

How Betamax bit the dust – and other tales of forgotten tech

January 4 2016, by Laurence Murphy



Credit: Pok Rie from Pexels

[Sony are to no longer make Betamax video cassette tapes](#) – something that will come as a surprise to many people who thought that Betamax had long since bitten the dust. But 28 years after it lost the battle to the

VHS (or Vertical Helical Scan) format produced by JVC, Sony – which stopped manufacturing Betamax recorders in 2002 – will cease production of the tapes, too.

It's a long, strange tale, set against a technology landscape that has changed quickly. Betamax was the first major attempt to provide high-quality record and playback capabilities of broadcast and domestic material to the average home.

So why did VHS – a [technically inferior standard](#) – win the standardisation battle in Europe and worldwide? As with all technological advances, just having the best technical performer doesn't necessarily mean that you will succeed and get widescale adoption. The per-unit cost to produce and to the end user define, in most cases, how viable a new technology launch will be.

The deals that the VHS lobby made with film studios, the fact that the VHS cassette could hold more minutes of material, and the lower unit cost of VHS meant that Betamax's days as a domestic standard were always going to be numbered. Betamax lost the numbers game and lost the momentum. And the public's trust and desire are difficult to regain once they have wavered.

Of course, just because the public went with VHS doesn't mean that the industry didn't care about Betamax. Professional broadcasters used a variation on Betamax's core technology – Betacam, Betacam SP and Digital Betacam – for years after Betamax was no longer considered suitable for home use.



For the record, professionals prefer vinyl.

Round and round we go

But then many formats have fought similar battles. Vinyl was seen as a prime target for digital replacement when Philips launched its compact disc (CD) player – there was no stylus to replace and you didn't have to worry about the vinyl warping or getting significantly scratched.

But vinyl has a redeeming feature – it's an analogue system. When a vinyl disk plays it isn't a sampled, [quantised](#), chopped-down and compressed version of the analogue music. Humans are analogue – our ears and eyes are analogue and as we can't see the matrix we don't

assimilate digital directly – it has to be returned to an analogue expression for us to perceive it. Which may be one reason why vinyl [is still hugely popular](#).

The nature of digitising discards information which is reconstituted later in the process – for a purist, this loss of information is unacceptable. That's why musicians and DJs tend to like vinyl and will fight to keep the standard alive.

Blu-ray vs HD DVD

The last significant disc technology standard battle fought in the home was between Blu-ray and HD DVD. On paper, HD DVD [had it in the bag](#). A high-definition extension of an existing global standard, HD DVD had the early backing of major film studios while Blu-ray looked to be a riskier, unsupported option.

Blu-ray was a new technology and format – more delicate than HD DVD and initially more costly to produce as it involved completely new production facilities.

Blu-ray's success can be attributed to many factors but one of the most significant was the [inclusion of a Blu-ray drive in the Sony Playstation 3 games console](#), a master stroke of forward planning and a significant gamble.

Sony was a major player in Blu-ray as a standard and it wanted a way to give the public access to the new disks – so they made a Blu-ray player the main drive in the PS3. Even though the games didn't benefit from Blu-ray technology at the time, the move positioned a next generation Blu-ray drive in the living room of every gamer with a PS3.

Sony made [significant losses on the PS3](#) in its first years as it was such

an expensive drive. But the picture quality of Blu-ray began to gain ground as Blu-rays could be seen in full HD and, once the cinema companies aligned themselves with Blu-ray, the penetration in the living room market proved to be the long-game tipping point which meant that it became the standard for high definition disk delivery.

Toshiba, the main backer of HD DVD, [made substantial losses](#) when they called time on HD DVD as a standard. Manufacturers are very wary of another format and an all-out standards war isn't now viewed as good for business.

Ultra high-definition Blu-ray (UHD) is [due for release in early 2016](#), the first UHDTV physical media standard for the home.

Blu-ray UHD could be the last significant physical non-streamed delivery standard for the home. The explosion in the streamed delivery of music, film and media through providers such as Netflix and Amazon, accessible from the Cloud and mobile devices, coupled with improved broadband speeds means that the need for a physical disk or delivery standard is debatable.

Disks could quite quickly become as redundant a technology as Betamax – certainly as long as the internet works and continues to develop.

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