

I think that choice is going to continue to multiply

Roger Lynch, chairman and CEO of Video Networks, talks to Kate Bulkley about the company's roll-out of DSL services and its relationship with BT.



It's been a long road for Video Networks but now you have about 15,000 subscribers to the HomeChoice service in London and plans are afoot to double the number of homes that are able to receive your services by this summer. So, what is the growth trajectory for this company?

The trajectory is to both continue to increase both the markets where we are and to continue to expand the market coverage. So you're right; we had a good quarter last quarter and a lot of subscribers within the footprint, which is still relatively small at 1.25 million homes. We are now hard at work almost doubling that footprint. For us it is about continuing to get significant market share in the markets where we operate and expand the footprint so we get the compound effect of our growth on our business.

Your delivery model is very different than Sky or cable. You are using the BT telephone lines to deliver content and other services to subscribers. No other operator has chosen to do this, and one might conjecture that they haven't because the business model is very expensive. So, why are you out in front on this and what has been problematic about being a pioneer?

The reason that this method of delivery hasn't happened in the UK yet to any scale is because local loop unbundling (LLU) regulation in the UK has been slow to come. The rates for LLU were very expensive up until June of 2004. In fact, the only country in the EU that had higher rates was Luxemburg, just to put it in perspective. Ofcom forced BT to lower those rates by 70 per cent in 2004, which then made it economical. Now you have a lot more people talking about doing LLU and one of the natural things to consider if you are building out your own network is what else can you do with it, like television. Now, the UK market is a pretty competitive television market. I don't think it's enough to come in and say 'Oh we have some broadcast TV channels and we are going to bundle them in with broadband and telephony'. It isn't enough because you've got Sky rolling out Sky+ and you've got cable rolling out VOD, so you have to have something that is a competitive and differentiated TV offering and that gets expensive because the whole on-demand side of it is technically a lot more complicated and more capital-intensive. Because this company has been at this a long time, we have those capabilities that the company has built up over the years and we can deploy it now. Someone new coming into the market has got a lot of work to do.

You say that Video Networks has been at this a long time, which is true, but there have been several different business models. The LLU costs cut was a major turning point in your history but before that the company had been chipping away at getting this business

up and running. So, what lessons did you learn then that are being applied now and that have put you in a better position vis-à-vis newer entrants?

One lesson is technical: our expertise in how to deliver on-demand content over digital subscriber line (DSL) networks. There has been a lot of learning there. But even more importantly, on the product side: what do people want, how will they use it, how do you get them to use it? The fact is that people on our network spend a lot of time using our on-demand content. If you compare this to US cable operators, their VOD might only get one-tenth of the on-demand viewership that we get. Why is that? Well, it's because our products are really architected around on-demand products as opposed to on-demand being an add-on, or an afterthought.

So how you actually designed the way the HomeChoice system works is why you stand out against cable companies, both in the US and here in the UK.

Unlike a cable network where subscribers are using a shared network - meaning there is a limit to how many people can be using a uni-cast traffic for on-demand activities - in our network architecture that connection, that phone line, is all yours. There is no one else using it so you can use it for broadcast or on-demand. It doesn't matter because it is not shared bandwidth. So the inherent architecture of our network is such that we have much more capabilities for delivering on-demand. Remember, we started with VOD and we added broadcast services. So we created a product and a user interface that really integrates the two. In a cable home you have to go, for example, to channel 107 to enter a VOD world. But with our service, you are already immersed in it when you turn our service on. Even if you are watching BBC1 and you want to watch some BBC1 programmes that were on last night, within that channel that you are watching you hit the menu button on our service and it brings up a replay guide of those programmes and you select one and play it. That on-demand functionality is integrated into the broadcast. Plus, if you are on our EPG you will get promotions for all our on-demand services. That's how we drive very high usage of it.

