

# DIGITAL TV WITHOUT THE PAIN

Swiss-based company **ADB** designs, develops, manufactures and integrates advanced technology products and services mostly for pay-TV markets around the world. ADB's VP of Strategy, with specific focus on middleware and consumer experience, is **Paul Bristow** who just by accident has the perfect background for the world of digital TV. Here he talks about the secret recipe for a high end set top box and how ADB makes digital TV more enjoyable for consumers



**H**ere at ADB we feel that, somewhere along the line, the industry has forgotten some of the basics about TV. The basics are simple things – when you switch it on, it should start working very quickly. When you press the button on the remote control the set top box should respond – now, not in a second. It should change channel as quickly as possible, not in four to eight seconds. We believe that in an HD world, we should deliver a great experience to the user as well - even just pressing the buttons on your remote control should make you smile and not be something that is a pain to go through. And that's where we are trying to make everything about the use of our product intuitive, fast, pleasurable.

#### How do you stay ahead of the competition?

We have 729 people in the company from 21 different countries. Of those over 500 are software engineers, mainly based in Poland and the Ukraine, but we also have R&D in Taiwan and the US. We tend to park our R&D centres near the very best technical universities, and every year we hold software engineering contests [to attract the best university students]. Of course for us this is fantastic because we effectively get 3,000 examples of the best piece of work from some of the brightest

people around, and you can bet that we hire quite a few of those.

#### Where does ADB figure in the hierarchy of STB companies?

I have no idea what number we are in terms of quantity. We don't do entry level products. In fact last year more than 85% of our products were high end – we tend to focus on that to maintain our margins and that seems to be working for us. Last year we grew and made profits again despite the recession.

#### What's new, product-wise?

Among the latest is a three-way hybrid digital TV platform that enables consumers to access video from three separate delivery networks – digital satellite, digital terrestrial and IP and for which we won an award at IPTV World Forum. All our know-how built up over the years went into this. It has a real-time on-screen messaging system that enables the operator to communicate directly with an individual subscriber, and on-screen invoicing that eliminates the need for paper.

#### Does the consumer see the ADB brand?

In short: no. ADB primarily works with pay-TV operators and one of the key differentiators between ourselves and our competition is that we do not try and compete with our customers for the attention of the end user. We try to deliver integrated solutions to our pay-TV

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customers and then let them brand it. In retail, it's obviously different. We make sure that we aren't competing with our customers or potential customers, we have a different brand which is called i-CAN and that brand you will see in markets where we are active in retail. So far that's Italy and we just launched in the UK in May with the i-CAN Easy HD hybrid receiver for Freeview HD and catch-up TV services.

#### Which are your markets?

Essentially any market where the operators are willing to look at advanced services. Just because a market has had digital TV for a while doesn't necessarily mean it's going to be the place that has the most advanced services. When we launched HD products with ITI in Poland, nobody believed that that was going to fly in a market where the ARPU is so low and people don't have a lot of disposable income. It turned out that this was complete nonsense – Poland has been one of our most advanced rollouts anywhere.

#### ADB's business is not just products though, but selling know-how?

We design, develop, manufacture and integrate advanced technology products and systems mostly for pay-TV markets around the world, and our customers are cable, satellite, terrestrial and IPTV operators, as well as the retail markets that we are involved in. We are one of the very few companies



that master all the elements that you need to produce a digital TV product - from the very lowest level, software drivers, through the middleware all the way up to the user interface, which combined with the performance of the box actually delivers the consumer experience. So you mix all of those things, add in the pay-TV expertise and that is basically what we do.

We provide open standards based solutions so that you can have applications developed by anyone but we take care of all the trouble of integrating the software inside the set top box. We don't actually manufacture set top boxes, we outsource that. Our core activity is making it all fly perfectly.

#### Which area has seen the most growth?

This has been in hybrid – nowadays more than 80% of everything we do is hybrid, i.e. the blend of broadband and broadcast. Of that the high end side, HD hybrid and DVR is now more than 85% of our business.

In terms of growth by transmission type, cable has done pretty well for us over the last year, as well as terrestrial and satellite. The only thing that has been a little bit negative has been IPTV given the struggle of Telecom companies during last year's recession. But if IPTV can deliver an HD on demand experience to compete with cable or hybrid satellite or hybrid Freeview

HD boxes, then it will have a future.

#### Is 3D straightforward?

If we were just an STB manufacturer, we could just pass through the 3D video and do nothing with it. We have taken a different approach. With a little bit of advanced maths and some very interesting optimization of the graphics routines we have made our Carbo™ user interface really look as if dialogue boxes pop out of the screen – and the rotating carousel of icons that we have in there actually rotates out of the screen and back into it, to give a full 3D experience for the consumer who has taken the 3D plunge.

There is one other interesting feature I should mention about our Carbo interface, it's a technology called SmoothView™. SmoothView gives you complete control of the speed at which you play back your content on your DVR. And the really cool thing is we do that with the audio pitch-shifted so that you still understand what is being said.

Say you are pressed for time and you need to watch a football match, you can do this at 1.5 times or even 2 times normal speed but still understand the commentary. That's a unique proposition from us.

#### Paint for us a futuristic picture of the consumer both at home and on the move.

In one word: multi-screen. ADB had the very first STB ever to be

▲ **Main Image:**  
ADB R&D  
**Top right:**  
Interactive menu  
for the BBC  
iPlayer  
**Below: UK**  
Freeview HD  
i-CAN STB

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certified with the DLNA home networking standard supported by all the big players. Our products can be DLNA servers which means we can take content and forward it on within the home, so for example if you are watching a TV show downstairs and want to see the end upstairs in bed you can move that piece of content to the screen where you are, even send it to your iPhone.

For consumers on the move, the vision we see is that together with the network operators, we'll find ways, no matter where you are, to enable you to watch your TV or access the applications and content you want. Imagine what it would be like if you could connect from your laptop into your home DVR and watch your favourite series in a hotel room somewhere abroad.

As broadband gets better you can upload content directly from home, or the network operator provides a service where the content is sitting in the cloud for you and you can access it directly from your laptop. Ultimately you should be able to ask for things to be recorded from your mobile phone, and be able to watch this content on your phone.

#### How far away is this?

It depends where you are and also on what level of bandwidth you have.

Some operators are already deploying multi-room DVR, and you see things like the 'TV Everywhere' initiative in the US which gives a subscriber to a cable TV network access to that network regardless of where he/she is, over the Internet.

#### What's on your wish list for the future?

What I would really like to see is for the industry to embrace open standards and start working together so that we can actually deliver the cloud based services we'd like to and make life easy for the TV viewers. We'd like digital TV to be really cool. We are doing what we can and we'd like the others to join in.

Thank you, Paul Bristow.