

Day 1, 2015 Conference – Will the price be right?

Teresa Corbin: We've actually now got a panel headed up by Alan Kirkland, the CEO of Choice, so I will hand it over to him and invite the panel to come up.

(TC): We have another video to play in the background from The Checkout, which is entirely appropriate, because it is an initiative of the ABC and Choice. Isn't The Checkout fantastic? Isn't it your favourite program?! Nothing to do with the clip you are about to see!

(VIDEO SHOWN)

Alan Kirkland: That was an outrageous plug! So, we're here in this session to discuss some of the changes that will affect prices into the future and we're joined by three quite diverse and interesting speakers. From right to left, as you see them, Shara Evans, who is a futurist, commentator and founder and CEO of Market Clarity, a firm that does a lot of work in the industry. David Forman, senior manager of industry and policy for Macquarie telecom. And Nick McClintock, director of economic analysis within the Bureau of Communications Research. So please welcome them.

(APPLAUSE)

Alan Kirkland: I'm keen to make sure we finish on time at 5:00 so we might just dive straight into the heart of the issue. I guess there are lots of things that are going to change in the future, and they have been the subject of discussion throughout the day, but I guess to sketch out our starting point in terms of price, I'm interested in your thoughts - we might start with you, Shara - on what role pricing plays now in consumer decisions about telco services?

Shara Evans: Well, price is fundamental. We can't get around that. And especially for consumers. Rod mentioned this in his speech - if it's not affordable, in other words if you don't have enough money to pay for something, it doesn't matter what the value is. One of the big trends, however, is in the whole value for money equation, product bundles are becoming more and more important for both businesses and consumers. One of the trends that I've been picking up on some of my research is the increasing availability of product bundles, particularly in the area of fixed line phone and fixed line broadband. What is surprising in some of the research I've done is that mobiles aren't part of the bundle - although you do have some options from providers to be able to get extra discounts if you add a mobile as part of your overall bill.

Another really interesting feature on the consumer side is the bundling of entertainment, as well. And interestingly, from and to - the Dodo brand and the Business Commander brand, interesting is the bundling of utilities now, electricity, gas and also moving into insurance, and I see that is an increasing trend as well. So I think that's probably my take on value for money and pricing.

Alan Kirkland: And from the industry side, David, how would you see pricing now?

David Forman: Well, I think you couldn't sit through sessions like today without agreeing that pricing is really at the core of accessibility. But it goes to issues beyond that, as well. It also shapes - pricing shapes the kinds of products that consumers will require and we look back to the relatively recent past and we see the change in consumer use of mobile devices, mobile phones, after the introduction of bucket plans that replaced timed mobile calls. Can you imagine how we would have been able to use phones in the way we use them today if we had not had that transition? That was led by a disruptive entrant into that marketplace. So the bundling of services needs to be watched very closely but I think we need to be conscious of the fact that they can be used by incumbents to

change prices and make it more difficult for people to come in and disrupt mobile pricing as happened in, what was it, the early 2000s I guess.

AK? With some of the trends that Shara talked about, particularly I'm interested in the bundling of entertainment services. We're seeing it with music streaming services and now it's starting to come to Australia in terms of video streaming. Do you really see that as being a big part of the future? Is that what it's all going to be about? Are people increasingly going to be paying for a bunch of other services as part of acquiring a device?

SE? I think it will be a part of it. I looked at the top players in the industry a few months ago, so Telstra, Optus, iiNet, TPG and N2 and out of all the plans I looked at that included fixed broadband, 71% of their plans had entertainment as an option for the bundle. So, there's clearly money to be had there, or all these players wouldn't be moving into it. But what's interesting is the move that TPG made a few days ago in discontinuing Fetch TV from iiNet's offer. So I think there's more to play out here.

Alan Kirkland: It seems there is a lot of settling to happen in terms of those streaming services which will determine who the telcos play with in the future. David, does that sort of - how is that playing out in terms of how people think the value will be captured along the supply chain of the future?

David Forman: I think one of the things that will be observed with some interest are the kinds of mergers that Rod was discussing. There's no question that we have, in this country, an industry that's structured quite differently to a lot of other countries. If I can speak from the perspective of the competitive carriers coalition as opposed to Macquarie telecom, we have been concerned about leveraging the content to foreclose other markets. We have been concerned about that for years and we're not the only ones. The previous chairman of the ACCC spoke about that repeatedly as an issue. Rod has spoken about that directly or indirectly over the years. It's something we need to be constantly alive to and I would argue it's beyond time that we have a closer look at just how that's playing out in a more holistic way than having to address that on a version by version basis.

