

February 2018



Gizmoe

This is the first edition of *Gizmoe* in 2018.

Gizmoe will also be posted on www.seniornet.co.nz from 15 February 2018.

A new year and with it comes new and exciting technology to challenge, and if we are honest at times frustrate us! It seems clear to me that the word computer is fading ever so slowly from our vocabulary. The word we use instead is device, admittedly not as concise and a device could be anything. Ask a kid what is a device? There is a good chance they will say a thing that connects to the internet and a place to store your stuff!

Thinking about devices, the annual CES (Consumer Electronics Show) held in Las Vegas each year is the place to go for the latest in tech devices. Here is a link which summarises this years event <http://www.techradar.com/news/ces-2018> . Whilst it may seem a world away from us all at SeniorNet, the fact is it isn't as we get to teach this so called emerging technology in the next few years.

Discussions continue with the Minister for Seniors office regarding funding. I have provided the Minister with additional information to be included in her budget submission. We had hoped that by now we might have heard back, but I am reliably informed "that the wheels in government turn slowly".

Gauging by the number of emails received at the Federation office from people asking to attend a SeniorNet Learning Centre it would seem a new flurry of people are wanting to learn more. Many of the enquiries relate to specific topics with a lot of people wanting help with smartphones – matching the worldwide trend of people dumping their clunky computers for portable devices (there's that word again!)

We have signed up a new partner this month, for sure its only short term. Statistics NZ, once known as the statistics department, have invited SeniorNet to help communicate Census 2018. Our role will be to encourage our members and their friends to complete the census using the on-line facility and also to provide help to those in the community unfamiliar with internet forms so they too can complete the census on-line. Its seemed perfect for what we do, helping others in our communities' grasp technology.

I hope the New Year has started well for you.

And remember..... Learn something new everyday!

Grant Sidaway Executive Officer



Upgrading to Broadband Fibre – A Personal Experience

Ray McDonald SN Eden-Roskill Technical Officer

I guess, like me, some of you will have heard stories about the experiences some people have had when upgrading to the fibre based UFB (UltraFast Broadband).

And no doubt a good percentage of these stories would have been framed as “disappointing”, “a disaster”, “wished I hadn’t made the switch” and so on.

It is not often that we hear stories that relay a positive experience, probably because satisfied people just don’t broadcast it. On the other hand, the disenchanting will usually tell others about their negative experiences.

It must be acknowledged that each upgrade installation presents its own requirements and challenges. But with a little bit of forward planning many of these can be mitigated without too much trouble.

So where does my story begin?

It probably begins when I received a flyer in the letterbox about the middle of 2017 to say that Chorus would be working in our area setting up broadband fibre.

Time went by, and technicians eventually turned up in our street and starting stringing fibre cable across the power poles. Pulleys were mounted on the poles and the fibre cable was pulled through with ease. It was quite amazing how quickly this was done.

The next lot of technicians to arrive on the scene set about mounting fibre junction boxes on the power poles into which the street fibre was connected.

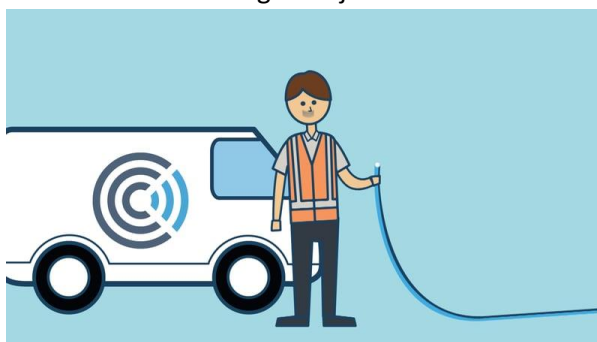
Come the latter part of December, the Chorus web site showed that Fibre was now available in our street.

With Christmas fast approaching, and mindful of the “disaster stories”, I decided

to defer doing anything about it until I returned home from holiday in mid-January. I wanted a peaceful holiday break.

This gave me a bit of time to decide how and where I wanted the fibre to be installed in the house. I knew that the fibre cable would be connected to a fibre junction box on the power pole and then come to the house via an overhead connection. This would eventually replace the existing overhead copper wire line.

My plan was to have the in-house fibre termination box mounted on the wall in our lounge behind the television. This would enable me to have the new wireless router also behind the television, and to have a direct ethernet cable connection to the MySky box. It would replace the existing SKY wireless box. It just so happen that it is the middle of the house as well.



With all this in mind I set about preparing the route the fibre cable would take once connected to the house. Essentially, this was to take the cable under the house and up into the corner of the lounge where the television is located. I also installed an ethernet cable under the floor to the back of the house where my PC is located, thus avoiding a wireless connection.

