

# If Your Internet Is Bad You Will Feel Bad

Hate slow internet? Well, you should. It could be shortening your life.

Ericsson Consumer Lab did a sure-to-be-completely-scientifically-legit study that suggests that slow internet can literally drive you crazy. Well, not crazy, but it will drive your heart rate up.

Web page loading delays led to an average of 38 percent heart rate increase. Video stream delays caused stress levels to increase by a third. It's easy to imagine that if you were really on edge, as many people are in our fast-paced modern world, this could *literally kill you*. Killed by bad internet. Damn. That's a bad look for your tombstone.



The study looked at participants' "brain activity, eye movements and pulse while completing tasks such as browsing

web pages and watching video clips.” Sadly, there was no mention of what *sort* of video clips participants were watching, because, as anyone can tell you, [some](#) online videos are [much more pulse-pounding](#) than [others](#).

“To put (the results) in context, the stress incurred is equivalent to the anxiety of taking a maths test or watching a horror film alone, and greater than the stress experienced by standing at the edge of a virtual cliff,” the report said.

Dear. *God*.

At Bigpipe, we were already doing everything we could to make everyone’s internet nice and zippy, as evidenced by our multi-award-winning ads\* but now our mission has even more importance. Say bye-bye to buffering today, which is a seriously big deal. Do you know what else is a big deal? Getting your first 3 months free, when you [sign-up](#) to any Bigpipe unlimited broadband plan on a 12-month contract term.

It might save your life.

\*At some indeterminate point in the future. Maybe.

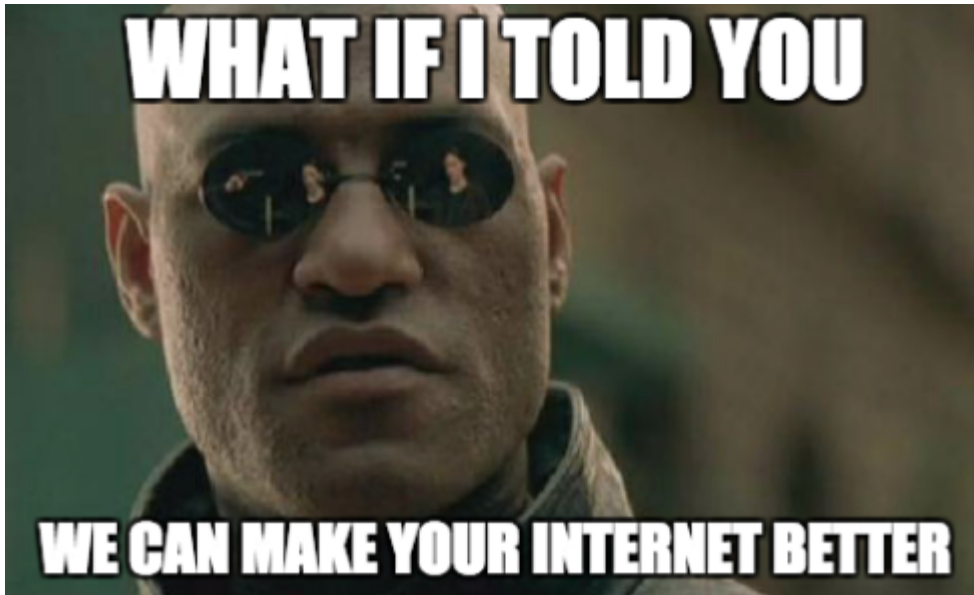
Offer is available for new customers and ends 31 Jan 18. Includes free Bigpipe modem and connection (worth \$148). Ts & Cs [apply](#).

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# Land access reform, or, how your fibre install is going to get much easier

Hi Everyone! Sorry we’ve been away for so long but we promise we have some exciting details for you we can’t wait to share.

Like all great things, we hope to bring you back here quite often as we bring some handy new updates the likes of which will help give you the information (and tools) you need to make your Internet better. (Yes, contrary to the internet there are ways you can improve it)



But first we have some super important details to fill you in on regarding Fibre, much of which will be music to the ears of those who are thinking of upgrading.