Rod also talked about, you know, the debate around pricing and prices generally being higher in Australia than in the rest of the world and I guess it gave us both sides of the argument but talked about population density being a significant issue.

Alan Kirkland: Do you think that's a fair argument and is that likely to change in the future? I mean, it is a gap, I guess, that's caused by our low population density - is that likely to narrow in the future as technology changes? Or Shara?

Shara Evans: Sure, I would jump into that one because I've done a lot of tracking work in infrastructure in Australia. Whether we like it or not, we have a lot of very densely populated areas where it's very efficient to serve people at a fairly low cost structure, especially with new optical transmission of 100 gigabytes per sayings, and so on, it's very efficient. But when it comes to laying out fibre or putting in mobile base stations across the entire country and serving a population that is not living in the densely populated areas, it's expensive and there's no way that we're going to get around it unless we get masses more people into this country which I doubt is going to happen in the near future, or somehow we manage to make civil infrastructure deployment really - and I don't think that's going to happen in the future, either.

Alan Kirkland: We might sort of pivot from, I guess, talking about - we have been talking about pricing in a homogenous kind of way, pricing for everyone, but I guess a lot of the other focus through the conference has been on affordability, so the fact that pricing isn't the same for

everyone. Is that something that you have sort of looked at in your research, Nick, and the bureau's research? I guess the impact of affordability on the take-up of technology?

Nick McClintock: It's something we're starting to get into. We've got a project which we're calling the blockers and enablers project, which is looking to assess what are the barriers and the enablers of efficient communications markets and we looked at it in the context of value - so price as a subset of value. But that communications services, obviously, have other aspects to them, that people value, such as speed, such as throughput, or, as we've heard today, reliability being a key value point for consumers. So, the issue of affordability is one of the areas that we're finding is coming out a little bit more in the research. It's still early days. This is a project we only really kicked off in the last couple of months. But really, it's about that value proposition and understanding how much the - what consumers value and how that changes and trends over time. Thinking about it theoretically, you would expect that as offerings become more diverse that there would be an element of price perhaps not maintaining that level of importance to people.

I'm talking about that in generalities. There's going to be subsets of a community where that's going to be more important than others. But other aspects of the service may become prevalent, such as people looking to be able to access unlimited plans, being able to access unlimited throughput that will, you know, serve whatever needs they might have. You know, equally there is that reliability question. The need to have that service there when you need it and to have the integrity of the service there for you, for reasons which may be - disadvantage may be because you require that for a safety of life reason or whatever. You know, we're looking at these things and it is still early days in the project for us but it's something we're getting into. I guess Rod touched a little bit around how consumers become informed around issues like reliability. I guess I'm interested in the views of the panel around how well-equipped Australia is at the moment to help consumers to make those choices. If consumers are weighing up on the one hand price, price is possibly a little bit more transparent, although it is quite complicated to compare.

Alan Kirkland: But assuming it's easy, what about the other stuff around reliability? How well-equipped are we to help consumers to make decisions, to compare offerings based on the respective reliability?

Nick McClintock: Well, I think it is a truism that the greatest level of competition in the market, the greater the level of transparency. That becomes evident to consumers because people have an incentive to be competing with each other across a number of factors. I think - I don't think consumers are well served at the moment, in terms of the visibility they are having into the quality of the services that are available to them. And I think, frankly, that is a function of the market not being as competitive as it should be.

NMcC If I can just jump in - the Harper Review of Competition Policy, you will have seen the press around the response and they focused on the Section 46 changes. One of the recommendations in that report, recommendation 21, related to informed choice and I think that was a really important recommendation that unfortunately didn't get any traction with the report. But it's something I'd really suggest it's worth going back to have a look at and something I really do think frames a lot of the dialogue going forward about the importance of enabling consumers to make the choices that best benefit them. Obviously, it's a recommendation and to implement something like that requires a lot of work, but I really do think it's something that would make enormous benefits to the community in the longer term if those sorts of initiatives, I think, were picked up and run with more generally.