Upon my return home from holiday, I called into the Vodafone shop at St Lukes mall. The reason I did this was because this shop is a “genuine” Vodafone outlet, manned by Vodafone staff. Some of the other “Vodafone” outlets are “franchised” outlets and don’t have the same degree of autonomy and decision-making clout of a “genuine” outlet.

I’m also an existing Vodafone customer going back to the iHug days, and wanted to negotiate a Fibre/Voice plan.

This all happened on the morning of Tuesday, 16 January 2018.

I came away having signed up for an Unlimited Fibre 100 and Voice plan, including some existing extra phone services, and a continuation of my existing SKY arrangements, all of which will save me about \$14.00/month on my existing VDSL/PHONE/SKY plan.

Emails started to come in during the afternoon giving update reports on progress for the upgrade, along with a text message from NZ Post to say there was a parcel (new Fibre router) being couriered to me. Indications were that installation was to be done on 22 January 2018.

Imagine my surprise when, at 8:00am the day after ordering the upgrade, a Chorus Fibre technician phoned me to asked if he could come around and install the upgrade NOW! A half hour period of grace was negotiated to allow me to get myself organised i.e. get up!

The technician duly arrived, and we discussed the plan I was thinking of. He was happy if I was happy. This was his stated aim that he repeated through the course of the day.

My initial expectation was that this initial visit was to scope out the work and agree on a plan, and that the actual installation would be done on 22 January.

“No, no”, said the technician, “it will all be installed and up and running today”.



All I could reply was “Wow!”

So, the technician ran the fibre cable from the street pole junction box, connected it to the house, ran it through under the house and up into the corner of lounge.

Then he set about mounting the fibre termination box and the VOIP (Voice Over Internet Protocol) box that was needed to connect our telephone.

Once the fibre cable was all connected to the Fibre Termination box, the newly arrived Vodafone router was then installed and linked to the FTB.

We tested that all the wireless devices that we have were working okay. The phone connection was checked and found to be okay, but would not be usable for a couple of hours while an external connection was completed. Phones were in fact working after an hour and a half.

Once the old overhead copper wire outside was removed, the job was finished.

To say that this whole fibre upgrade experience met my expectations would be a gross understatement, it exceeded my expectations by a country mile.

Given that it only took two days from ordering to having a completed and working (trouble free) installation, is amazing. Happy customer, you bet!

Why do I think it happened like this?

1. I undertook some pre-installation planning/work;
2. I meet and talked directly with Vodafone staff who were able to make decisions in-house;
3. I was fortunate to have a Chorus Fibre technician (employee) who took pride in the quality of his work, and had a strong customer focus.

So not all fibre upgrade experiences are disaster stories, mine turned out to be very positive.

PS: Post-installation, I visited the St Lukes Vodafone shop again and spoke with the store manager to convey my appreciation for a service that exceeded my expectations.

I also gave her the name of the staff member I had been dealing with, and the name of Chorus Fibre technician. Credit where credit is due.

And so the technology pendulum swings

Perhaps the main trend, in technology terms, over the past five years has been the shift to cloud computing – the move to store and process information in centres maintained by companies including Amazon and Microsoft rather than on our own computers.

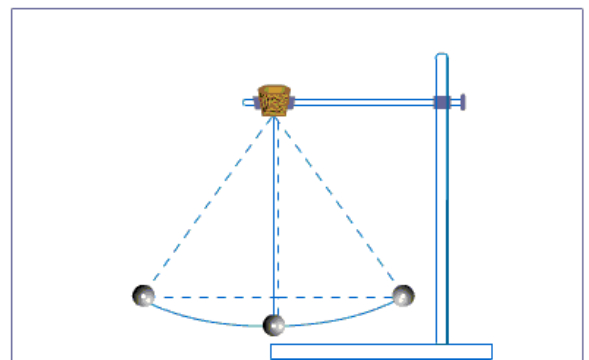
But as with everything involved with technology that too is set to change, even though cloud computing is becoming more important, we are starting to see the first signs of what might replace or improve upon it – so-called edge or fog computing.

There is still lot of work will still be done with cloud computing, however, the edge trend will shift much of the important processing and decision making to devices and gadgets that are connected to them, but at the far reaches of the network, not in one central place like the cloud.

In effect Edge computing will shift processing power out of the cloud and closer to end users

The term edge computing refers to the concept of a so-called edge device.

