Moshe Lichtman

Lichtman joined Microsoft in 1991 as a product manager in its Personal Systems Division. In 1995, Lichtman moved to the Consumer Platforms Division at Microsoft and became President of Softimage, a Microsoft subsidiary and provider of digital media creation tools for the film, video, and interactive industries. In 1998, Lichtman assumed the position of vice president of the Digital TV platform strategy. Prior to Microsoft, Lichtman held software development and management positions at several high-tech companies. He is co-author of the "Complete Guide to the C Language." He holds a master's degree in business from the MIT Sloan School of Management.

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From your perspective, how is Microsoft going to figure in the digital connected home of the future?
Over 96 per cent of Microsoft's overall revenues focus on a single phenomenon, the PC. The PC has taken about 30 years to get to three-quarters of a billion PCs worldwide. If you look at other consumer electronics phenomena, there are two much larger phenomena, one is the mobile phone and one is the TV. There are about 1.6 billion of each worldwide with mobile projected to go to 2 billion by the end of 2005. And all CE devices include all the ingredients to turn them into smart devices in terms of memory and processing power and connectivity. When we at Microsoft look at these phenomena we look at how software can make the experience better, richer and how can it make it more valuable to the consumer. The first thing we believe is that software can radically change the TV experience. TV in our view is going to become a hub of entertainment in the home. We don't know exactly what will be connected to that TV to really manage all of that entertainment experience so we are creating best of breed platforms that connect to the TV.

You have different ways to reach the consumer with your software, through the set top box software but also through the Media Centre software for PCs…
Media Centre PC is an extension of the PC. People already use their PC to download music and to manage their video libraries so it is already turning from a productivity device to a productivity and entertainment device. So the next natural extension is to link the TV with the Media Centre PC edition.

You also have the X-box, the Microsoft games console…
Gamers are another focus for Microsoft. There are already 150 million gamers worldwide and that is an area that is growing very fast and it is now expanding to community and entertainment in a more general way as well. And of course there is also the straightforward TV experience. The majority of the TV homes in the US and 60 per cent of homes in the UK are getting their TV from some kind of a digital network, either cable or satellite or DTT. So my business is to deliver software for those types of networks.

So what is the Microsoft vision for TV?
The vision for TV is for connected entertainment. If you look at all the devices today for photos and music and TV programming, these are all islands. Using our IPTV platform you can have a connected entertainment experience where the islands are connected and the whole is greater than the sum of the parts. I'll give you an example: at the end of my favourite TV soap why can't I get a message on the TV from grandma that she is sending me some photos? This would use the broadband network to tie the TV viewing experience with the photo viewing experience.

And this can all be achieved by software, which is your USP, right?
We are all about software and the protocols that drive those services. Our overall vision for TV is to create those powerful platforms to enable our partners and consumers to have those rich experiences and derive greater value form their day-to-day life.

IP is clearly a big part of the future but recently two Microsoft IPTV clients Swisscom and Telstra in Australia delayed the launch of your IPTV platform. So what do they know that BT –which recently ordered your IPTV technology for their planned VOD service—doesn't yet know?
First of all we are on track to deliver the software in the fall of this year and our customers are on track to deploy later this year commercially and deploy in scale in 2006. All of our customers who have announced are on track. They are committed to the platform and to Microsoft and to IPTV. Each has their own timelines so you have to follow up with them.

So it's not a software problem that is causing Swisscom for example to delay their launch of the Microsoft IPTV system, it's their scheduling issues?
Absolutely not! Look, we are reinventing TV. It is a complex puzzle, a lot of pieces. And those pieces are not with a proprietary approach. We have made many announcements over past couple of years with Thomson, Tandberg, Harmonic, Motorola, Scientific Atlanta and with Alcatel, the latter with which we have a very strong partnership on the whole broadband area. Also Intel and ST Micro, chipmakers, we have worked with. For this next generation TV to come to fruition it is not just about the software. It is about the whole industry and that is what we are doing.

At the moment most operators, including BT, are only just beginning with the 21 Century upgrades so there is only 3 of so megabits available for IPTV which is why BT for example is only launching a VOD service down its phone lines, not a broadcast TV service. It may be a better world, but is certainly not as big a world as now available on digital cable or

satellite!

Absolutely. Operators do pace the deployment of all these new services with regard to their networks. But for us this is about better TV. There is huge capacity limitation today on broadcast TV and that constrains the choice. There is this long tail concept where 80 per cent of viewers view 20 per cent of all the content, so there are audiences out there that are not being served.

When will you be able to unseat the Rupert Murdoch's of the world with their satellite platforms?