### **The Land access reform, or, how your fibre install is going to get SO much easier**

If you're trying to get fibre, and you live in a shared driveway, cross lease, or an multi-dwelling unit, you'll find one of the hardest things is getting consent. You'd need everyone who shares your land to sign a consent form before you can get fibre, and people sometimes forget, or their landlord is overseas, or your neighbours just don't like you that much (*Awkward...*), and things can get a bit messy. Or at least they *use to be...*

The good news is that the government has implemented a new scheme to make things much easier. Chorus is the first company to sign up.

This scheme will apply to fibre orders submitted on or after 2 October 2017.<sup>[\[1\]](#)</sup>

After you order fibre, the local fibre company will send out technicians to check what kind of installation is needed. Your install will then be allocated into three categories: low, medium or high depending on the impact to the land.

### **Category 1: Low impact**

If the fibre installation would only cause a low impact, you can skip the consents process entirely! Your fibre company just needs to send a letter to all affected neighbours, and they can begin work after 10 working days. It's estimated 36% of installs fall under this category.<sup>[\[2\]](#)</sup>

Low impact installation methods include:<sup>[\[3\]](#)</sup>

- Aerial installation
- Installation using existing conduit
- Digging grass/soil/sand
- Installing fibre beneath paving stones
- Attaching fibre to a fence, while not damaging the fence and minimising the visual prominence of the fibre

Note: Category 1 only applies to properties without a body corp. For properties with a body corp the install will be upgraded to category 2.

### **Category 2: Medium impact**

If the fibre installation would cause a medium impact, your fibre company will send a letter to your neighbours. If they don't say no within 20 days then your fibre company can assume they have agreed and can begin works. (This part speeds up the process) There's a narrow range of valid objections, so your neighbours can't say no just because they don't like you.<sup>[\[4\]](#)</sup> 52% of installs are in this category.<sup>[\[5\]](#)</sup>

Medium impact installation methods include:

- Fence installs that do not meet the low impact criteria
- Microtrenching less than 15mm wide
- Digging up hard surface smaller than 4m<sup>2</sup> per dwellings on the property
- Installing or attaching fibre or supporting equipment to a building

### Category 3: High impact

All installs that are not category 1 or 2 will be high impact. Standard consents process will continue to apply.

Chorus estimates that 70%<sup>[6]</sup> of previously declined consents will now be able to proceed. So if you tried to get fibre before and couldn't, or your fibre order is stuck in consents, [please get in touch with us and we'll see if this new procedure can help!](#)

More Importantly if you aren't sure if you can get Fibre, or if the modem you have can support UFB have a look over [here](#). You'll be able to find both here, just enter your address first.