SE Unknown: I'll make an observation as well. Picking up on the comments that David made, you talked about quality of services - one of the things that is probably non-transparent to consumers

and businesses are things like contention ratios on broadband plans. And I think that we could have a level of transparency beyond what is available today fairly easily if it were required that service providers say, "My contention level is X" and at least that way we would be able to compare, am I actually getting the same value for money per gigabyte from one organisation as opposed to another. It would help you to try and understand a little bit about the reliability, the quality of the services and the quality of the experience. And I'd also add in that it's important for people to understand the security with respect to their services, especially as we connect more and more devices in our household. And maybe we can touch on that later. And privacy implications - what happens with your data? Who might get access to it?

AK: Shall we move to that issue of devices that you have just flagged? So, I mean, I gather it has been a fairly common theme that's occurred throughout the day, the trend of more devices per users. That has changed a lot in the last five years. If you project the same rate change and growth, what does that look like in five or ten years' time?

SE: If you look at the history you won't get anywhere near to what the future is going to be. Everything - and I mean literally everything - is going to be connected, underpinned by the IPV 6 addressing scheme. That allows 340 trillion, trillion, trillion devices to connect to the internet. In less than 10 years it's quite likely that a typical household will have more than 100 devices. There are people like Dr Marcus Weldon, who was speaking to me last year, the head of Bell Labs, and his estimate was individually we might have somewhere between 100-200 devices. So the kinds of things I'm talking about are microwaves, refrigerators, TV, the Belkin switch that lets you connect your existing gadgets, toys like an interconnected Barbie, your cars are going to be connected, your garage door openers, your front door, even clothing is being designed with interwoven ICT circuits. We're going to see smart eyewear beyond anything you can imagine with glasses or Google Glasses. In seven years' time that might move to smart contacts and what we will look at is eyewear that combines biotech with ICT and serves a dual purpose, and do things like auto-focus for reading glasses. It will be able to monitor my glucose levels using information in my tear ducts. It is literally going to go bananas. Then we will have different categories of devices we will be connecting, everything from things in your kitchen, you will have 3D printing appliances in your kitchen that will literally talk to your smart fridge, figure out what you have in your pantry or fridge, find recipes on the internet, put the fresh ingredients in and low and behold it will come out like a Star Trek replica. We will see robots in Japan - they've just launched the first major humanoid-type robot as a service a couple of months ago. They designed a robot called Pepper and it is cute, humanoid-like and they priced it at around \$1,600 and sold it with a three-year Cloud-based services plan plus a three-year maintenance plan. Put 1,000 units on the market - initially - and in one minute they had sold out. One minute. So you can just imagine what the future's going to hold.

Alan Kirkland: And what does it all mean, I guess? Nick, you do a lot of work around productivity - I mean is this stuff going to...

NMcC: Would you like me to answer that question for you?!

(LAUGHTER)

AK: But do you see productivity increases being associated with all of this stuff or is it just going to be more stuff, some of which is fun, some of which disappears, some of which we're still not really sure what it does.

Nick McClintock: I think we all innately know that this is going to lead to improvements in productivity. The problem we have is we actually don't know how, necessarily. We don't have - our - the reflection of ICT stats in productivity is really poor. The reflection of ICT stats more generally is

really poor. The department and the ABS are currently most of the way through a joint effort to basically review the statistical coverage of ICT, which is due to report to government I think at the end of September and there has been a couple of rounds of consultation in that regard. And that reflects the fact that the way ICT stats are reported more generally is quite poor. How that relates to national productivity is even worse.

We're currently doing a project within the department looking at - and we've released a primer to this and that is on the website and I'm happy to provide that to anybody, if they like. We were looking to undertake two steps. First is growth accounting on selected sectors to try and understand exactly what are the productivity impacts from ICT, particularly in terms of labour productivity but also in terms of capital and ultimately NFP. The second stage is we're working with a private sector entity and a public sector entity in terms of a firm level analysis in order to understand from them how did ICT actually directly influence and improve their productivity and what were the complementary investments they made that assisted and how did that benefit their consumers and stakeholders, et cetera. That is a project we have going on which we hope to report on probably in the first quarter of next year. So in summation, I think we all know it's impacting on productivity. It's just we can't actually point to where. And I think that's half the battle and certainly something that is important in terms of this dialogue going forward about how we actually leverage off the advantages that ICT provides to us.

Alan Kirkland: And do you think that an internet-connected Barbie will have a productivity impact?

Nick McClintock: Are we talking about a barbecue or the doll?