[Laughs] Honestly I think the world is moving IP so it is not a question about unseating. It is just common sense. We didn't even talk about the cost of delivering the service. It cost the cable networks in the US $90 billion to upgrade to broadcast technology. IP technology is being used so widely in the IT and telecommunications industry that the economies of scale are enormous. And then you have the economies of building all your services on an IP platform as opposed to having a voice silo that is working on a switched network. A data silo working on an IP network and a video silo that works on a broadcast network. That is a huge cost in terms of management and billing and provisioning systems. All these costs go away in an IP world, so I don't know what a satellite company is going to do in a world like this.

What about content protection in this connected world? It has been a huge problem for the music business.

When we engaged with the chip set and encoder vendors and so on we also said we have to have a distinct focus on the content providers to make sure the content owners understand the IP platform capabilities and that they help us identify the content opportunities and services that can be used. We showed a major league baseball service at the Consumer Electronics show that we created working with the league and I know baseball doesn't mean much to European, but when we demonstrated it at the show, 30 per cent of the audience stood up and clapped because it is a dream for baseball fans to be able to see their favourite team and also see four other games in real time and to be able to switch between them in real time. And you just cannot do that with today's TV.

There are other companies like Sony that also have designs on the digital home or the digital consumer of the future with their many devices and services. How will Microsoft work with or compete with other players like Sony?

We believe that choice wins. We are definitely not in the same business as Sony or Apple. Their primary focus is selling hardware. They go in with their own proprietary software to their hardware and then create a sort of overall end to end eco-system which basically means you buy a device from Sony or Apple and you buy the software from Sony or Apple and you buy the music or the video from them as well! We have a much more partner-centric approach. We build the platform and we focus on enabling these consumer experiences across those different devices. Competition excites innovation.

You are saying that Microsoft software will show up on all devices if they want it.

Absolutely. And the area that we are investing in heavily

with our partners is SOC or system-on-a-chip. Two or three years from now we will get to price points in the mid-teems for these and that means that when you go to a Dixons or a Best Buy in the US and you buy a TV or DVD player they will already have the circuitry and electronics that with SOC will turn it into a plug and play IPTV device. So the scenario that we envision is you go into a retail outlet and the sales rep can ask you if you want a TV service from BT and you can plug it in and home and it works with the SOC chip and all the information is in the IPTV network. This will start happening in the three to five year horizon.

How about the general issue of navigation? Is this a big hurdle for the mass acceptance of the digital connected home?

Navigation is not the biggest hurdle for us. We have been investing heavily in usability and user experience. We have fine-tuned the experience so it is easy to use. When my kids [15,11 and 6 years old] got the new IPTV software on the cable system within 5 minutes they were driving, setting recordings and series recordings. No manual, nothing.

How fast will we start to see scale, commercial deployments of Microsoft's IPTV software?

We are on track to deliver the software this fall and commercial deployments will happen by the end of the year and scale deployments by the end of next year, but I can't give you number of homes. But if you look at all the operators that we have signed up for this – some are announced and some are not announced—they represent 28 per cent of all worldwide access lines. So out of 1.3 billion access lines globally, our customers represent 330 million of those. In Western Europe and the US alone our customers represent 75 per cent of the access lines. So that is the potential for us on the opportunity side.

...My kids... got the new IPTV software on the cable system within 5 minutes they were driving, setting recordings and series recordings. No manual, nothing.

Microsoft...Sony...and...Apple!

A postscript from Hugo Martin about the other key player in the home entertainment centre market.

Wherever Microsoft aim to dominate a market, you can be sure that Apple will play David to their Goliath! This is true in the battle to establish Home Entertainment Centres.

Earlier this year, it emerged that that Apple was dumping IBM chips in favour of Intel (who supply MS!)

According to US observers this is because of Apple's determination to challenge for this marketplace! Apple intends to challenge them both directly, right in the world's living rooms. An irony is that both Xbox and PlayStation use PowerPC technology, not Intel. Indeed, according to John Markoff of the New York TimesMarkoff, Sony had been

trying to persuade Jobs to adopt the PlayStation 3's Cell processor, jointly developed by Sony, Toshiba and IBM. Instead, he has, as usual, gone his own way.

Other possibilities from the Apple-to-Intel move: games and other software written for Windows are likely to run on Intel-equipped Macs. Both operating systems could run concurrently, on a single "Mactel", as the industry is already calling the computers Apple says it will have on the market in about six months. That could accelerate an already perceptible, iPod-driven, shift from PCs to Macs among consumers.

With Microsoft and Sony moved to IBM, Intel is keen to keep its place in the enormous home entertainment market and Apple, boosted by the runaway success of the iPod, is a good bet in a tough game.