Learning from Past Failures

Vital lessons can be learned from failed satellite ventures

by Elisabeth Tweedie

The satellite industry is a risky business – the stakes are high, the successes very notable and the failures absolutely spectacular! What distinguishes the two? Is it just pure bad luck that leads to failure, or could some of these have been avoided?

Launching any new business is challenging: to go back to marketing 101, to ensure success each of the four *Ps* (product, price, promotion and place *aka* distribution) need to be right. Complicated enough in any marketplace, but once launched, satellites are for the most part "fixed" for up to 15 years, sometimes longer, while their terrestrial competitors are free to change and advance at a much faster rate. Add into this the other factors needed for a successful satellite business: a successful launch, orbital slots, frequency allocation and coordination, Telemetry, Tracking and Control (TT&C), uplinking and ground equipment not to mention the considerable finance that needs to be raised, and it seems almost miraculous that any satellite business succeeds! But thanks to a sound business plan, good management, robust technology and maybe a modicum of luck in some cases most do indeed succeed.

But some like WorldSpace and Voom do not. Hindsight is always 20/20 and in a business as complex as ours although one or two things may stand out it is often a combination of factors that ultimately tip the scales to failure. The question is can anything be learned from these failures?

Satellite Radio operator WorldSpace launched its first satellite AfriStar in 1998, obviously targeted primarily at Africa. There is no denying that this was a vast untapped market and the intention of providing a news service to rural areas was an admirable goal. There is also no denying that in a continent where in most countries the average annual income was below US$ 500 the number of potential subscribers was severely limited. The second satellite AsiaStar was launched in 2000. The initial target market was India followed by China. Average per capita income in India was not significantly higher than in Africa, but India did (and still does) have a significant middle class so at least on paper was potentially a better market. However the monthly subscription was pegged at around US$ 2.35 with a SAC (subscriber acquisition cost) of US$ 175 meaning that it was taking around six years to break even on each new subscriber. (Contrast this with DIRECTV who at the time were reaching breakeven on new subscribers in less than a year). Even after breakeven with an annual revenue of less than US$ 30, it was going to take an awful lot of subscribers to recoup the cost of building, launching and operating the satellites. Take up was also hampered by the cost of the receiver which at around US$ 200 was an expensive item for developing economies.

Unlike XM and Sirius, WorldSpace initially only provided service to portable not mobile devices and it had no ground repeater stations. Given the significantly smaller numbers of vehicles in its original target markets this seemed to make sense. However, it did mean that WorldSpace had to do all its own marketing as it was unable to rely on car manufacturers or even after market suppliers of car radios to boost its sales. When the company later turned its attention to Europe with commercial service planned for 2007, it negotiated licenses to build terrestrial repeaters in Italy, Switzerland and Germany and had an agreement with Fiat to offer a WorldSpace radio as an option on new Fiat cars.

There was an IPO in 2005, initially successful the shares then dropped by over 40% in the first few months. At the end of 2005 WorldSpace was reporting around 100,000 subscribers over half of which were in India. Following the IPO there were repeated funding rounds to finance the expansion, terrestrial repeaters, and fund the ongoing losses. To compound matters there was also technical problem with AfriStar. WorldSpace filed for Chapter 11 Bankruptcy in 2008.

Voom was another doomed satellite venture. A subsidiary of Cablevision, Voom was the brainchild of Cablevision founder and former CEO and Chairman Charles Dolan. At the time of its launch in 2004 DIRECTV and Dish between them had around 22 million subscribers and were adding approximately another 200,000 every month. In addition there were another 65 million cable households in the US. Voom was hoping to capitalize on what was then the relatively new trend of HD. Around six million HDTV sets had been sold in the US but DIRECTV and Dish were only offering seven HD channels each. Voom was launched with an exclusive package of 21

Cablevision's Voom satellite HDTV service, launched in 2004, was probably ahead of its time. A more thorough assessment of the existing market would have increased its chances of success.

