessary. We are entering the AORTA (Always On Real Time Access) world. Gone are the old days when the human needed to be involved – dialling those phone numbers, in order to enable the machines to talk down the telephone line. Now the machines will just get on and talk amongst themselves without us being involved....

After ADSL there will be VDSL (Very Fast Digital Subscribers Link) and probably many more, each increasing the connectivity in our lives. Suddenly the thing that has been holding us back for so long – that tiny little information tube – has grown to the point where it is not only so big we can not fill it – but it is also so big we can not see both sides at the same time... Now we are motoring along the international Digital Super-highway!

Just imagine how this new technology will change the way in which you interact with your customers. It is only a few years ago that the BT television advert had Beatie being told that there were “all the colours in all the sizes...” The aim of the advert was to engender the idea that you could access information without having to physically visit the shop. With Broadband your customers will be able to visit you without even leaving their sofa in virtual worlds. In the future there will be complete virtual reality High Streets. Now your customers will not have to drive to town, park the car, walk along the high street (in the rain), and stand in a queue in your shop, they will simply visit the shop in virtual reality – and there are no queues in virtual reality! Without Broadband connections such models would have to be distributed on CDs and the changes to the model sent down a phone line connection. With Broadband both the model and its instructions can be delivered in real time.

The customer experience will totally change – as will their expectations. They will demand instant access to all the information all the time, and be more than disgruntled if they get a poor, or slow service. Believe me, if I am dissatisfied with your service I will go somewhere else for that service, and all the effort that I will have to expend is a single click of the mouse! The new information age means that distance is not a problem, I can take service from absolutely anywhere.

## *Looking at the Future Slightly Differently*

This, of course, also means that using the new always on Broadband connections you can supply service to anywhere. You will be in the heart of Europe without having to move premises!

The aim of business over this new Broadband connection is to make every single customer think that they are the only person in the whole world that you care about – and not only that but they must see themselves as the most important person in a group of one! Reach out through the connection and stroke your customer.....

Can you remember in the old days and those annoying “cold calls” on the telephone? In the new Broadband era you can get more connection with your customers without the annoyance. As their and your connections are “always on” there can be communication between machines not people. You will have the opportunity to push information towards your customers in which they might be interested and the machine will advise them of the information when it is convenient for the human. A current example is Amazon Books. They send me e-mails suggesting items that I might want to send as Christmas presents, or that I have bought all the novels written by this particular author and would I like to purchase the new one at a discount? My reaction to these pieces of information is one of delight – not annoyance. When I think “books” I think “Amazon” – that is the linkage that you need with your customers and it will become a transparent connection with Broadband services.

Once everyone is connected in the AORTA world, trading becomes faster and almost instant. The ability to connect to customers is only one side of the business arena. You can as easily connect to your suppliers. The concept of EDI (Electronic Data Interface) has been suggested for many years, but the great difficulty was that whilst your system wanted to send information the other end was unaware that it should have been in a receive mode. Large companies with their permanent LANs could overcome the problem but not the smaller enterprise. Now with the always on networks almost instant data transfer can be easily achieved. Stock holdings can be minimised, commercial settlements could be done in three days rather than 30! The speed of business is going to get much faster.

As an example look at how the technology is also going into the supermarkets. Just imagine an electronic identifier being printed inside the paper label on a tin of baked beans – the technology exists and with IPv6 we could attach a unique address to a tin of baked beans. As the shelf stacker loads the shelf, the shelf counts the tins. As you remove a tin, the shelf is aware that one has been taken and starts the restocking schedule. With an intelligent shelf and a little low powered wireless networking, we could have dynamic shelf edge pricing. The rates of vending (and stock loadings) would be monitored and (especially in the case of perishable goods) we could have prices determined by stocking parameters. Happy Hour on baked beans!

And the possibilities do not stop there. A small interrogator in the trolley, or a network connection from the shelf to the trolley would mean that the loading of the trolley could be

## *Looking at the Future Slightly Differently*

dynamically tracked – displaying its current contents and the total cost as you move around the store. Once at the checkout – there would be no need to lift everything from the trolley, the till would have a simple interrogation of the trolley or its load (with maybe a secondary check on total weight) and the purchase would be a simple transaction.

Once home, as you place the tin of baked beans into the store-cupboard or refrigerator, a simple sensor would be able to interrogate the identifier and know its current stock loading. As the number of items reduced a shopping list would be automatically generated for your next visit and fed to your mobile phone for convenience. On arriving back at the store, the phone interrogates the store for the current stock positions and plans your routing through the store with a coloured map on your 3G appliance which will also be an AORTA device.

In the future, using Broadband connections, we will be always connected to all the information, at all times and in all places. We will be immersed in a virtual information world, sending, receiving and sharing information with others. Just imagine you might, in the very near future, attend a virtual university or even go on a virtual holiday over these new Broadband connections.