

CASE STUDY 1

Command Audio: Three Startups for the Price of One

SUMMARY AND AUTHOR'S NOTE

Don Bogue began his career in corporate America working for Ampex Corp. in the early 1980s in senior management positions. It was there that he ultimately met John Ryan, chief engineer for the camera group. But it wasn't until 1995 that Ryan approached Bogue, who at that time was the CEO of Gigtronics, about a new technology he had developed.

The technology that Ryan had invented would receive a broadcast signal and store all of it or only those parts that were of interest to the particular user. In other words, Command Audio (CA) would broadcast a variety of audio programming, and the users could choose what they wanted to store and listen to. The receiver provided users with an electronic program guide that let them select from the broadcast stream what they wanted to hear. A small hand-held device that was always on automatically captured the latest versions of the user's preferred programs every time he or she got into the car.

To provide such a service, CA had to acquire the content from broadcasters, acquire the rights to broadcast, and actually broadcast an interactive version. CA would receive an automated feed of broadcast material—for example, an NPR show. Then a technician would go through the broadcast and provide segment markers so that listeners could choose the parts they wanted to listen to. This could actually be accomplished in a matter of seconds.

Bogue believed that his target group consisted of 18 million people represented by those who resided in the 100 largest metropolitan areas, spoke English, and spent an aggregate of 60 minutes per day commuting by car. Customers were disproportionately male, were more inclined than other people to purchase electronic devices, and had higher incomes. To validate his estimates and to gauge demand, Bogue commissioned an independent market study. In a test of 625 residents in the San Francisco Bay Area, respondents were favorably accepting of the concept.

Bogue understood the need to license to other radio on-demand service providers and to media and entertainment companies seeking new channels for content distribution if he was ever going to reach mass adoption. He figured that these additional service providers could capture about 40 percent of the market by 2002.

In 1996, when Bogue wrote the Command Audio business plan, a few companies had announced intentions to bring satellite radio to market through point-to-multipoint systems that would transmit music and other programming to cars equipped with special receivers. However, satellite radio does not give the users control of what they listen to, how much, and when. A significant advantage that Bogue saw for CA was its low infrastructure costs, which reduced its capital requirements significantly when compared to other information and entertainment service providers.

Command Audio's first business model involved protecting the technology position and launching into four major markets. As the company prepared for an initial public offering in April 2000, the public equity markets suffered a crash, primarily in the technology sector. Bogue figured that by the time the markets recovered, the company would be out of cash, so he moved to business model number 2, which was licensing the company's tools and technologies to digital radio pioneers XM Satellite Radio, iBiquity, and Motorola. Initial results were encouraging, but then his licensees began to suffer development delays that would put the use of CA's technology off for three years, during which CA would not receive any royalties. To raise capital, in August 2002, Bogue sold the software development business to iBiquity Digital but retained the exclusive rights to license its intellectual property in every other field of use.

With digital and satellite radio already under license, Bogue turned his attention to personal video recorders, the sort of device pioneered by TiVo and ReplayTV. This market was very large but very difficult to penetrate. He began to approach the major consumer electronics companies as well as manufacturers of cable and satellite television set-top boxes. Although these companies had an interest in personal video recorders and saw them as the next big thing, they were reluctant to accept the fundamental nature of CA's intellectual property and the need to acquire a license to use it. They figured that if they ignored CA, the company would eventually disappear. It was clear that TiVo and Replay were using the audio time-shifting functionality embodied in John Ryan's inventions, even though they were focused on television. Bogue quickly realized that the key to his company's success was having the money to go after the companies that were infringing his patents, and he had to have enough funding to outlast them. His current investors, as committed as they were, would not be supplying any more capital for this latest business model; and, in any case, the amount that Bogue needed was significantly higher than they might provide. An exhaustive search produced the answer: an insurance policy that covered the cost of offensive patent litigation and provided several million dollars of financing at a price the company could afford. CA would pay an upfront premium and, upon settlement of the lawsuit, would repay what had been put out plus a premium.

With financing in place, Bogue began to study companies coming into the PVR market and selected a target to focus on for litigation: Sony Corporation. Bogue figured that if he could win this suit, the other companies infringing his patents would fall in line and pay royalties rather than risk infringement litigation. On February 1, 2002, CA filed a patent infringement action against Sony Corporation. The litigation took four years, during which CA prevailed in multiple Markman rulings, summary judgment motions, and a bench trial on inequitable conduct. After the two companies had spent over an estimated \$15 million, Sony decided to settle the lawsuit. It paid an upfront financial settlement and signed a royalty-bearing license for the use of CA's patents around the world.

WHERE TO USE THIS CASE

- Chapter 4: Use to discuss how business models evolve with the needs of the market and the company.
- Chapter 6: Use to discuss the process of intellectual-property development.
- Chapter 14: Use to discuss the role of the product adoption curve in marketing strategy.