**Starter**

UFB

**Plan Includes:**

- Choose Contract / Leave Anytime
- No Data Caps
- No Throttling

**Important!**

**\$49**  
Connection Fee Applies

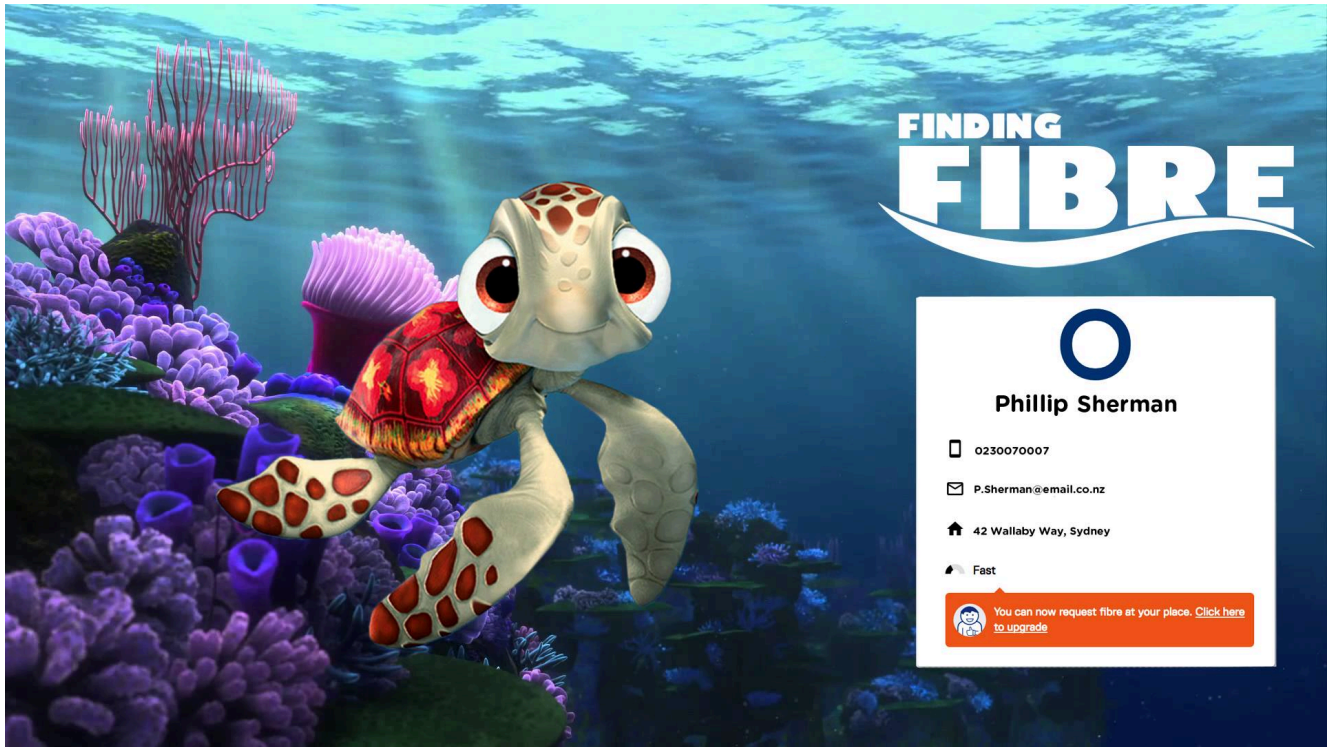
Buy Bigpipe Modem or BYO

**Sign Me Up**

- Check Availability >
- Check Your Existing Modem >
- Legal Offer Summary >

If you're already with Bigpipe and want to upgrade to one of our awesome fibre plans, just log in to our website and request a plan change [here](#).





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[1] <https://blog.chorus.co.nz/landaccess/>

[2] <http://www.mbie.govt.nz/publications-research/publications/telecommunications/ris-land-access-for-telecommunications-to-support-deployment-of-ufb.pdf> p.21

[3] <http://legislation.govt.nz/regulation/public/2017/0082/9.0/whole.html#DLM7233542>

[4] <http://legislation.govt.nz/act/public/2001/0103/latest/DLM7314737.html>

[5] MBIE, p.22

[6] <https://sp.chorus.co.nz/product-update/simplifying-consents-land-access-reforms>

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# Get more fibre in your diet with Bigpipe!

Good news everyone!

Specifically, good news everyone who lives in Rotorua, Taupo, Tauranga, Whakatane, Hamilton, Tokoroa, New Plymouth, Nelson, Blenheim, Ashburton, Christchurch, Greymouth, or Timaru.

That's right – Bigpipe has just expanded the bigness of its pipes. We can now provide fibre connections in many areas in the towns and greater urban areas listed. Over 100,000 more people can now get fibre with Bigpipe.

If you're a Bigpipe customer in one of these places and you've been hanging out for Bigpipe fibre goodness, head to [bigpipe.co.nz/login](https://bigpipe.co.nz/login), hop in to your dashboard, and use our nifty new Change Plan tool to see if you can get fibre with us. If your address doesn't look like it's listed, but you're sure fibre is available where you are, feel free to chat live with our team. Hopefully we can get some spiffy new fibre piping straight into your place.

And if you've got fibre with a different company already? We've extended our wildly popular UFBSWITCH promotion, so if you've already got fibre installed, switch to us by signing up with the promo code UFBSWITCH and you'll get 2 months of fibre on us, on any Bigpipe fibre plan!

If you're sure fibre is available but it doesn't show on our address checker, feel free to open a live chat with our care team so they can double-check for you. Also, some customers will be in areas where there's an overlap between Chorus customers and other Local Fibre Companies, like UFF or Enable.

When this is the case, we'll hook you up with whoever it's faster to get your fibre with. If you've got fibre installed with someone already, we'll use that, rather than doing a whole new fibre order.