satellite HD Channels and used OTA (over the air) antennas to receive local digital SD and HD channels. There were another 88 SD popular channels. Unlike WorldSpace, Voom was a short lived venture and after a boardroom struggle the satellite and package of programs was sold to Echostar in 2005 for US$ 200 million; a great deal for Echostar. Would there have been a third DTH provider in the US if Cablevision had hung on or had Cablevision totally misjudged the market? With an established duopoly a third player entering the market has to offer something pretty special. Consumers already had hundreds of channels from which to choose so essentially all Voom was offering was an additional 21 albeit in HD (and slightly more expensive subscriber equipment). Was that really enough to compete with two well entrenched players? Judging by the speed with which the venture was terminated the business plan must have called for a far more rapid take-up than what was achieved...and doubtless for a smaller loss than the US$ 450 million that was reported for one quarter alone. Cablevision is reported to have sunk over US$ 500 million into Voom, building and launching the one satellite obtaining slots for two others.

So, to go back to the original question: can anything be learned from these failures? Unfortunately no one has a crystal ball and totally unexpected events do occur, so no business plan can be 100% bullet proof. However sound objective market analysis based on solid research, taking into account not only the likely actions of competitors but also potential technology advances, ability to pay and most importantly historical adoption rates of comparable products can make a difference.

In the case of WorldSpace developing nations appear to be huge markets, but their ability to pay for the services they want or need has to be realistically factored into any business plan. By the time WorldSpace turned its attention to the potentially more lucrative markets of Western Europe, it had been hemorrhaging red ink for nearly seven years. O3b appears to have worked this out prior to its service launch. Initial presentations focused on connecting the "other 3 billion" to the internet by providing trunking and international gateways. This is still there but the maritime market, enterprise networks and path diversity for metro networks now also feature prominently.

Multi-nation services require multi-national marketing; that is to say multiple distribution agreements, marketing and advertising campaigns, payment mechanisms, landing rights, frequency coordination, and in WorldSpace's case programming as well. All of which have to be carried out in multiple languages with sensitivity to cultural issues–a very expensive and time consuming process. Something WorldSpace's original owners may not have had the experience to recognize.

In the case of Voom, Dolan was an experienced media executive, who had bucked the trend by cabling New York at a time when cable was considered the alternative to OTA for rural areas, so presumably he believed that he could prove people wrong again. In 2004 approximately 80% of US households had either cable or satellite TV. It's highly unlikely that the 20% that had neither were going to be the early adopters of HDTV, therefore by definition Voom needed consumers to ditch their existing equipment and service provider in order to become a customer. That is a tough nut to crack. DIRECTV and Dish didn't require customers to get a new TV set, HD was an option added several years after launch. Granted Voom had 88 SD channels but they were selling HD and therefore relying on a speedy uptake of HDTV. A look at the adoption of color TV in the US where customers were required to swap out hardware in order to get a better viewing experience would have shown that it took over 10 years to reach 10% penetration. HD was first introduced in the US in 1998 and with 6 million sets sold penetration was approximately 5% of US households 6 years after launch in 2004. A more dispassionate look would have realized that HD was likely to follow a similar trajectory to color TV. (In fact it took just over nine years to reach 10% penetration). Couple this with the fact that that Voom was an unknown and challenging established and well known players and it seems likely that a more impartial view might have written the business plan differently.

"...sound objective market analysis based on solid research, taking into account not only the likely actions of competitors but also potential technology advances, ability to pay and most importantly historical adoption rates of comparable products can make a difference…"

The well publicized failures of the original MSS systems in the 1990s have been examined and analyzed many times and there were a multitude of colliding factors that led to their demise, but the one that wasn't often mentioned was a simple belief that "mine is better." A belief probably shared by Cablevision when it launched Voom. When you're on the inside working on a new and exciting business it is all too easy to get caught up in the enthusiasm particularly where new technology is involved, and lose sight of the fact that not only does everyone not feel the same way, but there are a myriad issues to be factored in to a well constructed business plan.

Elisabeth Tweedie is the Associate Editor of *Satellite Executive Briefing*. She has over 20 years experience at the cutting edge of new communication and entertainment technologies. She is also the founder and President of Definitive Direction, a consultancy that focuses on researching and evaluating the long term potential for new ventures, initiating their development and identifying and developing appropriate alliances. During her 10 years at Hughes Electronics she worked on every acquisition and new business that the company considered during her time there. She can be reached at: elisabeth@satellitemarkets.com