



Seconds out, round one

Bill Gates and Rupert Murdoch are donning their boxing gloves to slug it out for the ownership of your living room. Guy Dixon goes 10 rounds with the heavyweights

According to BBC director general Greg Dyke, if the Beeb and Sky are two 800lb gorillas Bill Gates is King Kong. The world's richest man has watched through the depths of the IT industry's worst recession and observed that it is home consumers, rather than big companies, that are most likely to make the good times roll again.

Of all the products competing to own the home hub, Microsoft's Windows Media Center is the most obvious. It's display agnostic - equally at home on an LCD TV as it is on a computer monitor. It aims to act as the control centre for your hi-fi, your photo albums and your TV. You can easily record programmes to your hard disk. Oh, and it's also an extremely powerful PC.

What's more, these machines are no beige boxes. They are more akin to the sleek consumer electronics we expect in our living rooms. Out goes the keyboard and in its place you'll find a free EPG (electronic programme guide) remote control. Add broadband

to this mix and, given Microsoft's not inconsiderable internet presence, you can see what's giving Sky and Rupert Murdoch cause for concern.

But Rupert won't let Bill have everything his own way. The 71-year-old Australian newspaper tycoon has a 36 percent shareholding in BSkyB and now has his 30-year-old son James safely installed at the helm.

Sky's the limit

As a £12.2bn concern and Britain's 18th largest publicly listed company, Sky is big enough to stave off the Microsoft juggernaut. The next step for Murdoch and son is to persuade its seven million customers that they need to upgrade to Sky+ - a so-called PVR (personal video recorder) comprising a hard disk cleverly grafted into a TV set-top box.

Sky's broadband content portal Sky Scape is currently in talks with online music providers such as Peter Gabriel's OD2. Sky will inevitably have looked closely at what its cable rivals NTL and Telewest have been doing with broadband-enabled set-top boxes.

It's already teamed up with BT to offer discount broadband deals to Sky-TV customers. Then there's Sky's launch into display technology in the form of its home entertainment system, complete with a Sky-branded 42in gas plasma TV. All in all, it's a pretty powerful combination.

Look out for the new guy

But even Rupert and son will be casting a nervous glance at the success of Freeview. With two-and-a-half million punters a little more than a year after going live, there are young Turks in town. Enter Freeview set-top box manufacturer Humax, which will soon be selling set-top box cocktails. Set-top boxes in LCD TVs, set-top boxes with rewritable DVD players, PVRs with storage upgrades.

Bringing up the rear we've got traditional PC makers offering their own versions of the ideal 'entertainment PC'. EPGs in hand, we got our journalists to live with the different platforms. Turn over for the results and let battle commence. ☒



A visit from Media Center

With Tivo standing on one side and a Pace Twins digital video recorder on the other, Media Center faced a hostile reception when it knocked nervously on Will Head's door

Media Center came to stay recently. Microsoft has put a lot of work into its home operating system and when ATI offered to lend me a reference machine based on its eHome Wonder card I couldn't turn it down.

Setup was pretty simple - plug it in to the TV, aerial and mains. Once you start Media Center it runs through a wizard so that you can configure the television settings. The ATI card is analogue, so you're stuck with the five terrestrial channels unless you hook up an external decoder.

I had a quick go connecting it to an NTL digital cable box, but didn't hold out much hope. The NTL boxes don't use standard infrared remote controls, so trying to get it to respond to Media Center's infrared blaster proved fruitless. After a couple of minutes I gave up and resigned myself to life before digital TV.

Easy as EPG

Other than those teething troubles, everything else was simple and it was all up and running nicely in about half an hour. Time to pick some programmes to record. Easy enough: scroll through the EPG (electronic programme guide) and choose what you want. Press record once for just that show or click it twice to tape all upcoming episodes. The interface also looks great and is very easy to navigate from the armchair.

to record by time and date. If you want to set up repeat recordings you can do it on a weekly or daily basis but it's a fairly hit-and-miss affair.