Okay, think of it like networks as a spoke and wheel, with servers and data centres at their centres and things

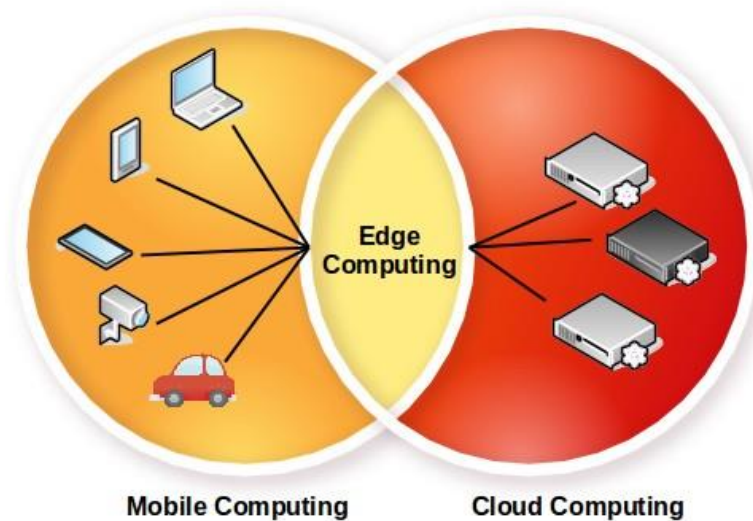


like PCs, smartphones, and tablets grouped around them in a circle, the latter group of gadgets are edge devices. They're at the network's edge.

Your smartphone is connected to the edge of your carrier's network.

In edge computing, gadgets are still connected to the internet and can still tap into cloud computing services. But they typically have more onboard computing power than in the past and can do more things on their own.

So is the pendulum is swinging back, with the technology industry going “back to the future”. Thinking back, before the 1980s, businesses depended on centralised mainframe computers, which workers interacted with using dumb terminals. Then, in stepped the Personal Computer (PC) which moved processing power out to workers' desks, out on the edge.



The cloud-computing trend centralised processing power again. With edge computing, the pendulum is starting to swing back, distributing computing power, closer to end users.

One big reason to develop edge computing is the rapid development of artificial intelligence, which typically require lots processing power to be available instantly. Some devices such as manufacturing robots, security cameras, and augmented-reality headsets already rely on artificial intelligence (AI). But item that best highlights the need for edge computing is the self-driving car.

To be safe on the road, autonomous vehicles, such as those being developed by Google, need to make sure they're keeping to their lanes, identifying and stopping at red lights and stop signs, and recognising pedestrians and cyclist to make sure the car is well clear of them. All of that requires the cars to process huge amounts of data, in real time, every second the car is mobile. According to some estimates, self-driving cars generate as much as a gigabyte of data every second.



With the need to process so much information quickly it would be impossible for such cars to rely on servers in the cloud. To handle such information, they'd have to upload their data to those cloud services, wait for it to be processed, and then wait for the results. Even though cloud computing services can be very fast, they're not fast enough (yet) to be able to respond in real-time to current

driving conditions or immediate dangers. The car would plough through the stop signs and crash into people before the information got back from the cloud.

So instead of relying on the cloud, self-driving car developers have been installing their vehicles with processors giving each car enough computing capacity on the spot.

Let's not run away with the idea that edge and cloud computing will compete; they don't have to present users with an either-or situation - the two can complement each other. The important thing is finding the right balance between how much processing can be done in the cloud and how much could be done on the edge devices.

Census 2018 – doing our bit to help in the community

The next census is just around the corner. On 6 March 2018, you'll be asked to do your part to build a snapshot of the people and places that make up New Zealand. This time around, the census is going online and SeniorNet and Stats NZ are teaming up to help. Between Wednesday 28 February and Friday 9 March, volunteers at our SeniorNet learning centres around the country will help people over 50 fill out the 2018 Census online.

When you take part in this year's census, either online, or by paper if you prefer, Stats NZ will have safeguards and procedures in place to make sure your information is secure and remains confidential. Because Stats NZ is aiming to have most people in New Zealand take part in the census online, they built robust new online systems to ensure they look after and store your information securely. Stats NZ will never share identifiable information with other government agencies without your consent and their published statistics and research do not identify individuals, households, or businesses. Everyone who works at Stats NZ or has access to their research is required to sign a statutory declaration of secrecy, which is a lifetime obligation.



Whether you choose to fill out the census online or by paper, it's important to take part. Information from the census helps determine how billions of dollars of government funding is spent across New Zealand. Because the information they collect is about everyone in New Zealand, it can be used to inform decisions and make plans about services and where they should be, such as hospitals, kōhanga reo, schools, roads, and public transport. Councils, iwi, and businesses use census information to help work out the core needs of their area or services. Community groups and organisations use the information to support funding applications and make the case for improvements within their communities.

A few years ago, when the census was only conducted by officials going from door to door this was reported by one such official.

"I was faced with a dilemma today in trying to complete their census form. They had left blank their ages. I queried this to which they said they don't tell anybody their age. I said they needed to too. In response they asked if their neighbours, Mr and Mrs Hill had given their age, I said yes, they had. Oh, they said that's easy then, just say we are as old as the Hills"

Why I Don't Use a Smartphone – a different perspective!