You talk about bandwidth limits being a problem for cable networks, but isn't there also a problem with putting content down phone lines? BT is talking about upgrading their networks in their 21st Century Network project so they can deliver more than two or three megabits to a home. So, how have you solved the DSL bandwidth problem?

In cable there is a lot of bandwidth in the local loop but it is shared so the amount that any one subscriber can use at any one time is

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limited. In our case because the local loop is a one-to-one connection going from your house to the telephone exchange, we don't have the same issues as cable. The other issue for delivering over telephone lines is: is there enough bandwidth available to deliver the quality of service that you want to deliver? The way we solved that is we went and put our own equipment into BT's exchanges and we made sure that the fibre that we use to connect to our servers is a very, very high-capacity fibre link so we have plenty of bandwidth. The only issue is: how much bandwidth can the phone line support? In cities people tend to live relatively close to their telephone exchange and that is the issue: the farther away from the exchange that you live the less bandwidth that can be delivered over your phone line. So, in London, 93 per cent of the homes can receive enough bandwidth, i.e. they are close enough to the BT exchanges to receive our full service.

BT has talked about launching a VOD service that may look similar to yours. How will you compete?

I would strongly dispute the statement that BT is going to launch a similar service. It is not a similar service at all. It will have on-demand content that you can download or stream but it will have no broadcast TV content so it will not be an integrated platform like ours is. And it is bandwidth limited. They are talking about two megabits. For our most-difficult-to-encode content right now we use 4.3 megabits and we are really at the leading edge of compression technology and what you can get out of it. It does require significant amounts of bandwidth to deliver these services.

So even when BT say they are going to use MPEG4 compression, this still isn't going to help them on the bandwidth side and let them rival what you are doing.

The biggest issue about why what BT is doing won't rival what we are up to is because our offering is an integrated pay-TV and VOD offering. With ours you get all the broadcast and pay-TV and VOD channels in an integrated and simple-to-use way. I do think that MPEG4, over time, will deliver lower and lower bandwidth requirements to deliver video. But it is over time. We will launch MPEG4. In fact, all of our set-top boxes are MPEG4 capable. We will launch MPEG4 soon, this year, which will make us one of the first to launch it commercially.

And how will this help you?

It will reduce bandwidth requirements a bit but not a huge amount but 12 or 24 months from now it will be better than it is

today. If I were to show you a graph of how MPEG2 improved over time, it would show you that, in 1995 what took about 6.5 megabits, today can be done in about two megabits. MPEG4 will be the same: over time there will be reductions in bandwidth requirements.

There has been a lot of talk about PVRs, certainly from Sky. But your service is effectively a kind of off-site PVR or network PVR. How does that put you ahead of both Telewest, which has plans to launch its first PVRs this year, and Sky, which counts over 400,000 PVRs?

When you have a service like ours there is a lot of necessity for a PVR, but it can still be complementary. The Sky+ box can become the heart of the Sky offering, for us the PVR would only be complimentary. Our subscribers would mostly use the on-demand content on our service, our film and kids and music on-demand services, or all the replay services that we have on all the BBC channels. So, a PVR that can store 40 or 50 hours of content is a nice thing to have but having servers that have 10,000 hours of content that our subscribers can access is a phenomenal thing to have. And if you marry the two it can be interesting, but a PVR is not revolutionary for a service like ours like it is for satellite. We might offer our subscribers a PVR but we don't need it to be competitive, it's just an add-on.

Some people who have used the Home Choice service have had some strong words against it. Recently, at the DTG annual Summit and AGM, Dermot Nolan, who is an analyst, said that he thought the service was, and I quote: "crap". So, not meaning to put too fine a point on it, how would you respond?