Alan Kirkland: The dolls! Just as a point of clarification.

Nick McClintock: I can see the productivity benefits in the barbecue, not so much - having two boys I don't see the benefits in a Barbie doll.

Shara Evans: It's actually a little bit scary because if you can imagine that somebody had hack into that doll and see what your kid is doing - security is an after-thought in almost all of these devices and that is really dreadful.

SE contd. I do want to comment on productivity. One of the things that we need to be very cognisant of is, with artificial intelligence and robotics in particular, anything that can be automated will be automated. And SI NA put out a report a few weeks ago now that was really quite sobering. By 2025 they expect that up to 40% of the current Australian job market might be replaced by automated processes. So we might end up with an economy, through ICT, that is very, very highly productivity but it might not be people that are doing that producing. Now, one of the things that I will say, so that we don't all go away and say, "Oh, gosh, we won't have any jobs in ten years" is that there will be brand-new job categories but we need to make sure we skill up for it.

AK: David, this sort of explosion in devices, is that - I mean, how does industry feel about it? Is it something that presents opportunity or is it something that alarms you in terms of the amount of people that are going to be building because they expect to be able to connect?

David Forman: I don't think there's anything alarming to industry about everything in the world being connected. I think the attitude of industry is, "Bring it on". I mean, it's an interesting discussion, this productivity issue, because we can see at an enterprise level, anecdotally, absolutely, the transformation that ICT makes to an enterprise in terms of its productivity, in terms of the very nature of its business, but that doesn't flow through into the macro measures that we have to measure productivity at a national economy level.

I have heard arguing, for example, by someone who spent a lot of time working on these things, that there is a school of thought among economists that much of the great productivity gains that were made through the 90s that have been attributed to the micro-economic performance of that time, in fact, may have been a consequence of the difficult fusion diffusion of ICT in the economy. We weren't capable of measuring that, so we attributed it to other things. The telco industry, of course, has an interest in this, but I mean frankly, these things, whether you measure them or not, these things happen and the question is how we diffuse those and - effectively diffuse those to the most people and make them accessible to the greatest number of people because that is where the economic advantage is going to be.

Alan Kirkland: I might open up to the floor. There are some other things we could explore, but I'm interested in whether you've got any questions for the panel, based on any of the discussion today, or, I guess, anything, if you think it fits under the overall theme for this session. So we might just start in the middle over here.

Jim White: Jim White, OptmiDigital. Interesting last point - I myself, as a user of Fetch TV and Netflix, lament the poor bandwidth that inevitably means I don't have a blue screen - I have a screen that says "Your internet connection can't support what you're trying to look at." How is your sector going to then get ahead of what has been described as this future so that we don't end up with another case of the networks in this country not being able to satisfy the explosion of streaming video on demand?

David Forman: We can look at that in the longer term, or as an issue that's arisen in the shorter term as people have tried to adapt to the explosion of demand, in relation to Netflix that we've all read about. If you'll indulge me, let me take a longer-term view. The carriers, along with ACCAN, small business association and local government organisation, some months ago, initiated a project which we called Vision2030. That was based on the fundamental kind of proposition that the economy is transitioning to a digital economy, that the best means by which we can ensure that the standard of living of this country in the mid-21st century is what we've come to expect over the last 50-100 years is that we are the quickest to move into that digital economy, and that we do that in such a way that the most number of people, the broadest spread of the population, are able to participate in that. And there are two elements from the perspective of the carriers - there are two elements to make sure that we have a platform to do that. One of them is the infrastructure.

The second one is the pricing, so that people are able to afford to take advantage of the infrastructure that's in place. Cast your minds back to the conversations that we had when the NBN was initiated. It was about both of those elements. It was about addressing the value of the private sector to be able to find the commercial signals to put the effective monopoly in that last mile - to put that in place so there was the capacity to deliver the things that were regarded as being necessary in a digital economy. And the second element was to get the structure of the industry right - to go back and fix up that unfinished business that Rod referred to earlier of the structural separation of the industry. Now, unfortunately, where we are today, we have some of the highest retail prices for fixed-line services in the OECD - the highest or near-highest across nearly every measure that the OECD has. And we have some of the highest regulated wholesale prices in the world. I take the point about population density, but I don't think that goes near explaining the delta between Australia and the rest of the world. Has the NBN, as we've rolled it out, has the NBN addressed that? In fact, I think there are very concerning signs that the focus or purpose of the NBN has been lost to the extent that in fact we've got some pressures in the other direction. So recently, the ACCC made a draft decision about pricing for wholesale access to the old copper network. It determined that the price should fall by 9.6%. That is not very aggressive, in my view, because we're talking about a pricing that will be set at that level for four years.

