

# Mobile TV Business Models, Technologies and Markets 2008 -12



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## Executive Summary

Mobile TV technologies have multiplied rather than consolidated, and despite an early lead by DVB-H, in what seemed a two horse race with Korea's T-DMB, there are now at least 15 separate Mobile TV technologies that operators can bring to bear, with a variety of business models. In the words of one investor, "So it's just a mess?" However, while it might appear haphazard for operators, the world is settling on a handful of these technologies that are being forced together into a number of blended services working side-by-side on the same device. Increasingly, it is not the technology choice that is difficult to make – that is often dictated by local geography or politics – but finding the right business model.

During 2007, those countries that have adopted a 'free-to-air' policy have sold far more Mobile TV handsets, but this does not mean that any operators are making money out of these networks and devices. Sometimes cellular operators are forced to back Mobile TV not because there is a clear business model to do so, but because it would leave them as the odd one out for *not* launching it, and drive up their customer churn.

Despite this, Japan has now shipped more than 20 million 1 seg ISDB-T mobile handsets, and Korea has 8 million T-DMB devices, many of which are not handsets. Chip suppliers and device makers are flocking to free-to-air services, which are driving the transition to Mobile TV, but it does not guarantee any improved ARPU for cellular operators. Many Western operators such as Verizon and AT&T are now looking at Mobile TV purely as a threat to be countered rather than a service to be offered. They prefer to promote inferior, streamed cellular video services, which at least improve ARPU, even if it is for a minor percentage of their total customer base.

However, the cellular operators will not be able to hold the tide back forever. Broadcasters need Mobile TV and the potential future advertising revenues that it promises, which is why technology suppliers have targeted the free-to-air model across the world. The arrival of such services sets a deadline for every cellular operator to have a clear strategy for co-existing with this important new technology, or risk desertions from its established customer base, driving churn out of control.

The Apple iPhone has already shown the world what can happen when cellular operators ignore the agendas of their customers, and in Mobile TV this threatens to happen just as broadcasters start looking for a platform on all portable devices.

Mobile TV is coming whether cellular operators like it or not. It has already begun to scale in some parts of the world, and inevitably is beginning to be understood better by consumers. This report forecasts 301 million specialist handset devices, that can receive one or other format of Mobile TV, will be sold by 2012. A further 60 million non-handset devices will be added to that, making total shipments of 361 million devices which can view Mobile TV. However, the key finding of this report is that handset transition will drive the emergence of Mobile TV services, and this is observed to be more than three times faster in a market where a free-to-air Mobile TV service is available, compared with those markets that offer a paid subscription service.

For cellular operators to reach a point where paid Mobile TV services generate ARPU, the short-cut route is to encourage transition to Mobile TV-enabled handsets using a free-to-air service, and from there go on to offer premium services. Other revenues are available from Electronic Program Guide (EPG)-triggered advertising, channel change advertising and media asset sales, to augment free-to-air TV service payments. However, once again, these rely on there being enough handsets in use for mass adoption of Mobile TV to take place.

By adopting paid Mobile TV services, the US and Europe will initially see progress as slow and steady, deriving mostly from content that is already consumed over cellular streaming unicast TV services, rather than making the best of the vastly superior quality of broadcast Mobile TV technologies. Later, as technologies such as ATSC M/H (Advanced Television Systems Committee Mobile and Handheld) and DVB-T2 (Digital Video Broadcast-Terrestrial version 2) emerge, new free-to-air approaches are likely to be launched by these economies, and then their spending power will begin to see them catching up on the Asia Pacific region.

Asia Pacific free-to-air services will find advertising-only approaches tough to bring to profit, due to immature advertising infrastructures. Eventually, premium services will emerge which leverage off the rapid handset transition of free-to-air and offer hybrid services, part free, part paid. Only then will Mobile TV reach its full promise, emulating existing terrestrial TV with its free, paid, premium and pay per view tariff layers. This experimentation will all happen during 2009 and 2010, with the West finally offering free-to-air services alongside paid TV, and Asia Pacific adding paid services once its markets reach 50% handset penetration.

Ultimately, Mobile TV in any given territory will likely be a combination of technologies and business models. Some technologies such as T-DMB and ISDB-T will be controlled almost entirely by broadcasters, pushing the advertising model. Other technologies such as TDtv (Mobile TV over UMTS TD-CDMA), DVB-SH (Digital Video Broadcasting - Satellite services to Handhelds) and MBMS (Multimedia Broadcast Multicast Service) will be controlled entirely by cellular operators, focussing on raising ARPU and reducing churn. Other technologies such as DVB-H will be used in both business models. We anticipate multi-mode devices and handset software stacks that blend multiple services into a single experience, for instance, DVB-H and DVB-SH, or MediaFLO and ATSC M/H. Chipsets and radios that can work with multiple standards will come to dominate the market.

Until cellular operators perceive a clear and realizable business model, they will remain hesitant over launching Mobile TV services and all the drive will come from chipmakers, handset suppliers and broadcasters. We believe that the Mobile TV dam will not burst until well into 2010.

China and Asia will ship some 50% of all specialist mobile handsets up to 2012. We expect Western Europe and the US to take vastly different paths, but to arrive virtually at the same place. ATSC M/H will have a late and profound effect on US shipments beginning in 2009 and will accelerate beyond that. Europe will mostly stick to its paid service ideal and will have a lower attach rate throughout the forecast period, but – owing to higher European mobile penetration – will see increases in subscriber numbers earlier than the US.

While 2008 will see the shipment of around 29 million specialist Mobile TV handsets, this will almost double the following year and rise to 52 million devices as shipments plateau during 2010, and then continue at more or less the same rate going forward. Non-handset devices, which can receive Mobile TV, will ship in varying rates all over the world, with 16.5 million devices shipped during 2012 and 60 million accumulated shipments over the whole forecast period.

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