Add on an EPG, and instead of specifying times you're dealing in programmes. You don't need to know (or care) when it's on, just what it's called. If you want to record a whole series, you don't need to remember to program it each week. And if the programme time changes you needn't miss your favourite show.



PVR or DVR?

When is a PVR not a PVR? When it has got no EPG (electronic programme guide), a personal video recorder is a bit of a catch-all phrase. If it records TV digitally then most manufacturers are quick to slap a PVR label on it. Not so fast we say.

The thing that separates a PVR from a plain and simple DVR (digital video recorder) is whether it has an EPG. It may seem a small point, but it makes a huge difference to usability. Without an EPG, you're stuck with setting up programmes



Despite the manufacturer's best efforts, this Media Center PC is far from silent. That level of background noise is okay in the office but will prove annoying in the lounge

All recordings completed with no hitches and in terms of quality they easily beat VHS. The only problem is that to record something the device has to be switched on. This may sound obvious, but it limits Media Center.

Devices like Tivo and the Pace Twins box sit quietly in the background and get on with the task of recording the shows you've

asked for. But because it's a PC, Media Center sits there huffing and puffing until you switch it off. And if you do turn it off it won't record. You can put it into standby rather than completely shutdown but then it fails to turn off again after it's woken up.

Oh, and despite the manufacturer's best efforts, Media Center PCs are far from silent. That level of background noise is okay in the office but will prove annoying in the lounge.

I couldn't fault ATI's implementation. It's a good solution that does everything Media Center promises. But until it becomes quieter, less of a PC and more a consumer device, I won't be hanging up my other remote controls just yet. ☒

Obviously clash management is an issue - what if *Friends* is on at the same time as *The Bill*? But providing you can set one to have priority over another (and the ability to pick up repeat showings), it should all work out okay.

So kids, don't be fooled and remember - if it ain't got no EPG, it's DVR not PVR. Simply put, a DVR is just a better quality video recorder, whereas a PVR will change the way you approach recording and watching TV forever.

Compared to consumer devices such as the Tivo, ATI's Media Center really shows its PC roots

Control the whole Media Center from this easy-to-use remote



1:30 PM	2:00 PM
Reg Neighbour	Doctors
Working Lun	The Phil Silve
Today with	Everything M
Mr Denning Drives North	
Pop Idol Ex	Trisha
Channel Off Air	
Channel Off Air	

What's an EPG?

PVRs (personal video recorders) have so far had little success in the UK. It doesn't look like there'll be a new Tivo anytime soon and Sky+ hasn't yet got into its stride. Without an EPG (electronic programme guide), all you've got is a pretty swanky video recorder. The EPG allows you to ditch the arcane method of setting up recordings by time and date and simply select the shows you want to record by clicking a button.

The EPG data lists upcoming programmes on all channels. It allows you to do clever things such as tape a whole series with a single click - no more remembering to manually set up a recording each week. Even if shows get moved in the schedule later on, provided the EPG is up to date you won't miss an episode.

But this data isn't cheap - it costs money to regularly update EPGs. Somehow, though, the accountants at Microsoft have found a way of providing something for nothing. Purchase a Media Center PC and EPG updates won't cost you a penny.

So, all you skinflints out there who wouldn't buy a £200 machine because you had to pay £10 a month, you can now spend more than £1,000 on a new PC safe in the knowledge that there's no monthly cost. But whether the updates will still be available for free a few years down the line is anyone's guess.



Sky high and rising

As his six-month free trial draws to a close, Guy Dixon writes to his beloved Sky+ and argues it should be bundled for free to ensure its success

Dear Sky+

Forgive me for writing to you like this, but after six happy months of living with you I feel it is my duty to warn you that there are hostile interests at work that don't care for your long-term wellbeing.

What's more, with my free six-month journalist's premium channel trial coming to an end and the prospect of spending more than £600 over the coming year for the right to continue our relationship (£199 for you and £50 for your installation, plus a minimum subscription of £31 per month), I feel justified in getting one or two niggles off my chest.