Spread over four years of 9.6% drop in wholesale prices to those monopoly elements of the copper, it's not very dramatic, and it doesn't catch us up to where the rest of the world is. But even that caused what I regard as two quite extraordinary interventions from the government. One by the two shareholder ministers from the NBN, and then a letter from the department that argued that the NBN should not be reducing prices for those wholesale services. These are the old copper services. The motivation for that was that - there were a number of reasons that were given, but the underlying motivation was concern that the NBN prices were set at a level that may be above where prices on the old copper network would go, and it would slow people down in transitioning to the NBN. We're trying to maintain prices on the NBN at a level that potentially is above where we believe prices on the copper should be. And why are we doing that? Because we've got this notion in our head that we've got to keep NBN off the budget. And to keep it off the budget, we have to be able to construct a corporate plan that says it's an investment, not an expenditure.

To me, that has taken us so far away from the purpose of the NBN - which is to deal with these issues, to make sure we've got the infrastructure in place, and that it's affordable, so that we rediffuse the benefits of the digital economy out to the entire economy. That was the purpose. Now we are pricing ourselves, and parts of the community, out of that vision. We're pricing - as soon as people at the end of price - the other end of the network would be subsidised and able to be invested in by the private sector are no longer commercially attractive, or the investment is not as attractive, because the usage at the end has gone, or isn't what it could be. So we find ourselves really, in my view, tail-wagging the dog. A political decision was made to determine, in the end, that it shouldn't be in the budget.

Jim White? : Could you describe that as a policy of unaffordability?

(LAUGHTER)

David Forman: Um, well, I think you can describe that as a policy that is entrenching prices that are clearly unaffordable to people today. I think it's unlikely that the ACCC will change their view, but it illustrates, to my mind, that we're in a very wrongheaded place when it comes to pricing and the motivation for the NBN. Frankly, my view is, put the NBN on the budget if you have to - just put it on the budget and let's get the benefits out into the community and take a bet that it's going to more than pay for itself by the economic transition that we want to get ahead of, not behind. One thing that I would interject - I've done a lot of price-modelling of NBN wholesale prices. For the last four years, I've been talking about how flawed the CVC product is. As we use more and more bandwidth, it's going to be a bigger and bigger problem. A lot of providers are recognising this now that the Netflix tsunami has hit.

We need to totally deconstruct the NBN wholesale price and start again. But there's something else we can do to make infrastructure more affordable - look at the civil works we're doing for roadwork, railwork, any kind of utility work, gas pipelines, NBN - any kind of construction. If we're going to be digging up a footpath or a road, let's for God's sakes coordinate what we're doing, put in multiple conduits so that we only do it once and make it more affordable for any organisation that needs to go along the conduit. David's shaking his head saying a, "No, don't leverage civil infrastructure!" But it makes dead sense. Yes, it's not that easy to do, but in my view that would drive down the cost of the civil infrastructure, which would make everything much more affordable for everybody. That was in fact how Tasmania came to be the first state on the NBN - because when they put out the natural gas reticulation into their suburbs, they built a conduit for optic-fibre - a decision taken in the 1990s.

Alan Kirkland: Another question just here?

Nigel Waters: Nigel Waters from the ACCAN board. I'm not sure if this is the right panel for this question, but I'll try you anyway. We had a brief reference this morning to zero-rated content, which is probably better known as unmetered content in this country. To what extent do you think there's potential for unmetered content for key services like government sites or educational sites to play a part in addressing the affordability issue - whether it's voluntary, whether it's mandated, whether it's commercially driven? Is that part of the mix that we should be looking at?

Alan Kirkland: Anyone Would anyone like to take that?

DF? : I guess if there's a cost associated, it's going to be picked up somewhere. My view is that there's - you can see a very powerful argument to say that that's a way to drive consumer uptake. That's a very powerful way to drive digital service delivery. I guess if you're saying to network owners "You've got to deliver this stuff at no cost," and they've got a wholesale cost to a provider, then there's an issue you've got to balance. Maybe as part of the government agency that wants to supply the content - the Department of Education or health services or others - to fund the cost of the bandwidth and actually put it into a pool that's used for unmetered social-good content. I think there are ways around it, but you can't get it for free and expect the telco industry to pay for it.

