

01. Remote IT Support

‘Thanks for coming over. I’ve got my basic website in place, now. It’s been a long time, since I’ve done website design. The first product that I tried, auto generated websites, using A.I. It could produce a slick layout in less than an hour. Unfortunately, it was far too restrictive. A.I. lacks flexibility.

The support staff at my Service Provider are great. They let me swap over to their Word Press package. That has allowed me to put my specific graphics in place. I chose a simple domain name. www.yellowreindeer.com. **Yellow** and **Reindeer** are both, easy to remember. I designed my website, for viral marketing.’

‘What is viral marketing?’

‘Viral marketing, is creating interesting content, that people want to pass on. Low cost or zero cost, high impact. Here are a couple of examples. Both of these videos, promote good causes. I’m sure, that they won’t mind the extra publicity.’

https://www.youtube.com/watch?v=g_YZ_PtMkw0

<https://www.youtube.com/watch?v=qa4quLuIfI4>



**Do you see that doggie
in the shelter?
The one with, the take
me home eyes...**

‘I love the dog shelter video! So. How is your viral marketing campaign doing?’

‘It’s not ready yet. That’s why, I invited you over. I’m writing copy for each section. Starting with my IT section. IT is my main bread and butter. It’s how I’ve earned my living, for most of my working life. IT skills, also allow me to offer a whole grab bag of other services. We shall come back to those later on. I thought we could go through my IT career. We’ll make copious notes as we go. Then I can chose what I want to include on my website. You can interview me and I will answer your questions as best as I can. Are you OK with that?’

‘Absolutely. Why don’t we start at the beginning...’

'I've always had an interest in technology. I have a degree in Electrical & Electronic Engineering. After graduation, I started working for a computer manufacturer. I had no idea where my career was going.'

'What happened.'

'I ended up working in computer PCB manufacturing. The experience taught me how big companies work. It wasn't for me. Too big, I was a small cog inside a big machine. I worked for several smaller companies and ended up working at a company that manufactured magnetic recording heads. Then, I was made redundant.'

Afterwards, I worked night shifts at a bakery, while I decided what I wanted to do with the rest of my career. Working nights, allowed me to attend interviews at any time during the week. I was working on a hygiene crew, which meant cleaning down bakery machinery, between production runs. I have never been afraid of hard work. These were twelve hour shifts. It required speed, and an attention to detail. Working to tight deadlines. I learnt how to think and act really fast.

I grew up with 8-bit computers. I had a Sinclair Spectrum at one point. Personal computers became available, but they weren't cheap back then. I decided that I would teach myself about computers. My first computer, was a Pentium Duo, with a CRT monitor and an inkjet printer. That set me back, roughly £1,800. I paid for it by working overtime. Twenty two shifts, in a row. I got my computer in the end.'

'Wow. Twenty two, twelve hour shifts, in a row. You must have wanted that computer badly. Did that get you a job in the computer industry?'

'Eventually. Yes. I began working for a small computer company in Crewe. I was supporting a drag and drop database product, called Commence. The product is still available, I believe. I also picked up computer networking skills, hardware skills and basic scripting skills. In 2000, Commence released a personal version of their product. It was released free on CD, on a computer magazine cover. There was no broadband, back then. Computer support meant talking to customers blind.'

At the same time, our company secretary, was married to the owner of a vinyl record business. His records, were stored in a product called Data Ease. The person who looked after their database, was heading back to Scotland. I had the skills to help them. I exported the tables out of their database, in to Tab delimited files. Created a new database for them, inside Commence. Imported the files in to Commence and designed several forms and reports for them. They were good to go.'

'I bet they were pleased about that! They could have gone to a computer consultant.'

'Yeah. I wasn't the most technical person in my company. I was just prepared, to have a go. Take action. I felt really good, about being able to help them. What I did at the time, was a game changer, in the vinyl record industry.'

'In what way?'

'The only people, who could afford websites and run them back then, were the big blue chip companies. Commence 2000 had a new feature, where you could export the tables as HTML. Do you have ANY idea, how significant that was?'

'No. What's HTML?'

'Hyper Text Mode Language. That's not important. In layman speak, his lists of records could be exported as HTML tables. Those tables could be uploaded to the Internet. He registered a domain name and I created a website for him. This wasn't how it is now. This wasn't, put some details in to a form, press a button and A.I. does the rest. This was folders of files and graphics. We put the files in place using FTP. I showed him how to export the tables in to HTML. He used a dial up modem to upload the files. The graphics were really simple. The name of his website and an animated GIF of *The Pink Panther*, playing a saxophone. It was a naff design.'

'What's FTP?'

'File Transfer Protocol. If you ever, have a quiet moment, at one of those fancy dinner parties. Someone, is boring you to death, with details of her new kitchen. Mention File Transfer Protocol. It will stop her dead in her tracks. Trust me. On those very rare occasions, that I have ever been invited to a party.... I've stood next to some attractive woman and she asks me what I do. The very second, I mention that I work in IT. She's collapsing on the floor, with a fake heart attack or she crashes through the glass patio windows – leaping over garden fences, like a gazelle. Never to be seen again. IT, is the ultimate conversation killer. Works, every time.'