The way I counter what he said is very simple. The amount of usage that we get on our on-demand services is phenomenally higher than any on-demand platform in the world. For example, C1, our on-demand general entertainment channel, is generally the second or third most-watched channel on the platform period. BBC1 usually gets the most viewing but then C1 is number two or number three. C1 takes about 10 per cent of all viewership on the platform. And BBC1 comes in at about 14 per cent. In kids, our on-demand channel, called Scamp, is the most-watched kids channel on our service, despite the fact that we carry CBeebies, CBBC, Cartoon Network, Boomerang, Nickelodeon and the rest. Scamp is a phenomenally good kids' service. Our on-demand music service, VMX, gets 50 to 60 per cent of all music video channel viewership!

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Roger Lynch Video Networks CEO

Before joining Video Networks in 2003, Roger was President and CEO of Chello Broadband. He grew that business from 20,000 subscribers to over 400,000 in less than two years. During this period, Chello won numerous awards for its innovative service, including Best Consumer ISP in Europe by the ISP Forum. Previously, he was an investment banker with Morgan Stanley in London, Silicon Valley and New York, where he specialised in Internet, technology and media corporate finance. In this role Roger orchestrated IPOs, financings and mergers for more than 35 leading companies. Roger has an MBA with Highest Distinction from Dartmouth College, where he also was a Tuck Scholar, and a BSc in Physics from the University of Southern California.



The functionality sounds great; the content sounds good; the quality of the signal sounds good. But you only have 15,000 subscribers and this company has been at this for a decade and you have spent over £250 million pounds. Devil's advocate would ask 'has it been worth it?'

My perspective is from when I came in 2002. There was a lot of money spent over many, many years and I came in and restructured it and basically started it over again. We were able to use a lot of the technology and capabilities that had been developed but it was essentially a re-start for the business two years ago.

And since you joined you have spent about £60 million.

We have spent a lot less and we have accomplished a lot more. As far as the subscriber numbers go, the big push for subs really only started in September 2004 and, in a four-month period, I think we did very well attracting subscribers. In fact, our calculations show that we probably had 20 per cent of all DSL additions in that period against AOL and Wanadoo and cable broadband. And that was just four months after our re-launch.

So, what are people subscribing to HomeChoice for? We've talked about your TV services, but you also offer telephone and high-speed Internet or broadband services as well.

They subscribe for the bundle. People who are looking for broadband look at us and say, 'Wow, this is a much better way to broadband because with it I get free phone calls and I get digital TV and all these on-demand movies and things that I can watch'. So, people come at it from a broadband angle and others are looking for innovative TV services.

How fast do you think you can grow going forward? I think you are expanding in London this summer. What can you tell me about a national roll-out timetable?

Eventually we plan to cover around 9 to 10 million homes in the UK, but we haven't stated a timeframe except to say it's not this year! And we will be available to 2.4 million in London this summer, up from today's 1.25 million homes.

How do you see HomeChoice playing a part in the Government's plans for analogue TV switch-off?

I think we will play a part. The Government has a number of issues with analogue switch-off but one of them is MDUs (multiple dwelling units) or apartment blocks that can't get satellite and maybe can't get Freeview because of signal interference issues and there is no integrated reception system and they aren't cabled, so how do they get digital TV? Well, they all have phone lines, so all we need to do is go put our equipment in the phone exchange and we could deliver digital TV to all of them. We have spent time with DCMS and other parts of the government to look at how we can help with that. I think that now there is a realisation that a service like ours could play a part.

One of the issues about switchover is who is going to pay for it. And what the Government said in its recent Green Paper is that the BBC is going to pay for a lot of it and the Government will help by guaranteeing the BBC licence fee for another set period of time. Is there a role for Video Networks in this?

We will be playing a role because of these reception issues I told you about. There are a lot of apartment blocks in London. Many of our new subscribers are coming directly from analogue. As far as us funding a component of switchover, we will do it if there is a commercial opportunity for us. I think there may be a model that we would look to explore where there is some public funding to go into areas that have particular problems, especially in city centres that have a lot of apartment blocks. That is a possibility.