We'd love to try to hook you up with our fast internet, so give it a go ☐

We'd love to get you all hooked up with fibre, so give it a go ☐



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## Good Elite News Everyone!

Alright, Elite customers! It's almost time to upgrade you from your already-fast 200/200 megabit experience to a blazing-fast next-gen world. (And if you're not an Elite customer yet, there's no time like the present!)

Naturally, you've got questions about this process. We're pleased to report that it should be nice and painless for you. Here are the details, in a convenient bulleted list:

- **Dates:** We're upgrading Elite customers between 1 and 8 October. When your upgrade goes through will depend on where you're located – we expect Christchurch and Hamilton upgrades to be done a bit earlier, and other regions to take a bit longer. Regardless of your location, we currently expect the upgrade should be complete by 12 October. If yours is not done by then, please get in touch.
- **We don't expect any downtime:** There should be no need to reconfigure or restart anything. However, if you're on



Elite and you're not getting higher than 200/200 speeds by October 12, try the ol' on-and-off-again. If it still doesn't work, drop us a line.

- **Max speed:** We want to be very up-front about this. Due to technical limitations, the *absolute maximum speed* you can expect to get under *perfect* conditions is around 930Mbps down/480Mbps up. It *may* be possible to get faster than this. However, it is *very* likely that your speeds will be considerably slower. it depends on a lot of factors. Our network engineers have suggested that **the fastest a customer with good equipment on a wired connection should expect from Elite is around 600 – 900 Mbps download / 300 – 500 Mbps upload** (although it's certainly possible that some connections will be faster.) This is likely the case for other ISPs, not just Bigpipe. Don't worry – this is still insanely fast!
- **Your router:** Check that your router can actually manage Elite speeds. It may be fine with 200/200 and baulk at anything higher, so it pays to have a look. Googling it is the best option.
- **The Bigpipe Modem:** While Bigpipe modem (the Huawei HG659 modem/router) is technically capable of gigabit switching, our internal tests show it can achieve maximum speeds of around 500 Mbps upload/download when routing actual internet traffic in a real-world environment. Your results may vary. We have had customers achieve speeds in excess of 800 Mbps on speedtests when using this modem.
- **Your computer / device:** We've now reached a magical new era when the internet connection is actually faster than many people's home computer can handle. If you want to get the most from Elite, your computer must be fast as well. *If your device is not up to it, you will not be able to get high speeds.* The recommended spec for the computer is an Intel i5 CPU or above, and you will absolutely need a gigabit ethernet adaptor.
- **WiFi:** There is a very good chance that your speed on

devices connected using WiFi will not hit anywhere near max speeds ([see here for Reasons.](#)) Our advice is to always measure speeds using a wired/Ethernet connection to an actual computer, as a mobile device (iPad, smartphones, etc) relies on WiFi and simply won't be up to it.

- **It might take a while to get up to speed:** Allow at least 24 hours of consistent connection to let the hyperdrive spin up properly.
- **Speedtests:** Speedtests often don't reflect real-world performance. They're like taking a car out on a racetrack and driving it at full speed – it's very different to everyday driving on the road! Your speedtest results will vary – often massively – depending on where you are sending traffic to and from. If you're looking to take your line for a speedy spin, the server you use must also be fast enough to serve you at max speeds. If you're running speedtests, we recommend you use speedtest.net's Auckland Spark server. Here's a video on how to switch to the correct server: <https://www.youtube.com/watch?v=toI84pQnvPo>

And that's it for now! Enjoy the new Elite goodness, and as always, if there's something we haven't covered above, feel free to leave a comment. If you're having trouble and you've run through the above checklist, drop us a line and we'll suss it as soon as we can.