NMcC: Just quickly, we're doing some work at the moment on the economics of open government data, which has shown that there's really strong welfare gains from raw data being made available at zero, or an incremental costs, and it's really beholden on government to stay away from too much value-add, because governments don't do a very good job of that. Your point about having that sort of information readily available...

Given a lot of that information is basically developed by government already, so there's large sunk costs around it - the incremental costs to government in terms of its provision may be quite small - there's obviously issues we need to deal with in terms of interactions between government and the sorts of services you're talking about, but on a basic level, I think there's plenty of potential there.

David Havyatt: David Havyatt of Digital Research. Firstly, everyone forgets that the original fibre to the home model had four ports - the idea was that health and educational providers would pay for a service to use the second port, so you weren't relying on OTT, so the household could have one, and the health provider would be signing up for another one. That's now gone, unfortunately, in the MTN, and everyone's forgotten that we've lost what was a very important part of the project. The reason I was shaking my head about coordination is you're not the first person to ever say it, Shara. The only way to solve it is to determine that all infrastructure for services like that get built at what I call layer zero by local governments. There's no reason why a local government couldn't be responsible for all layer-zero infrastructure. The other one I wanted to flag was the CV pricing. Everyone forgets that NBN Co's model for CVC pricing is for a falling CVC price, they just haven't committed to it. They will apply the same CPI model formula that's applied to NBN accessing.

Nick, thank you for pointing me to Section 21 of the Harper Review. I actually totally missed that. For those who haven't read it, his proposal says "Our data should be available to us to take to another provider to say, 'What would my price look like?'" it's a very, very good tool. It's called a recap. Given that you seem to support it, and that it would be very good in the telco sector, why do you think neither the ACCC nor the ACMA has ever found a useful conversation to have with industry about whether we should develop such a tool?

Nick McClintock: Um, that's a really good question, David. Um, and if only there were an ACCC and ACMA people here to answer it for you!

(LAUGHTER)

Nick McClintock: I think transparency of information in the industry is something that we want to push, but it's one of those things that I don't think there'll ever be an end point on. I think it's going to be an ongoing effort from governments, from regulators, from industry, from yourselves, to try and really push those sorts of outcomes forward. Because I do genuinely believe that enabling consumers to understand and best serve their interests is the way of circumventing a lot of the issues that we then find we have to try and address through other means, such as regulation, which - as well as we might try to get it - is not the ultimate, perfect solution. I mean, we regulate to try and help markets and consumers to operate the best that they can, not supplant the market or the operator from doing what they should do in commercial and, ultimately, public interest.

Alan Kirkland: I'd perhaps answer that by saying it's unfair to expect the regulators to do that. This is an issue that Choice has advocated quite strongly on through the Harper Review and a range of other processes. It's drawing very much on the approach that's being taken in the UK, where government have essentially forced providers across a range of industries to get together. It was really a political issue. They introduced legislation that gave government the power to mandate that industries hand over consumer data, but they never used that legislation. It was just the big stick in the background. What actually happened was that Treasury in the UK called people together, got together key industry players across a range of sectors with comparison sites and other third-party businesses in order to say, "Come on. We actually want to see some action on this." That has started to get some movement. I would say the regulators don't have the power right now, but I think it's really political leadership that's needed in that area.

(INAUDIBLE QUESTION)

Alan Kirkland: There was another question there. Did you want to answer that, David?

David Forman: Um, yeah. Firstly, the comment on the CVC pricing. NBN has been telling the industry for years that it plans to reduce CVC pricing. It reduced it in one step. It produced, I think, in the first corporate plan - some document - there was a graphic illustration of CVC pricing dropping away as its volumes went up. It's never committed to that. That goes to the question asked earlier here, around how industry is going to scale up the backbone - it goes to the issue around contention. The industry can't plan against - the industry hasn't been known and been arguing for years that CVC pricing is taking us into a world of pain, and NBN has, for years, been saying, "No, it's going to be fine, we've got a plan," but they've never revealed that. My question around that would be, "Well, why not?" I fear that the answer goes back to the proposition I put before - that we're so concerned about NBN hitting a rate of return that we're keeping all the options open in case there's a discussion all the time about new revenue streams from NBN.