When you mentioned LLU you said that there are still some economic problems there. How difficult is LLU still to get from BT and how does this impact you as well as your potential competitors, like the ISPs?

Right now we are the largest LLU operator in the UK. We are at the forefront of working with BT on the issue of the lack of industrialisation of a process for LLU. If you have been following what Ofcom has been doing, the fact is Ofcom has forced BT to lower their rates but that doesn't mean that it is yet a viable product or service, because if you can't add a large number of customers economically or efficiently then LLU is not going to be a mass-market service. Right now it is not industrialised to the point where you could roll it out nationally. AOL or Wanadoo would absolutely die if they went and built a big LLU network and they tried to migrate all their customers on to it because BT couldn't handle it. This will hopefully improve over time. It will have to because LLU does need to take off in this country and other operators will be doing it and BT will have to comply or they will have issues with Ofcom.

Is the problem that Ofcom and the telecoms adjudicator are not being strong enough? Or is the problem more of a technology problem where BT needs to invest in its infrastructure in order to support LLU?

I think the problem is that we have this vicious cycle where the rates for LLU were high and nobody invested in it and nobody was doing it so BT didn't need to industrialise any of their processes because nobody was using it. So, finally when Ofcom broke the back of the economics and lowered the rates that BT could charge then 'gee, surprise, surprise' people started using LLU and so now BT is behind the ball in industrialising the process. Their core infrastructure itself is very simple: it's a copper wire coming into the BT exchange. So it's not that they need to put massive amounts of equipment in or capital expenditure into it. It's more about internal systems.

So this isn't about BT having to build its 21st Century Network to have the capacity to offer LLU?

No. It's about making it all automated. BT is able, on a very automated basis, to now handle some 60,000 new broadband customers a week, but they struggle to handle 500 to 600 LLU orders a week. So why is that? Because they have automated the first and not the latter.

And of course the first helps them a lot more than the latter as well! I assume you are talking to BT and Ofcom about this a lot. Is it getting any better?

We deal with BT every day on this issue and it is getting better but at a much slower rate than we had hoped and that Ofcom has hoped.

What about HDTV? Sky has announced HD services in 2006. Do you have a plan for offering HD?

High definition requires, really, two main things on a DSL network. You need bandwidth on the phone line and you need encoding that reduces that bandwidth as much as possible while giving a good picture. We talked about our launching MPEG4. That should significantly reduce the bandwidth required to launch HD. It ultimately depends on the type of content you are delivering but it takes between, say, 5 to 8 megabits. You couldn't do it today with MPEG4 except for certain content but the rate of improvement is very, very rapid. We are testing it every month and the software improvements that the encoder manufacturers are delivering are showing very rapid improvement. So, then the question becomes how much bandwidth can you get over the phone line? We do 6.5 megabits today but there are new ADSL standards that

Having servers that have 10,000 hours of content that our subscribers can access is a phenomenal thing to have.

are about to be deployed in the UK called ADSL-Plus, so for people living a short distance from the telephone exchange it can result in up to double the bandwidth. And all the equipment we are putting in people's homes now is ADSL-Plus compatible. So the combination of those two things means that HD could be delivered over a network like ours at least to some of our subscribers. If you drew a distribution curve of the bandwidth available to our subscribers right now you'd find that about 80 percent of them could get 8 megabits. We don't provide 8 megabits because we don't need it right now, but the point is with new services it is always an issue of how large an area are you trying to reach and what kind of services are you talking about? So, the overall message is: 'Yes, ADSL will be able to deliver HDTV'.

You have recently launched an on-demand news service with ITV London. What is that and why is it important for you?

It's about leveraging the strengths that we have. We have the ability to direct services to individual households. So the *ITV London News Tonight* service allows you to go and watch the news stories on demand but you could also choose your neighbourhood in London and watch the news stories and traffic reports that are just for your neighbourhood. It's up and running and people are going directly to the *London News Tonight* channel and using it.