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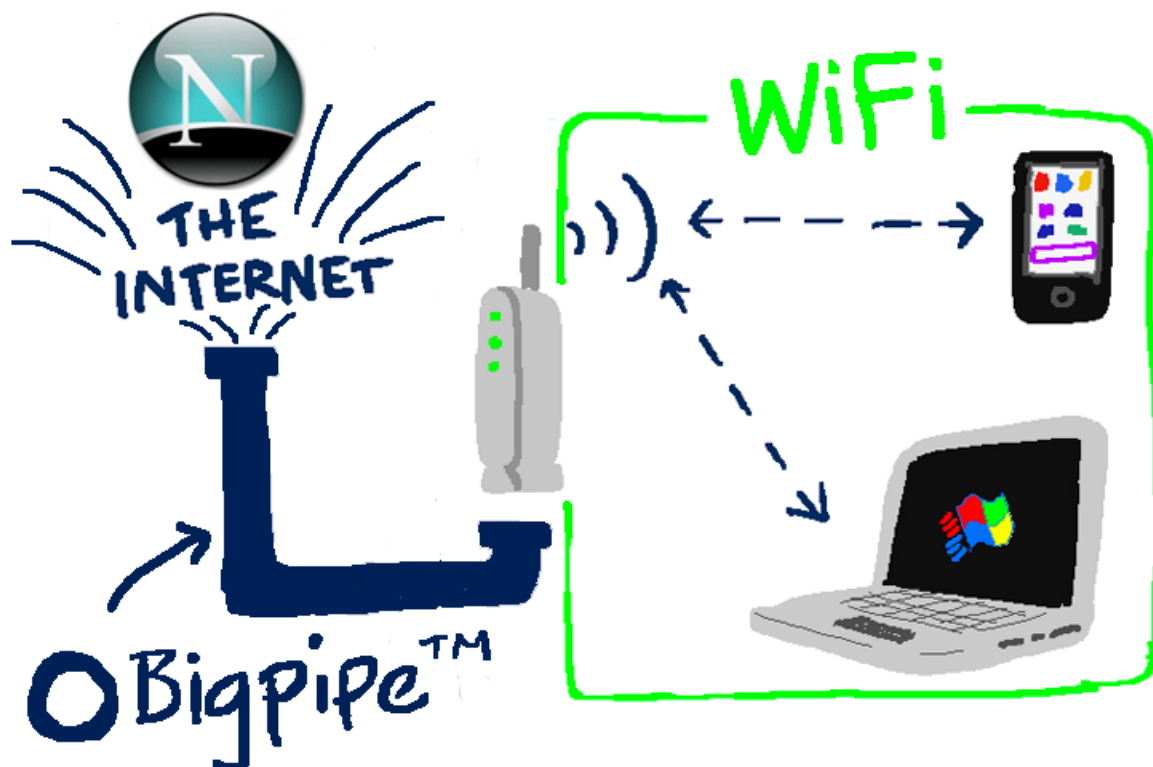
## The Bigpipe Big Guide to WiFi

One of the things we hear often from our customers is that their WiFi is not working. We get a lot of messages like this:

Palmerston North here, my hard wired stuff like PlayStation work but lap tops and Mobiles don't even pick up our router anymore.

It's understandable why people get confused. To many, WiFi *is* the internet. It's the technology that your phone, iPad, and lots of other devices use to get online. But, often, "WiFi" isn't the same as "My internet connection." In the example above, the problem almost certainly has to do with the WiFi, and the Bigpipe connection is fine. It's always tough when we get one of these messages because it's difficult to explain that we can't usually affect how well your WiFi works. We just supply the connection. Put more simply:

**WiFi is not the internet.**



Think of Bigpipe as a water company – one with really big pipes, naturally. We deliver the water to your property and take care of the water meter. Nice and easy. WiFi is like your internal plumbing and other things that allow you to get at the water – taps, faucets, showers, and so on. And laptops and iPads and smartphones are like cups and kettles – things that

allow you to get at the water and use it.

The main difference between us and the water company is that if there's something wrong with your WiFi, we'll do what we can to help you fix it – but we can only do so much. Fortunately, we know a bunch of tips and tricks that you can use to get your WiFi as good as it can be.

## **What if I've got a Bigpipe modem?**

If you've got a Bigpipe modem, it's a bit different to bringing your own modem to our service. As you've purchased it from us, you're entitled to a refund or exchange if it turns out to be faulty because of a manufacturing defect, and this includes faulty WiFi. We're also able to get a bit more in-depth with troubleshooting. Not to mention that it should "just work" right out of the box – the Bigpipe modem comes pre-configured for our service, no matter what sort of connection you have. However, we almost always find that, no matter what sort of modem you've got, a problem with the WiFi comes from one of the causes outlined below – and the fix should work too ☐

### **How do I know if the problem is with Bigpipe or my WiFi?**

The easiest way for you – and us – to tell whether a problem is related to your WiFi or to your Bigpipe connection is to test using a wired connection. If the WiFi doesn't work, it could be any number of problems. If a wired connection doesn't work, chances are the problem is on Bigpipe's end – and it's much easier for us to diagnose and fix it.