'Who is *The Pink Panther*?'

'You're yanking my chain! You don't who *The Pink Panther* is?'

'Yeah. I do. I like to wind you up sometimes. You bite, way too easy! So, you created a database for them, moved their data and put all the records up on the Internet. I bet there can't have been many small businesses with their entire inventory on line, back then. The Internet was nothing like it is today. That must have been huge.'

'Yeah. He was the first one, to have all his records listed on line. It opened his business up to the entire planet. It was all done, using a dial up modem. He had this program with a tortoise. As the file was uploading, the tortoise moved along a line. When the file had uploaded, there was a loud cheer. Those were fun times.'

'Were you well rewarded, for your efforts?'

‘No. I did it as a favour. They got me some book vouchers, to say thank you. Sometimes, it is nice to get that warm and fuzzy feeling inside. Warm and Fuzzy feels good. One of his rival businesses, offered me £700 to put their business line. I should have taken him up on it. I don’t know why I didn’t. As I said. There were others who could have done a much better job, technically, than me. I truly believe that it is better to do something, than wait for that ideal moment, that may never come...’

‘So. You learnt about this database product and eventually you were sent out on site. Why don’t you tell me about a typical site visit?’

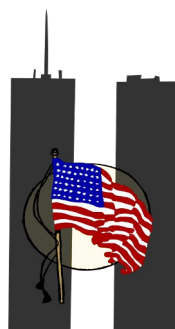
‘We were a small company, so it was unusual to get work for a big blue chip company. The tending process is very time consuming. I was sent to a large call centre. Part of a Fortune Five Hundred company. I didn’t know it at the time, but I had been sent on a trial only. As far as I knew, I was there to do create a database.

This company, supplied pet food. I spoke to the manager, a young graduate. They were after a database that they could use to track calls to pet shops. It was too expensive to send out reps – so they had sales teams, who managed the accounts. The operation had started out on Excel spreadsheets. A lot of graduates drift in to sales. They know Excel pretty well, but they have practically no database knowledge.

The project had been put out to tender. A contractor took on the work. After six months – the project had failed. They were still at square one. It all looked pretty simple to me. I created the structures in Commence, pet shops, people, contact logs, offers etc. They had three Excel spread sheets, shared between them. Excel is not suited to track customer activity. It is a temporary fix, only.

I got hold of the spreadsheets and used those to create the field names inside Commence. I chose the postcode as the unique name field. Good database design, always has a unique identifier in each table. The postcodes were 95% different. There were lots of *Pets R Us* or *Paws for Thought* etc. The database was a big success. I added a table for the end users, called Help. This was something that I did in most of my designs. The end users, needed somewhere that they could put their own notes. They could write the processes in language that they personally understood.

The pet shops project went from nothing, zero expectations; to a great success. Later, I was asked to go to Dublin to do some training and roll out the database and later, after that... I was sent to Eindhoven. That project, will be locked in my memory forever. Everyone remembers where they were. The planes, hit the twin towers...



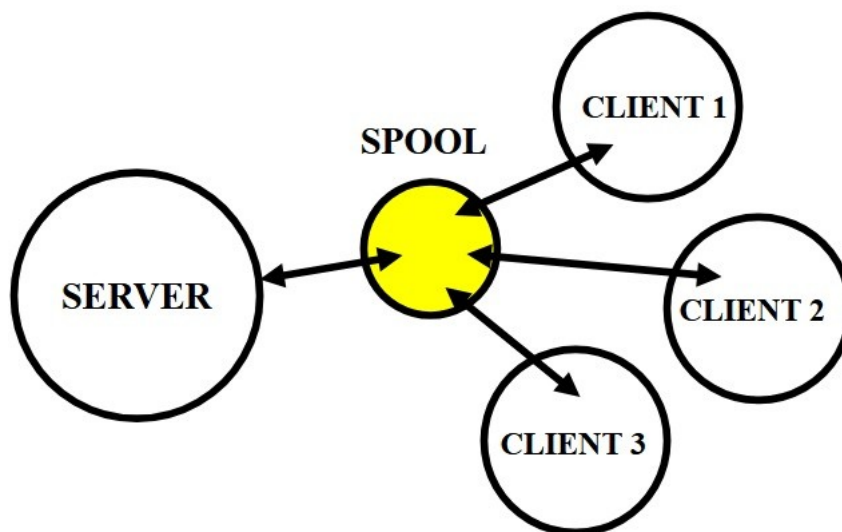
11th September, 2001

‘Technology has changed a lot over time. How has that affected things?’

‘Massively. I’ve seen it all. 8-bit machines – the ZX81, to later generation Pentiums i3, i5, i7 and more recently i9 Intel microprocessors and their cheaper counter parts, using the AMD chip set. We have gone from dial-up modems to ADSL to full fibre. Unlimited storage capacity, pretty much. Terra bytes of data. Solid state disks to increase performance. Floppy disks to CDs to USB sticks. The Commence CRM product, grew out of very slow connections to the Internet. Originally working with dial up modems. It was based on thick client technology.’

