

Artificial Intelligent Agents

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

What we all need as we journey down the Information Super Highway is help and help is at hand, in the form of agents – Artificial Intelligent Agents. Just like the secretary, or personal assistant, of days gone by we will use these new agents to sort, sift and pre-digest the mountains of information that will surround us if not completely swamp us in the near future.

Referring to Artificial Intelligent Agents is really a misnomer – these agents are not intelligent, nor are they artificial. They are simply small packages of software that are there to help us. We will learn our preferences (by example – or voice command) rather than being programmed and they will ruminate in the vast expanses of the information world seeking and sorting the information that might be useful to us. This information will then be offered to us for executive decision. I do not see these agents making decisions – they are not that smart, well, not in our life-times.....

Like all new inventions, everyone is at a loss as to how, or why, they would use such agents. I see them being used in everyday situations. For example, I see you using a TV watching agent! Just imagine in 6 years time when there is over 4,000 channels of digital TV streaming into your home! Are you going to read the programme listings? Because they are going to arrive in a book nearly a metre thick – every day! No, you will use an agent. It will watch what you watch, know what you like and dislike, and will seek out programmes and offer them to you. It might even have a conversation with your diary-agent and automatically record those programmes that are transmitted when you are out.

I see you having many agents for Finance, Shopping, Music, Books etc. each one attending to its area and culling the available information to manageable quantities. But, I hear you say, “What happens when they make mistakes?” Well, did human assistants never make mistakes? I see the biggest mistake being bringing too much information back from the mountain.

And these Agents will have faces. There are simple computer programmes these days that can turn two photographs (one of your face and one of the side of your head) into a complete virtual head. After a few seconds processing you became a full motion, full colour virtual actor in an artificial reality space. As well as faces and bodies these agents will have voices

Looking at the Future Slightly Differently

and be able to listen and understand. With a little more application the lips can be synchronized to the words being spoken and the whole process becomes very conversational – and as soon as it is conversational anybody can use the system. No need to remember DOS commands in these systems.

The Agents might even have personalities.... HAL the computer from the film 2001 might not be science fiction any more.

The construction of virtual voices has progressed in leaps and bounds in recent years. Not only are there machines which speak from text, but they can now also listen to human speech, understand and take meaning from the words.

Most of us have witnessed the very stilted voices that were used a few years ago, mostly in the early days of on-line banking. But today, we have machines that can listen to natural human speech, including all the disjointed phrases, Ummms and Ahs that we humans frequently and unknowingly say, and extract meaning. As an example, one of these machines was attached to BT's fault reporting line and the "conversations" recorded. One conversation sounded like.....

"Well, like..." said the person, "I have this phone and Um.... Well I have had it for quite a while really..... but I haven't used it recently 'cos its broken. So I thought that I would give you a bell, but not on my phone 'cos it's broken like... so I have gone next door to Mrs Blossom's....." And out of all that rubbish the machine was quite able to understand that the line needed testing.

"Would you like me to test the line?" it asked.

"Urrrr..... Yeh" was the reply.

"What is the number?" enquired the machine, and the man was so involved by this time in the conversation he just spoke the number!

I see our initial access to information in the future being assisted by these agents. Call and Contact Centre will probably have automated agents in the front line fielding all the boring and mundane issues, reserving the human agents for those interactions in which the human intellect is required.