## **How to get your WiFi working well**

## Everything in its right place.



This is what WiFi looks like to Superman.  
Poor Superman.

WiFi works using radio waves. Anything that emits or gets in the way of radio waves – for example, TVs, microwaves, other routers, cordless phones, walls – can interfere with your WiFi connection. For best results, place your router carefully. Make sure there are as few walls as possible between your devices and your router. Don't put your router with other electronics like your TV. Give it its own special, privileged spot high on a shelf, like you would a valuable painting, or a cat.

And, if you can, try and place it somewhere in your house that is closer to where you like to use the internet. Either in the middle of your house, or, if you like doing a lot of streaming to a big screen (and let's face it, who doesn't?) then place it in a good spot with line of sight to your streaming device.

## Change the frequency

# FREQUENCY ASKED QUESTIONS



5  
GHz



Back in ye olden days, about five years ago, every WiFi enabled device used the 2.4 gigahertz frequency. Now, in our shiny new modern era, most WiFi devices can make use of 5 gigahertz frequencies – and so they should. 5 GHz is *almost* always better.

## Giga-what?

When it comes to modem frequencies, you'll see the term "gigahertz", or GHz, a lot. Don't let the jargon hertz your brain – all this means in practical terms is that 5 gigahertz tends to be better with modern devices.

If your modem or devices support 5 GHz, use it whenever possible. While 5 GHz comes with a few caveats – some older devices don't do as well on 5 GHz WiFi – it tends to be faster, and having more bandwidth means there's more room for more devices to connect at once.



Most modern modem/routers output 2.4 and 5 GHz frequencies simultaneously, by default. You can set the different frequencies to have the same login details, and then all you need to do is make sure to connect your iPad, laptop or phone to the 5 GHz network instead of the 2.4. Easy!

## Make sure your network is secure

If you haven't set up a wireless password for your WiFi network, do it. DO IT NOW.



If you don't have one,  
get a WiFi password  
now! Make your dreams  
come true!

Why? Because if you have an open wireless network, everyone can use it. And if you have an open network, we can guarantee that everyone *is* using it, right now. Your weird neighbours are using it to access websites with names that rhyme with "Horn Pub". German tourists in the van down across the road are using it to have long Skype conversations in German with their German friends and German family and German Shepherds. Hackers are using it to hack into the mainframes and turn your computer into a mindless zombie slave. Of course, if you've got Bigpipe, you don't have to worry about data caps, (and if you don't have Bigpipe, you should [get it here!](#)) but if there are a bunch of strangers using your WiFi, it can make still your connection really slow. Set up a username and password for your WiFi network. Make it a good one. Or your connection will be terrible.

## Change the channel (advanced)



If you've been having WiFi trouble and you're a bit more tech-comfortable than the average bear, it's a really good idea to look at changing the channel on the router. Within each frequency band (2.4 and 5 GHz) there are a number of channels that the router uses to communicate with different devices on the network. If too many devices are using the same channel, you'll get interference. How to fix it? Simply log in to your router and change the channel.

Of course, this isn't necessarily simple, but it can definitely be worth having a go at figuring it out. The best way is probably to Google "change router channel [+ your router model name / number]". [There's a good how-to guide here.](#)

## Get a better modem/router



Bigpipe is a BYO modem service, and most modems will work fine – but let's face it, if your modem is more than 3 years old, it's probably getting a bit crusty. So why not get a new one? [You can get some great modems here.](#) We've also started offering the Bigpipe Modem, which you can buy from us for \$199 – or get it half-price at \$99 if you're a new customer, or you're changing Bigpipe plans. To extend our analogy from

before, it's like if your water company threw in a kick-ass kettle that made 500 cups of tea a minute. And if something ever does go wrong with your WiFi, it's a lot easier for us to help you fix it.

