

Lecture 26- Pre-Lecture reading

Case Study 2: Nextel & Sprint

In this case study we will focus on Nextel, a company that began a “Fleet Call” and used “SMR” channels. These SMR (“Specialized Mobile Radio”) channels were the “other” channels that the FCC created at the same time as cellular. They were intended to serve fleets like taxis and police, and they got almost half the UHF-TV spectrum at 900 MHz. The focus of the FCC (as with cellular) was more spectrum-efficient technology, but there were no ideas like cellular reuse for these small 1-channel systems that typically served “vehicle dispatch” purposes (police, taxi, etc.). In desperation, the FCC decided to license this spectrum in small groups of channels, with the hope that such groups of channels would serve groups of fleets in a more efficient way. Instead of having (say) a taxi-cab company own its own radio system with a single channel for “dispatching” cabs, a system with 5-20 channels would be shared by many dispatchers. It was thought that such sharing would be more efficient, but the old 1-channel systems were pretty efficient (dispatchers were pretty good at using the channels) and these shared blocks of channels weren’t popular, but Nextel was in that business. Nextel offered more sophisticated services like access to telephone and they served long distance truckers, so their service was wide area.

The small groups of channels were not sufficient to create a cellular system but they were often available and were much cheaper to acquire. In the 1990s, when cellular was starting to grow dramatically, and new competitors like T-Mobile and Sprint were buying 2GHz channels at high prices, Fleet Call (later called Nextel) saw the possibility to use SMR channels (with digital voice technology) to create cellular systems. They described what followed in a “history” that we will quote here in red, to show their viewpoint on what was happening.

With the break-up of AT&T as a nationwide local service provider in 1984, local telephone companies inherited the rights to develop cellular telephone networks. To ensure speedy development, the FCC limited each market area to only two cellular companies. In such places as San Francisco, Denver, Chicago, and New York, customers were allowed a choice, but only between two cellular companies.

The companies best suited to develop cellular systems often were those with the most resources, such as established telephone companies BellSouth, Southwestern Bell, Ameritech, and GTE. Many smaller companies in the industry, unable to compete or raise financing, were steamrolled into mergers with these companies. What resulted was a regime in which pairs of competitors locked up virtually every market in the country. The entry of third tier competitors was precluded by FCC rules aimed at nurturing the market and conserving capacity on the airwaves.

Thousands of other radio wavelengths had been reserved for some future use. Others had been set aside decades before for mobile radio, using an old and highly inefficient analog signaling system--an accident of history and technology that provided the seed for a new form of mobile telephony that could operate in competition with cellular systems. These specialized mobile radio networks could be converted to use digital signals, which require only a fraction of the bandwidth of conventional capacity-hogging analog signals. By going digital, previously limited radio bands could be opened up to handle thousands of calls.

Around this time, the FCC recognized that its policies had successfully allowed the cellular industry to mature to a point where greater competition could be allowed. Rather than further crowding existing cellular frequencies by allowing more competitors into each market, the commission chose instead to back the development of specialized mobile radio (SMR).

Within the next 12 months, Fleet Call had financed the acquisition of ten mobile radio companies and began laying plans for the construction of communications networks in large markets. At this early stage, Fleet Call concentrated only on acquiring SMR licenses. The task of turning SMR frequencies into a new type of cellular system was still years away.

Nextel's plans were both creative and naïve. They wanted to serve both dispatch (where a very large coverage area would serve a fleet efficiently) and telephone (where small cells were needed). This would cause interference that would affect dispatch systems like the police. They thought "digital" service was a big advantage (particularly in letting them operate with fewer channels) but they didn't see that the cellular operators would quickly switch to digital voice. They recognized that operating in a different frequency band would make service for "roamers" difficult. They also created their own operating protocols, so their "cellphones" were unique and more expensive. They didn't seem to realize that operating with fewer channels than their cellular competitors would be an economic disadvantage.

The financials weren't good.

The results were increasing revenues but increasing losses

All revenues/costs in \$M

	1996	1997	1998	1999	2000	2001
Revenue	333	739	1847	3326	5714	7689
Expenses						
Cost of Revenue*	248	289	516	697	2188	2888
SG&A	330	862	1551	2094	2278	3020
Depreciation	401	526	832	1004	1265	1746
Interest	206	378	622	782	849	1196
"Restructuring"						1769
Net after expenses	(852)	(1316)	(1674)	(1251)	(866)	(2930)

We know that Nextel had less spectrum and the wrong spectrum and unique (expensive) handsets, but they had unique users (fleets) that loved their tailored and unique services. In 2001, for example, their users were paying \$400/year more than Verizon's users. Unfortunately, their cost per user was more than \$600 more than Verizon's cost per user. They didn't have enough spectrum, their SG&A/user was high (they had only 8M users compared to Verizon's 29M) and they were paying out almost 40% of their revenues to others for roamer services. Despite these problems, in 2002-2004 they showed growth and increasing profitability. Their revenue per subscriber was still \$200 more than Verizon's (those happy fleet customers that loved Nextel) and they reduced their costs per user so it was only \$130 more than Verizon's. Their profit per subscriber was significantly better than Verizon's. It was a remarkable turn around for a smaller company, but it was dependent on the good will of their unique users.