First, some appreciative hugs

You are indeed an extremely good video and radio recorder. You are also, if you don't mind me saying, very easy on the eye. You're easy to use, your EPG (electronic programme guide) is a wonderfully sturdy piece of design that would survive most domestic incidents and the quality of your recordings is indeed identical to the original digital broadcast.

I also accept that in terms of the volume and variety of programming, there's no one to touch your parent company Sky (although the

regulators might have something to say about it a year or two down the line).

Though I still seem to spend more time looking for quality programming than actually watching it, what the hell? I've got time on my hands and with perseverance I have found some good stuff.

While the novelty of pausing and replaying live TV wore off after a couple of days (ditto slow motion), the same cannot be said of Series Link. To be able to mop up an entire series at the push of a button is what we in the computer business call a 'killer app'.

I confess to having experienced a number of lost weekends, nostalgically wallowing in *Brideshead Revisited*. Bedtime has also become a tardier affair, which I attribute to the ability to watch four episodes of *Curb Your Enthusiasm* back-to-back.

In short, I now actively plan my TV viewing rather than rely on blind serendipity. No longer does my loyalty belong to the schedule. It belongs to the programmes themselves. And for this, you are to blame.

I think you will have a positive effect on programming long term. Because there is so little wheat to contrast the chaff, the quality



The Sky+ planner enables you to record and store up to twenty hours of programmes

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content sticks out, is recorded as series - or at least part-series - and is savoured. Schedulers won't be able to get away with their usual trick of breaking up quality programmes with cheap, weaker shows.

Your parent company, Sky, obviously thinks a lot of you. It wouldn't have blown a cool £20m on a recent advertising campaign, telling everyone how wonderful you are if it didn't. I also like the way you let me create my own channel. I can sit back and plan my viewing seven days in advance, compiling a list as I go.

The personal touch

The problem is I need more personalisation. I know you give me 20 favourite channels that I can flick through at the push of your EPG's blue button. And for this I am grateful. But that's just 20 channels out of a total of nearly 1,000. I need to be able to control what appears in my electronic listings before I start harvesting my favourite programming.

I want to be able to tell you that I never ever want to receive shopping channels. Nor do I want to see what's on in Welsh on a Tuesday evening. (I absolutely welcome the presence of a Welsh channel. It's just that I don't speak the language - nor do I ever want to learn it.) At work my email spam filter blocks messages offering me everything from debt relief to hand relief. I need the same quality control applied to my onscreen TV listings.

What's more, 20 hours worth of stored viewing simply isn't enough. I don't blame you or Sky for this. If I had enough space to record my favourite 100 classic films, I wouldn't keep coming back for more. You are there to enhance my Sky broadcasting experience - not detract from it.

But the biggest question I keep asking myself is 'Are you the future?' You are an admittedly cute piece of consumer electronics with a bit of computer technology cleverly grafted on. You may think that at the tender age of just a two-and-a-third, you're barely a toddler. But in terms of the PC industry you'd be coming up for pension eligibility.



Yes, I know you can do automatic minor upgrades online and I do appreciate my new-found ability to record two channels at the same time while watching another. But if you think this keeps you futureproofed you've got another think coming.

Sony, brand-queen extraordinaire, is already selling its PSX in Japan. By the time the PSX arrives in the UK it is expected to combine a hard disk PVR (personal video recorder), TV tuner, DVD recorder, PlayStation2 games console, broadband access and the ability to procure a host of music, film and gaming content online. It's also likely to be very aggressively priced.

There are Freeview set-top box manufacturers out there doing technology cocktails. Want an LCD TV with built-in DTT (digital terrestrial TV)? No problem. Need a Freeview PVR set-top box combined with the mass storage capability of recordable DVD? Sure thing. In the US Dell's LCD TVs are now shipping with cut-price deals on your erstwhile rival Tivo. And don't get me started on Microsoft's Windows Media Center.