Neal Utting, Hamilton SeniorNet

My wife and I are at home most of the time, where we have a fibre connection, multiple landline telephone handsets for ready accessibility, and we each have a computer.

We are listed in the White Pages, so people are able to contact us easily.

We have free calling to landlines throughout New Zealand, and Caller ID.

For this we pay \$94.49 per month, plus calls to mobiles (which we avoid doing as far as possible).

We each have a mobile with \$20 Prepay (annual). I shudder to think how much more we'd be paying with two smartphones on monthly plans.

I recently bought two cheap smartphones and we put the SIM cards from our 2G mobiles into these.

The last \$20 Prepay on mine had expired (with about \$16 unused), so I added a further \$20.

The main reason for buying the smartphones was that 2degrees is closing their 2G network in 2018. But did we actually need them? Could we find how to use them?



I explored Android according to my knowledge of Windows, downloaded a few apps that I thought might be useful, and did very little else.

I found that typing in those little onscreen boxes led to many mistakes. I soon found how to use the Backspace, but switching keyboards to find some characters proved difficult.

I then found a voucher on the phone's carton for a \$19 Minutes, Text and Data plan, so I added this.

Despite this I then received a text informing me that my account was less than \$2 – so I added a further \$20 Prepaid.

I then realised that the \$19 was a monthly recurring payment, so I cancelled this according to the instructions for texting for this to be done.

But I haven't texted. I wasn't sure that what I had done had been successful, so I emailed for this to be confirmed. I received a reply that the \$19 plan was suspended.

Then came another text informing me that my account was again depleted. I went online and found that \$19 had been deducted despite the plan being suspended, so I went to a 2degrees shop to find out why.

They credited the \$19 that had been deducted, but couldn't explain their error.

They also found that my smartphone was set to Data, and that I was using this whenever I was online. They switched this off for me (I still don't know how).

I have only used the smartphone at home, where I have it connected to Wi-Fi. I'd assumed that this was how data would be used – no-one had told me that Data needs to be switched off, or else it is used.

My smartphone is in the glovebox of my car for emergencies – and I still haven't made a phone call on it in the 6 months that I've had it. I haven't given anyone my number, so it's never on in case someone calls.

I haven't investigated the possibility of emailing on my smartphone. Why should I when I have a computer for this?

My smartphone has cameras, but it's easier to carry a small digital camera.

GPS is available on my smartphone, and I think that there are apps available to track where I've been – but I have a GPS watch that can do this, and it's simpler to wear.

Thanks for your contribution Neal, the great thing with technology is we get to choose what works best for us.

A few statistics about smartphones to ponder:

- *More than half the world now uses a smartphone*
- *Almost two-thirds of the world's population now has a mobile phone*
- *More than half of the world's web traffic now comes from mobile phones*
- *More than half of all mobile connections around the world are now broadband*

Supermarkets with no Checkout Operators

It could change the way we buy groceries, Amazon, the internet and e-commerce giant, has opened a supermarket with no checkout operators or self-service kiosks. Just walk into the store pick up what you need and walk out.

Purchases are billed to customers' credit cards when they leave the store.

It uses hundreds of ceiling-mounted cameras and electronic sensors to identify each customer and track the items they select.

On entering the store, shoppers walk through gates swiping their smartphones loaded with the Amazon Go app.



Then they are free to put any the item on the shelves straight into their shopping bags.

There's no need for a trolley or basket as you won't need to unpack it at the till. In fact, unless you need to be ID-checked for an alcohol purchase, there's also no need for any human interaction at all.

With the help of sensors on the shelves, items are added to customers' Amazon Go account as they pick them up - and delete any they put back. An electronic receipt is issued as they exit.

They're calling it "Just walk out" and while they won't spill the beans on just how it works, they say it uses "computer vision, deep learning algorithms and sensor fusion, much like you'd find in a self-driving car".

You scan a QR code as you enter. After that, your phone can go back in your pocket as it won't be needed again during your shopping.



Hundreds of infra-red ceiling cameras have been installed to differentiate between customers as they move around the store. There are weight sensors on the shelves to indicate if an item has been taken or put back. Some items carry a visual code, like a bar code, to help cameras identify them.

There's no word on how accurate the system is, but several people have tried to shoplift only to find that the system spotted them and billed them for the goods!

The store is in Seattle, and whilst there were no queues at the check-out (as there weren't any) there were queues to get in!

In the USA alone, there are 38,440 supermarkets with an average of 10 check-out operators per store. The Amazon shop and go system could see over 380,000 out of a job!

Remember to support the companies that support SeniorNet