**Whenever possible, don't use WiFi**



We get it – WiFi is convenient. But it's also a huge pain. Because it's just radio waves, it's vulnerable to interference from everything from other WiFi users to solar flares. Whenever you have a device that can accept a wired (Ethernet) connection from your route – PCs, game consoles, many laptops – use it. It's nearly always faster and more reliable than WiFi.

## **The End...?**

If you're having trouble with your WiFi in the future, try

these tips first. We've also got a bunch of other ways to optimise your connection at our [Bigpipe Big Guide to Improving Your Broadband](#) If you've got any tried and true tips and tricks for getting WiFi working (microwaving your router or deleting System 32 don't count) feel free to leave them in the comments!

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## Our Marketing Guy Gets Roasted At Startup Weekend

*Bigpipe Marketing Wizzard Joshua Drummond got roasted at Auckland Startup Weekend. Observe, humans, as he embloggens his experiences.*

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Man, I'm tired today. "Shattered" feels like a good word. My head feels like a large, enthusiastic man in very heavy boots has been jumping on it for the last few days and I keep hittgn all the worng keys whne I tpye. It feels exactly like a hangover, actually, except I haven't been near a drink for the last three days. I've been at Startup Weekend.

Startup Weekend is a twice-annual shindig that takes place in a bunch of New Zealand cities and around the world. It's a pretty simple concept: you try, and mostly fail, to start up a viable business idea over the course of 54 hours. It's a few years worth of learning compressed into a weekend.

As you might imagine, this is pretty full-on, and going in I was apprehensive. I'd seen the end result of a Startup Weekend last year, where the teams line up to pitch/present their idea. Some were intimidatingly excellent, others

intimidatingly bad. Then there was the fact that teams from Startup Weekend sponsor Spark Ventures (which Bigpipe is part of) have set a high bar to follow at Startup Weekends; a team led by [my boss Ollie](#) won one year, and in 2015 a [team led by Spark Ventures design champ Mike Blythe won](#). Argh.

I decided to have a go anyway.

The weekend began on Friday night with a warm-up exercise. We were split into teams and given two post-its with random words chosen by other teams. I was in Team Four and we were given the words “Ketamine Sausage.” This meant that we had to pitch a start-up company that revolved around drug-laced meat smallgoods. It went exactly as well as you would expect, and many lols were had.

Not long later we were given the opportunity to pitch actual ideas to the entire startup weekend crowd of 77 or so people. I’d had an idea for a service that allowed people to easily make group purchases of single items – in the “X, but for X,” startup parlance that pervaded the whole weekend, it was “Kickstarter, but for things that already exist.” I made my pitch alongside 35 others, which ranged wildly in quality and ambition. Some ideas had clearly been incubating in people’s heads for some time, and others... had not. One guy seriously wanted to make “Uber, but for Uber.” I am not making this up.

After the pitches, we had to write up our ideas on a single sheet of paper and people would come round and vote for them by means of sticky dots. Meanwhile, the pitchers (me, and 35 others) had to try and shanghai people of various skills and backgrounds into teams. I had a fair few votes and quite a lot of interest in my idea, which was the first happy surprise of the weekend. Of the 35 ideas pitched, 13 teams were formed, and one of them was mine.

Me and my team – Lisa, Tina, Will and Rob, a brilliant, friendly, skilled bunch with several start-up companies of

their own between them already and an average age of around 18 – called ourselves Team PitchIn and got to work on our idea, using the suggested [Lean Canvas method](#). Several hours of savagely hard work later, we discovered it to be utterly unworkable. It wasn't so much that it was a bad idea; more that it was a decent if obvious one and so about a thousand iterations of it already existed, including one in New Zealand. There was no market niche for a brand-new startup. It was time to pivot.

If you hang around start-up types, or do an event like Startup Weekend, prepare yourself to get utterly sick of this word. Pivot is a term that means, roughly, to change the course of your idea while retaining the learnings from whatever you were working on before. We'd done a lot of research – “market validation” – for our PitchIn idea, and a recurring theme was that when people chipped in to buy something for a mate it was a right awkward pain in the arse following up with friends for the money owed. It was the same case when friends lent money to friends and the debt went unpaid. The Startup Weekend mentors noticed us puzzling over this trend and encouraged us to follow it to see where it went. We did.