Your window of opportunity, as the marketing folks say, is getting smaller all the time. Everyone wants a piece of the digital home theatre. There's nothing for it - your parent Sky has to waive your hardware and installation fees. I'm sorry if this makes you feel cheap, but it's for your own good.

Fond regards
Guy Dixon, online editor, *PC Advisor*

PS I look forward to working with you again as part of a long-term review of Sky's £3,500 42in gas-plasma Home Entertainment System... ☒

Glossary

- PVR Stands for personal video recorder. Hard disk-based device with an EPG that aims to replace the VCR. Records at a much higher quality than tape.
- EPG Stands for electronic programme guide. Offers onscreen listings for all channels.
- DTT Digital terrestrial TV, aka Freeview. Free-to-air digital channels that can be received using a digital TV decoder and conventional antenna.
- STB Stands for set-top box.
- Time shift The ability to pause live TV for up to 30 minutes.



Land of the Freeview

The Freeview revolution has given birth to a new breed of set-top box that goes way beyond the ability to view digital terrestrial television. Guy Dixon looks at a new pretender for ownership of the home network

The number of Freeview-equipped homes is approaching the two-and-a-half million mark just 15 months after launch. Attracted by the one-off hardware investment - in some cases less than £50 - the BBC estimates that by the end of this year around four million UK households will have plumped for Freeview.

The world's third biggest set-top box manufacturer, Humax, sees this as an obvious opportunity to piggyback a whole range of convergence technology into UK homes. LCD TV is now the fastest growing consumer electronic in the UK with the installed base set to hit eight million by 2005, according to Sharp. Humax sees gold in them thar hills.

This new year sees the Korean giant launching 17in and 30in LCD TVs with built-in terrestrial set-top boxes. Alongside its DTT (digital terrestrial television) LCD TVs, it is also releasing hybrid audio/visual products that combine set-top boxes with a DVD player, MP3 player and DVD recorder.

Matching enhancements to Sky+, Humax is bringing out an update to its first PVR (personal video recorder). The updated Humax PVR-8000T (see right) will have two tuners, allowing users to view and record two different channels simultaneously. It is also looking at set-top boxes with removable/upgradable hard drives via a front cartridge in combination with recordable DVD. ☒

Humax PVR-8000T

After several weeks living with Sky+, the £200 Humax PVR-8000T felt a little tacky. The EPG (electronic programme guide) wasn't as pleasurable to use and the Freeview-based box needs an extra tuner - you can't watch one digital channel and record another. But it does feature a perfectly usable programming guide, making it very straightforward to set future and current recordings.

The PVR-8000T offers 20 hours of recording but only allows five favourite channels in contrast to Sky+'s 20. As only a fraction of the overall number of channels are currently available through Freeview, though, five is sufficient.

The Humax also provides timeshifting features such as the ability to pause live TV for up to 30 minutes, fast forward and fast rewind, along with similar frivolous gimmicks like slow motion.

Battle of the EPGs

In the digital home it's the person who controls the EPG that rules the roost. If you've got a TV, VHS and DTT set-top box the chances are you've got three remote controls. What you need is just one remote to rule them all or bind them - a single, all-encompassing über fuhrer EPG capable of managing home entertainment. In search of this quest the BBC recently announced plans to launch its own "fully flexible, platform neutral super EPG that will allow TV content to be recorded Tivo-style". Viewers will be able to watch current and archived BBC programmes on their broadband PCs or home entertainment systems. Alternatively they could download shows to their Windows Media Center PC to view on their TV.

While Microsoft wasted several months preparing for September's launch of Media Center, many manufacturers came up with their own versions of the ideal entertainment PC. But should we entertain them, asks Rosemary Haworth

Entertainment PCs

acking their machines with all the necessary hardware, vendors have taken the initiative and created their own Media Centers. These PCs offer a user-friendly menu that makes accessing content a breeze and a remote control that lets you enjoy it all while reclining in the lounge.