I'd like to see them get the products designed and out there, to get the existing revenue streams, so we could start using it before starting talking about other products and other revenue streams in order to pump up the PNL. The other issue was about CPI minus pricing...

Audience member (cant remember): : Wouldn't the simpler solution on copper pricing have to say having the same formula applied to it, in terms of A-B-C (?)

DF: : I wouldn't see it as a simple solution. We tried CPI minus before, as you're well aware, on copper, and after many decades of inadequate pricing outcomes, wound up with moving to the building-block model that the commission uses on copper now. A completely different process was followed to get to the SAU that contains NBN's pricing construct. That was around agreements around 20-year payback and being able to capture losses for recovery later. I don't think it's a simple solution to now, in the last years of copper, again shift the methodology, would be arguing about the process for another seven years.

Alan Kirkland: Was there another question just here?

Ian Binnie: Ian Binnie, ACCAN member. It's a while ago now, but some of the comments that the panel were making earlier on make me wonder if there were actually two different conferences here. Most of the earlier sessions, we've talked about the digital divide. Here, Shara and others are talking about the internet of things and having internet-connected fridges and glasses. I just returned from a 3-month trip around Australia, most of which was on our major highway, and there was absolutely no internet coverage the vast bulk of the time, until you get within 5km of a town, and even then you were lucky to get it. Wasn't even emergency call coverage. Wouldn't have been very useful if I was driving with my connected glasses on. When these devices are coming online, it's a global phenomenon. It's going to happen in Australia. What we'll end up with is islands of connected communities and islands of non-connected communities in the bigger IOT sphere. But again, go back the original premise of the NBN. It was addressing the risk of unless there was public intervention. So the idea of universal connectivity and the NBN reaching everybody - it's not the solution necessarily to the problem on highways, but it puts an infrastructure in place that could provide some of that solution. I think we - I fear - that we have forgotten that there's a public policy premise upon which the NBN was built that was about universal opportunity, universal access, and was connected to economic benefit and economic growth. In fact, I remember one senior bureaucrat saying to me that the reason for the NBN was, in a country like Australia - going back to the productivity question - there's two ways that you can shift the dial on productivity. You can have a massive influx of migrants to jack up the population, or you can force the diffusion of ICT to happen much more quickly and much more broadly. And that was what sold that very hard-headed economic person on the NBN.

Yari: I'm Yari from the TIO. My question is pretty much it seems to me that there are always going to be some people who can't afford telco services, and it seems that I'm not really sure but, would it be possible to just say, for low-income households, you will only be charged 3% of your income for communications services? Because if we just say, if we just work on having an affordable price, we're still going to leave some people out. Has there been any discussion about that, and is that a possibility? How would that all work? Any thoughts on that?

David Forman: I think one of the things that the Competitive Carriers' Coalition along with other industry participants have said is that the existing - I know ACCAN has also said this - the existing tools that we use to try to deal with it and create a communications safety net are really archaic. We're building a universal platform for connectivity. The question then becomes one that we've heard discussed at various times today about what are the essential services that sit on top of that and how are they subsidised? I'm really interested to see how the RTI addresses some of these issues. I was going to echo similar comments in that it sounds like a universal service obligation that encompasses modern connectivity more so than just fixed-line connectivity - that's part of the answer. But the exact framework and mechanism for that to unfold is yet to be seen.

Alan Kirkland: There was somebody up the back here?

Sandra Milligan: Hi, Sandra Milligan from ACCAN, and also Melbourne University. I wanted to make a comment about productivity. I taught my first university class of 32,000 people this year. ..from 180 countries. And I think that's what you call a productivity increase.

(LAUGHTER)

Audience? Unknown: Get a pay rise? Pay...?!

Sandra Milligan: Now, the interesting thing from a consumer point of view is that the Australian students paid more for access to that course because of the internet costs than almost any other students in the rest of the world. Um, so the - it strikes me that unless we get a community of people really connected to the internet at a very low price for consumers, we're in a global market here, and our productivity gains are going to be swamped by those of other countries.

Alan Kirkland: Any comment?

David Forman: Um, I think you just described an example of what was the premise of the Vision2030 discussion. We've either got to be - we've got to find a way to make people most able to connect in this country if we want to be the people who take best advantage of the opportunities that digital technology are making possible.

Alan Kirkland: Was there another question on this side?