‘What is a thick client?’

‘The data is stored inside tables, inside a database. Commence is a proprietary product. The Commence product, has a server database. The Clients synchronise changes with the server, via a spool directory. A client can be a complete copy of the server database or a partial copy – depending on permissions settings.’



‘The beauty of this system, is that the client data is available offline. So, the sales rep, can pull over offline and still access all her customer data and put in logs etc. Then when her laptop is back on line, in the office or via an Internet connection, she can sync the changes up to date – update the server and the other clients. Also, if the clients have full data – then if the server is compromised, maybe a Ransomware attack, it is possible to build a new network from one of the clients.’

‘What’s a Ransomware attack?’

‘A Ransomware attack, is where computer files are encoded and the criminals demand a ransom to unlock the files. Personally, I don’t believe in paying a ransom. It is better to protect yourself, through a good backup strategy.’

‘Wow. Viruses, antivirus software and backups. That’s a lot of work.’

‘Yeah. Backups are key. The customer has to take responsibility for that. When I first got in to software, it took me a little while, to get my head around how valuable the data really is. A 50 pence CD can contain a database backup file, worth tens of thousands or hundreds of thousands of pounds. It’s the man hours required to obtain the data in the first place, customer records and communications with those customers. There is always a risk reward balance. When you allow the customer to access their server remotely using RDP, that means a static IP address and opening up a port. The server, just became a little bit more vulnerable.’

‘Static IP address? Now, my head is hurting.’

‘OK. Websites have domain names. In my case www.yellowreindeer.com. Computers don’t recognise domain names, so you need something called a name server. That translates the domain name in to an IP address. IPV4 is a four digit address. IP stands for **I**nternet **P**rotocol. On the internal network side of a router, the address is typically 192.168.1.1. Every device on the Internet, has to have an IP address, to connect on the Internet. The highest number that you can go to, is 255.255.255.255. There are only a finite number of IP numbers available. The authorities, created a standard called IPV6. Which is six digits. However, that standard has still to be adopted. They haven’t run out of numbers yet. The reason for that, is something called DHCP. DHCP is the usual way that most people connect to the Internet. The service provider assigns a temporary IP address. This can change, after a few times connecting to the Internet. Are you with this, so far?’

‘Yes. I think so. Maybe.’

‘If you want someone to connect to your server. You need a consistent IP address. That is what is known as a static IP address. It is the same, every time your router connects to the Internet. In addition, if you are allowing a connection using RDP, then that means opening up a port. This is an extra four digit number, that you put on the end of the IP address. That means, setting up port forwarding. This is getting a bit technical now. Opening up a port on the router, increases vulnerability.’

‘So. If your database uses a thick client. Is there something called a thin client?’

‘Most databases, use thin clients. You have access to the data, so long as you are logged in. The moment you log out, then you lose access to that data. Think, pretty much any database, where you purchase products on the Internet. If the database is the centre of your business, then daily backups – off site, is a really good idea. I’ve worked on SQL Express based, databases. A veterinary system and a dental system. Different businesses, same structures. Both require SQL reports.’

‘What are you offering, when it comes to remote IT support?’

‘A broad base of IT skills. I can support products for small IT companies. My business will be made up from several customers, from all over the UK. Maybe, one day a week for this company. Another day, for this one. Several weeks for this company and so on. Cover at specific times of the week or year. If there is a longer term commitment, I can write myself a collection of .pdf tech notes. I’ve worked with SQL, so I can write basic SQL reports. Depending on the demand, I can spend the time to master joining tables and writing much more complex reports. Once you have one report for one customer, you can use a similar report else where.

There may be a requirement for Zoom based Workshops. Something as basic as buying PCs, or access to free Open Source software. I use LibreOffice Writer – all the time. Customers can save money, by making good buying decisions. I would always choose a laser printer over an inkjet personally, because I print infrequently. Inkjets need to be used frequently, otherwise the print heads get blocked.

Maybe, someone has a successful sales operation, running off spreadsheets and they are looking to migrate the data to a database. Spreadsheets are no good for customer management. They will need a CRM project. I could help there.

I had a member of my family, who was running a repair business. They needed a website and they had no idea about designing one. I’m not a professional web designer, but sometimes putting a workable website in place – at least that gives the customer presence on the Internet and allows them to learn what they want their website to do. It is better to do, than to wait forever, for that perfect design...’

‘What else, do you want to say.’

‘I could write a load more stuff. I’ve built miniature computers and stuck networks together and done loads of fault finding regarding the Internet. We’re writing this between us, to attract interest from potential customers. I’m at the end of a phone. The customer will browse my website. Something will trigger interest. Then I get a phone call and in a short space of time – we can decide if we can help each other or not. All relationships, start with a single phone call....’