But don't bank on being able to access a wealth of new channels simply because the entertainment PC you bought brags of its TV and PVR (personal video recorder) functions. It depends on the type of TV tuner card installed. Acer's is terrestrial only but works a treat whereas most Freeview ones we've tried don't - if they work at all. In many cases, cable subscribers can also use their set-top box while analogue TV viewers are restricted to terrestrial channels.

In general, I wouldn't want to mess with setting up live TV recording and timeshifting via remote control because it requires closeup mousing dexterity. Similarly, until you've got a few tried-and-trusted stations programmed in, cycling through using the remote control to find receptive radio stations is an endurance test for your digits and patience.

The same is true of less-assuming items such as your digital photo collection. With small folders of images or removable media, navigation is a breeze as you scroll through a few thumbnails or a short menu to find the image in question.

But I question how easy it will be finding what you want once you've got a few months' worth of MP3 audio and video files, a hard drive clogged with TV recordings and a stack load of photos. 'Create playlists' or 'put it on random' are the standard answers I receive from MP3-player makers and digital content providers. Sorry, but I just don't buy it.

I want to be able to quickly and easily access tracks and images stored on my sleek and shiny entertainment PC. The answer is an alphanumeric keypad that lets you tap in a search term or onscreen options that do the same. A girl likes to have it all, but she also likes to be able to snap her fingers and enjoy it.



Acer Aspire Pleasure Centre

No amount of solid silver-grey casing can disguise the fact that the Aspire is a desktop PC with, well, aspirations. Acer has made a virtue of its bulk and styled it like a jukebox, slanting it at the front, adding CD player-type functions and a status screen along with a Super Dial that lets you access different operating modes: picture, music, video, PC, FM radio or TV.

You attach the Aspire to your existing TV monitor or flat-screen display. You can then operate it as your main entertainment device from a sleek remote control that, when not in use, lies in a recessed bay on the unit's top. Using the machine is a doddle and there's little need for the very basic but thorough user guide.

Apart from the standard couple of software apps that need to be set up as on any new PC, the only thing you need to configure is the TV function. Reception on the PC desktop is superb but it drops several grades using the Aspire's main TV function. Although the actual TV feature disappointed, I was amazed to get such clarity and distortion-free reception from a PC TV card. Viewed on a good flat-screen display and with the support of a 128MB graphics card, even *Coronation Street* looked glamorous.

When in non-PC mode, simple interfaces let you easily navigate your way to MP3, CD and video tracks or any of the myriad choice of media cards you want to read digital images, video or other files from. Slots to access these as well as your CD and DVD drives, plus ports to add extras via USB, are concealed behind a plain black sliding panel on the machine's front.

The Aspire's Super Dial or remote control mode switching is hard to fault for an evening's entertainment as you can do the lot from the comfort of your sofa. To test this I got the girls round for a night watching DVDs and - genius this - singalong chart hits courtesy of Sunfly's karaoke series.

Unlike some PC vendors' takes on entertainment PCs, Acer doesn't stop you enjoying your multimedia while you work or access email. You don't feel as though you're being cheated of standard computing functionality or the option of whistling along to a catchy tune while you work. If space constraints mean you really must house your PC in your living room, this is a stylish option. And the fact that it patiently sits in standby mode ready to deliver music, video or any other type of service you require in a flash makes it a realistic replacement or complement to your existing entertainment setup.

Acer: www.acer.co.uk
 Price: £999 inc VAT
 Specifications: 2.8GHz processor; Windows XP Home; 512MB DDR RAM; 120GB hard drive; 16x DVD-RW drive; 128MB graphics card; onboard sound; network card; wireless optical mouse and keyboard; Microsoft Works Suite



Systemax Applaud

On looks alone this all-in-one entertainment PC is the best of the bunch. As with the Acer Aspire, its silver casing ensures that it harmonises with the rest of the entertainment components in most living rooms - that is, your DVD player, TV and VCR.

This puts the Systemax Applaud at an immediate advantage - it's far more likely to appeal to the customer casually strolling round PC World than, say, the Packard Bell (see pix) where the attempt to create a distinctive design means the product jars rather than blends in.