Do you foresee doing more localised services like this? And, if so, what?

I can't talk to you about any specific deals, but I can give you hypothetical examples. Today we have a Bollywood channel that is an on-demand channel and that is a great way for ethnic content to be made available. It's not economical to have a massive number of Chinese or Asian broadcast channels in a market but there is tonnes of content available, so how do you get that content to the hundreds of thousands of people who want to see it?

One way we can do it is to develop on-demand channels where there are thousands of hours of content available all at once. This is an amount of content that would never be possible within the constraints of a broadcast channel. So it's a really good platform for doing things like that, as well, of course, as doing mass-appeal content like movies and music videos and general entertainment.

Sky has bet on PVRs, at least for the moment, to, in effect, emulate the kind of VOD capability of a network like HomeChoice. But in the future do you see any possibility for Sky to work with a terrestrial operator like yourselves or like BT that could offer Sky a DSL connection in the back of the Sky box that would give them true on-demand content? Do you think there is potential for this kind of an arrangement or do you think that we will continue to see Sky and others sticking to their distinct distribution camps?

I would doubt that all the players would stay in distinct camps. I would suspect that, over time, Sky would respond to the threat of VOD.

Would Freeview also consider a DSL connection to their box?

Freeview is not a commercial service so it is a different dynamic.

But commercial players could start to rub out the lines of distinction between themselves?

We have in effect already done that because we started with VOD and broadband Internet and we added broadcast TV last summer.

How fast will this grow over the next year?

I think the number of hours will grow very significantly as well as the number of channels it is available on.

So, step back for a moment and give me your macro-view. How will the future look in the UK with digital TV and other services?

I think that choice is going to continue to multiply. If you look at the last few years you've got the advent of Freeview and the cable companies moving to digital and obviously Sky went to digital and you've got services like ours and I suspect others will try and do it too. Then you've got VOD and the next big trend will be how do I take my content with me? Portable devices that allow you to take content out of the house and watch on the tube or in the taxi.

There has been a lot of talk and some early prototypes of so-called PVR-to-go devices. Is this the kind of device that you would envision offering your subscribers?

They can do it right now and there are devices out there like the Archos portable video recorder that are compatible with our service now.

So is this a potential new revenue stream?

We are certainly looking at it. Is this something that we should enable or is this something that will take off on its own? We need to make sure we are compatible with it.

The future looks interesting. Is there a day when you will make money for your investors?

I certainly hope so! The economics of the business model before the restructuring were impossible because the cost of using BT's network was exorbitant. The company was paying BT £50 per line per month for the privilege of charging subscribers £20 or less a month for the HomeChoice service. That just didn't work. There were also so many constraints on what HomeChoice could do. But now that we have built out our own network by adding technology in the exchanges, and that required some capital, but the economics have totally flipped around so that every new customer we get we make money on, good money on. It doesn't yet cover all of our fixed costs but these are profitable customers. Previously every new customer cost the company money. Now the margins are very, very good for us. The only issue is we just launched so we need to add more subscribers and every day we do that and we get closer to breaking even.

HomeChoice HomeChoice HomeChoice HomeChoice

Video Networks is the leading UK provider of broadband and home entertainment through its HomeChoice service. One of only two broadband television providers in the UK, Video Networks has built the most advanced television network in the world. Broadcast channels and on-demand programming is delivered to customers homes via the phone line directly to the television set,

ensuring content can be watched at any time of day. Customers have the choice to engage with their televisions in the usual way, or take control and choose the programming they want to watch, when they want to watch it!

Using the remote control, customers have access to over 10,000 hours of programming all available instantly, as well as the best in digital

channels. Content can be paused, forwarded and re-wound by the touch of a button. HomeChoice offers its customers a range of the biggest TV titles and films from around the world. It offers its subscribers access to over 1,000 films, a huge selection of television programmes and over 3,000 music videos – more than any other TV-based video-on-demand operator in the world.