Nextel 2002-2004

Turning the corner?

All revenues/costs in \$M

	2002	2003	2004
Revenue	8721	10820	13368*
Expenses			
Cost of Revenue	2535	3169	4003
SG&A	3039	3453	4241
Depreciation	1595	1694	1841
Interest	990	802	565
"Restructuring"	35		
Net after expenses	527	1702	2718

***still getting \$835/user!**

Then, at the moment of their impressive success, they decided they were too small to achieve the dominant position to which they aspired. AT&T and Verizon had more users than any other provider, but a merger with Sprint could give them a roughly equal footing with the big guys.

When you want to compete with the big guys, merge with another company?

Sprint, Nextel in \$36B merger

Wireless company will have about 40 million customers, putting it closer to 2 larger rivals.

December 15, 2004:

The companies called the deal a merger of equals, saying shareholders will each own about 50 percent of the new company, which will be called Sprint Nextel.

"It's a great deal for Sprint. They didn't pay much of a premium for Nextel. I'm not sure how they pulled that off," said Greg Gorbatenko, telecom analyst for Marquis Investment Research.

But Gorbatenko said the two companies are not the best of fits with each other, with very different customer bases and business models.

13

But some analysts saw problems with the merger.

Another view

By Kent German (CNET "cell phone guru")

September 6, 2005

The oddest of odd couples permanently joined forces last month when Sprint and Nextel completed their \$36 billion merger. When the marriage was first announced last December, it astounded the wireless world. The AT&T and Cingular merger made sense; they operated on similar networks, offered some of the same handsets, and catered to a comparable customer base. However, Sprint and Nextel seem to have very little in common. Sprint uses CDMA, while Nextel operates over a proprietary network. Sprint attracts a broad range of customers, while Nextel has long depended on a loyal base of business people who love the carrier's pioneering push-to-talk (PTT) functionality and its corporate-friendly services. Plus, Nextel's *bulky Motorola mobiles are a sharp contrast to Sprint's long line of stylish silver flip phones.

*low volume product doesn't get improved

14

And the sceptics turned out to be right. From 2005 and 2006 “Sprint Nextel” made a tiny profit while they struggled to combine, but the merger of two very different companies wasn’t going well. The incompatible channels and technology were causing problems and those previously happy Nextel users were jumping ship. The employees of the two companies were temperamentally different and favored different marketing strategies. Layoffs (for efficiency) made everyone unhappy. At the time of the merger, each company was valued at about \$30B and the terms of the merger suggested that the combination was worth about \$80B. In fact, the inefficiencies of the merger created a company of much less value, and in February of 2008, after only two years of operation, Sprint Nextel officially “wrote down” its value by \$30B, acknowledging that the merger had been a disaster.

Sprint-Nextel: The Deal from Hell

Sprint has written down nearly \$30B,
which is pretty much what they paid for Nextel.

Feb 28, 2008

Nextel started out as simplex (push to talk service) for taxis and other dispatch services, using one or two hill-top, community towers. The Nextel interference problem started when Nextel was allowed to expand into cellular service. As Nextel built out cell towers, nearby, low-power police radios were drowned out. The FCC said it wouldn’t be a problem. They were wrong.

Under the plan agreed to in 2004, Nextel would exchange 16 megahertz of spectrum spread around the 700 MHz, 800 MHz and 900 MHz bands for 6 megahertz in the 800 MHz band and 10 megahertz in the 1.9 GHz band.

- According to Sprint Nextel’s 10-K report, the best-case scenario is that re-banding will cost the carrier between \$2.7 billion and \$3.4 billion.

18

Things didn’t get any better. The channels had to be exchanged and the Base stations had to be re-fitted. Users continued to leave. Losses continued and got worse. The value of the merged company continued to fall, losing 90% by 2012

Ongoing numbers for Sprint Nextel

	2006	2007	2008	2009	2010	2011	2012
Revenue \$B	41.0	40.1	35.6	32.2	32.6	33.7	35.3
Net gain	1.5	-29.8	-2.8	-2.5	-3.4	-2.9	-4.3

In 2013, Sprint-Nextel was bought by SoftBank and renamed Sprint. Shareholders got \$16.6B.

Losses continued, and in 2021, Sprint merged with T-Mobile. How do you think this merger of T-Mobile and Sprint has worked out for them? Try to read some news articles on the internet about this, especially in relation to 5G and form an opinion.