Systemax can't actually take the credit for the Applaud's design. This is one of several similar models (including those from Evesham, Hi-Grade and Iridium) based on an AV PC shell. Even so, it drew many admiring glances and comments from colleagues and friends. It's also the only one of the four proprietary systems I tried that I would seriously consider giving houseroom to in my smallish flat as a replacement entertainment system/PC.

So what's the Applaud like to use? It's a dream. Simply sit back and listen

to your CD or MP3 collection, fire up the TV or stick a DVD movie in the optical bay that flicks out from the righthand side of the widescreen display. The speakers flanking the widescreen display are good and solid - great for atmosphere when playing Tomb Raider or Championship Manager, which are both part of the package.

The remote control is long and slim with sensibly spaced and not too fiddly keys. It performs without fault when asked to skip between tracks or images from at least the length of my lounge.

The Systemax comes with an optical mouse which ensures that there's absolutely no desk clutter while the keyboard, of course, is built in. I wasn't that keen on the keyboard because it felt rather loose. Hooking up the TV wasn't as smooth as it should have been either, although cable users shouldn't encounter any problems.

All in all I would say that the Systemax Applaud is a fantastic-looking widescreen laptop which gives its only current Media Center equivalent, made by Toshiba, a real run for its money.

Systemax: www.systemaxpc.co.uk
Price: £999 inc VAT and delivery
Specifications: 15in TFT widescreen all-in-one unit with fold-up keyboard; 2.8GHz Pentium 4; Windows XP Home 512MB RAM; 160GB hard drive, DVD/CD-RW drive; 32MB Savage 8 graphics card; built-in stereo speakers; TV and FM radio tuner card; optical peripherals; remote control



Packard Bell iXtreme 613 Duo

Oh dear. Someone at Packard Bell has seen an Apple iMac and decided to try and emulate its looks right down to the vaguely spherical speakers that in the Apple's case are iconic and in Packard Bell's... well, perhaps it was being ironic.

If they'd managed to hide the gubbins of this PC in its childish-looking 15in flat-panel, it might go some way towards the oft-promised move away from a desktop reminiscent of office life and towards the living room. Instead, you get a standard tower that, like the rest of this system, is encased in shiny white and pale grey plastic. There's also a unit that sits on top sporting a CD bay and a six-in-one card reader.

This latter idea is great. It's the idea that hiding a bog-standard PC tower under the desk and then pretending it's not there that isn't so good. And for some reason there's no remote control - an add-on that would have cost Packard Bell all of, ooh, a tenner - further detracting from the whole entertainment centre idea.

Nor do you get wireless peripherals, so you're left with the usual ugly cable trail. It's a shame because the machine boots up rapidly enough, although the On button is

situated on the tower. And left in standby mode the iXtreme will serve you up some tasty multimedia morsels double-quick.

The plastic 'Tomy My First Computer' theme is continued in the machine's interface. After being prompted to install a list of apps to make web surfing and PC use safer (plus the obligatory AOL or Freeserve ISP software), you're left with a Packard Bell-branded desktop background nothing like the Media Center-esque interface expected. This appears only after you select a multimedia task such as playing a CD or viewing your picture library. Once you're used to the arrangement and the lack of funky uniform look, you just get on with using it like a standard PC.

Packard Bell is one of many firms that's selling systems available in both non-Media Center flavours and, generally for a little more dosh, ones that are. But it's one of the few that hasn't made an effort to create a decent user experience for the entertainment seeker who's after cheaper thrills. Packard Bell has bargained on Microsoft's system winning the day and quashing the equally good proprietary alternatives through sheer weight of marketing. ☒

Packard Bell: www.packardbell.co.uk
Price: £1,199 inc VAT
Specifications: 3GHz Pentium 4; Windows XP Media Center Edition; 512MB DDR RAM; 160GB hard drive; DVD-RW drive; 128MB ATI Radeon graphics card; 6-in-1 card reader & CD/DVD-ROM drive Duo unit; PS2 mouse and keyboard; 15in TFT flat-panel