The result, as of mid-Saturday morning, was [PaperKat](#), an app for making agreements among friends – and automating (and hopefully) removing the pain of following up on them. We got the name from the same highly scientific “put a bunch of random words in a hat and see what happens” process that gifted the world Ketamine Sausage, but we quickly started rationalising it to the point where we quite liked it. “Kat” reminded us of Maneki-neko, the “Lucky Cats” that are associated with good finances and luck, and “Paper” could mean both money *and* contracts! If you were sleep deprived and desperate to come up with a name, I suppose.





the paperkat logo. so cute!

Over the course of the weekend, we did a bunch of one-minute updates, where each team would have someone come and update everyone on how they were progressing, or not. Will from my team did one of these, and came up with an excellent description of the nerves and excitement that Startup Weekend can summon. “I can feel my heart beating in my face,” he said.

“See a doctor,” someone yelled. (It was me.)

On Saturday night, team PaperKat had our first pitch practice. The mentors, who were standing in for the actual judges, did not hold back with their critique of our pitch and business model to date. It was a thorough roasting. It might have had the potential to shatter egos but the rest of the team took all the criticism seriously, as well as detailed notes. We put all these into a document that one team-member brilliantly titled “Post Roast Toast” and began to re-do our pitch. This process repeated itself with every practice pitch, and ours got better with every iteration. After every pitch practice, the team would reassemble around our shared pitch document and edit the hell out of it, while I either did or delegated other tasks to team members. I couldn’t believe how lucky I’d been to get such an excellent team. Ollie had given me a bit of advice at the beginning of the weekend – “It’s not about the

idea, it's about getting into a good team," – and it was proving to be very true.

The final pitches rolled around on Sunday evening. Results varied. Some were unbelievably slick. My team had been either lucky or unfortunate enough to end up with people whose main skill was "business" as opposed to development or design, but others clearly didn't lack in those departments. One team had managed to conjure up \$30,000 in seed funding for their venture over the course of the weekend, and I haven't the slightest idea how they managed it. I can only assume that angel investors keep seriously unconventional hours. One came up with a brilliant method of recycling tyres, another had a great way to match volunteers to charitable events. Other teams had pivoted late in the piece or thrown out their original ideas at the last minute, and they knew it. One team came up with an excellent slide, something like a postmodern poem, to sum up their experience. It went along the lines of:

*This is great*

*This is shit*

*I am shit*

*New idea*

*This is great*

*This is shit*

*Oh shit*

Our pitch went almost unbelievably well, thanks in large part to the mentors who'd hung around and made suggestions in the last hours of the event as well as some hard practice. We ended up making a bunch of gags that incorporated the judges, as well as meowing at several points throughout the presentation, and the gamble paid off. We finished to almost violent applause. The rest of the team were buzzing afterwards – it was the first time I think we'd all realised that we had something decent on our hands.

*Team PaperKat nailing an 'audience and judges' engaging presentation [#SWAKL](#) [pic.twitter.com/HxprV8v54v](https://pic.twitter.com/HxprV8v54v)*

*– Jane Treadwell-Hoye (@JaneTHoye) [May 15, 2016](#)*

The judges went and deliberated, cheesy gag prizes were handed out – I scored a stuffed toy leopard thanks to the meowing – and when they came back, our team was beyond stoked to get second place. When we took the stage to take our photo and our prize (a very nice certificate) we enjoyed having the entire audience meow at us.

*First runner up... Paperkat!! ? [pic.twitter.com/8t4ZVGWsoQ](https://pic.twitter.com/8t4ZVGWsoQ)*

*– AKL Startup Weekend (@AKLSW) [May 15, 2016](#)*

Second equal went to the tyre-recycling outfit Radial Roofing, and a well-deserved first place went to “Tinder, but for volunteering” start-up Involve.

I’m still a bit bushed (I was close to falling asleep as I wrote the first draft of this post, so I opted to finish it the following day) but I had a most excellent time, learned a ridiculous amount, and made quite a few new friends. Not bad for what amounts to spending 54 hours on a weekend making a PowerPoint presentation with strangers.

Overall rating: A+++ would Startup Weekend again.