David Havyatt: Yes? I do find it hard not to comment on this general question about internet prices in Australia. I apologise for this.

(LAUGHTER)

We've already discussed the density issue. The other is that, in the internet price you pay in Australia, it includes a bundled price for another element of that service, which is the international connectivity. And whether we like it or not, the link between Australia and America does fall into the category of a very unfilled link in the sense it's still a very small place here to be communicated with. Unfortunately, another factor of it is that we pay for it all. The Americans pay no money for connecting to Australia. Which is not the case for any of the other countries you're talking about. So there are a whole range of factors that do have a reason why comms is more expensive in Australia than it is elsewhere. Now, whether the difference is right or not is another question. But I do get sick of people thinking that it's appropriate to make this cost comparison - sorry, price comparison - without recognising there is a significantly different cost. It's like sort of arguing that you should be able to get the same, you know, dollars per kilometre on airfare from Australia to the US as you get for, you know, well, something much shorter and fuller in America. Anyway. Given all of that, um, David, how realistic are those sort of objectives in Vision2030 of trying to bring down prices to the point of what they're paying in the rest of the world?

David Forman: My view is that they're realistic, but might require some big and politically risky policy decisions such as maybe saying, "You know what? We're going to let the NBN costs go on the budget.

Havyatt "That's a government subsidy.

DF What is it now?

Havyatt It's a government investment right now.

DF Sorry, what's the difference?

Havyatt In 1959, the telecommunications network was taken the position of being only funded by debt in government. Not a cent has been spent by the Federal Government other than crazy broadband-in-the-bush programs, up until that point. You don't need to have the government funding this. There are other things the government's own budget money could be funding when telco can fund itself.

DF: Hang on a minute. The NBN was not - why was the NBN not built by the private sector, then?

Havyatt: Fundamentally, as you know, the private sector refused to accept structural separation. If Sol Trujillo accepted structural separation, it would have been built in a joint venture with Telstra. Full stop. End of story. Right. That was then.

DF: That's not now. To move to where we are now - I'll just remind people, too... You asked why is what?

AK: Just to give the interpreters a reasonable job as best as we can to keep it orderly and one speaker at a time - they're working very hard...

(APPLAUSE)

AK I'm interested in, in terms of where we are now, what the political appetite is for a radically different approach to the NBN? Ah, probably zip. Do you think we'll get there?

DF: Well, it depends on whether people, such as the people in this room, take the view that they need to get the message to government that this is bigger than just the state of the budget over the next few years. I actually don't buy the argument that we can say - I think the underlying modelling that's been used to cost the NBN and to suggest what its rates of return will be - I would suggest, to put it politely, than I don't regard them as particularly reliable. I think we will probably have an issue in 20 years' time of looking at the NBN and saying, "What are we going to do about the fact that this thing makes so much money?" We get tied up in arguments about how we drive more revenue into the NBN, or go back to the fundamental practice of building it.

Alan Kirkland: There's probably time for one more final question if anybody has a burning question out there?

(LAUGHTER)

Alan Kirkland: If not, I might ask the panellists in closing if you can give us one word, or a phrase if you like, you think sums up the biggest driver of change that'll impact on pricing and perceptions of value for money in the next 10 years? What's going to happen the thing it'll have the biggest impact on?

SE: Massive bandwidth growth. Massive bandwidth growth. Because of all these interconnected devices. They're going to be connecting primarily through wi-fi networks in the home area or mobile networks when they're outside of wi-fi zones, whether it be public wi-fi or the wi-fi in your house.

SE contd: There was a report - maybe, David, you can tell us which it was, 18-24 months ago, which was predicting 15 megabits per second requirement for households. I was wondering what sand they'd stuck their head in - that has nothing to do with technological trends.

AK: What's the biggest change for you, David?

David Forman: Well, the biggest determinant of which way we go - I think we're at an inflection point. We've got a once-in-a-generation chance, and the biggest determinant as to which way we go will be political courage.

Alan Kirkland: Nick?

Nick McClintock: Data. I think what we'll be able to access, learn and do with data in terms of analytics, understanding human behaviour and what drives consumers, I think will expand the choices that are available to us. I think the scope is limitless, really, in terms of where that can take us. I see that as the big change going forward.

Alan Kirkland: On that note, can you please thank our panellists?

(APPLAUSE)

Teresa Corbin: And please thank Alan for keeping the unruly masses at bay!

(APPLAUSE)