CASE ANALYSIS

This case follows an individual who becomes an entrepreneur after serving in executive positions at two technology companies. Meeting John Ryan at Ampex Corp. was a critical connection in this story, because Ryan had the technical expertise to be able to solve a perceived problem (that people wanted control of their radio listening time) and invent a device to implement the solution. It appears that Ryan saw in Bogue someone who had the management and market expertise that he did not. Bogue had the ability to recognize how Ryan's patented technology might be commercialized. This presents a good opportunity to discuss the value of network contacts and putting together a team that represents both the technical and the business sides of the equation.

Focusing on the Customer

A follow-on discussion could focus on how the technology met the needs of the customer—in other words, how it was designed to solve a problem for customers: how to control what they listened to during commute time. From the initial design, Ryan and Bogue had identified the potential customer as “someone who is essentially paralyzed and blind while driving.” In other words, they knew that people had to be able to use the device while safely driving. They also knew that the real pain in the market was not for control of music, because customers already had that. The real opportunity was in the nonmusic categories that commuters enjoyed. A critical success factor for this business would be acquiring the content from broadcasters, but at the time, this did not appear to be a problem. There were plenty of providers in a market where brand name was not critical. They could also offer a benefit to FM carriers who had excess capacity and would welcome a new revenue source.

Finding the Right Business Model

Command Audio presents a unique opportunity to examine the issue of business models, particularly how the business model evolves throughout the life of the business. Often, the entrepreneur starts with a business model that seems to work but doesn't think about changing it to suit the evolving needs of the marketplace. Then that same entrepreneur wonders why the business is struggling. Fortunately, Don Bogue did not fall into that category. He had the courage and foresight to make changes when the current business model was not working. Perhaps this came from years of corporate experience, or perhaps he simply was superior at scanning the environment for changing trends. When the IPO market fell out of favor with investors, Bogue wisely did not rely on the predictions of Morgan Stanley and Credit Suisse that the market would return in the spring of 2001, a year away. Bogue realized immediately that he did not have enough cash flow to go beyond September 2000. Rather than trying to maintain the business model in its current form while hemorrhaging cash, he immediately downsized the company to a supportable level while he considered ways to generate quick revenues.

Bogue knew that the company's biggest asset was its intellectual property, a portfolio of valuable patents, so he figured that licensing would be a relatively low-cost way to generate revenues. With licensing, the company would also reduce its risk and would pass along costly development to the licensees in exchange for royalties. These assumptions were correct, but Bogue, who had not been in the licensing businesses, did not figure on his licensees being faced with development problems of their own—they were huge established companies—and that these

problems could stall his company's receipt of royalties. This is a common problem with entrepreneurs, whose natural optimism can leave them unprepared for things not going as planned. The second business model failure might have made many entrepreneurs decide that these kinds of struggles just weren't worth the effort. But when you have valuable intellectual property, it's difficult to just let it die a slow death.

Intellectual Property and Marketing Strategy

Another good discussion could take place around the third business model, which was the riskiest of all. It was at this point that Bogue's ingenuity and risk-taking capacity came into play in an important way. The marketplace was moving toward personal video recorders as the next logical step after the launch of TiVo and ReplayTV. Bogue reasoned that one of the major consumer electronics companies would be interested in licensing and claiming for itself all the patents in the area. However, large companies sometimes don't want to be bothered with license agreements, and since Command Audio was now a very small, struggling company, the large companies figured they could last until CA eventually went under. On his third business model, with little cash flow and now looking at taking on the giants, Bogue decided it was time to play his hand. He and Ryan did some investigation and figured out that TiVo and Replay were using some of the technology embodied in Ryan's patents, even though they were operating in television. This ability to recognize the patent infringement was the first advantage that Bogue had—and it served as a *motive*.

The second advantage was that Bogue was able to think creatively about how to fund his effort to defend his patents, which is an expensive process that can cost a small company its life. Finding an insurance policy that would cover offensive litigation costs at a premium he could afford gave him the *means* to execute his plan. The third advantage Bogue gained was when he identified the best company to go after first—the *opportunity*. It was important to choose a company with deep pockets and a major player in the industry to set an example. Sony Corp. was his choice. Winning the lawsuit (it was settled) put the company in a cash-positive position and paved the way for subsequent license agreements.

Moving forward, CA, which is fundamentally a product development company, must develop a sustainable strategy that protects its intellectual property while prosecuting infringers. The cost of doing this should be reflected to some extent in the licensing fees it charges.

DISCUSSION QUESTIONS

1. What was the source of the opportunity for Command Audio?

The source of the opportunity was the relationship that Don Bogue developed with John Ryan at Ampex. When John Ryan needed a business/market assessment of his new invention, he went back to his old friend Bogue.

2. What were the problems with the first business model: building and selling the CA box and service to consumers?

The problem with this business model was that it required the company to be responsible for introducing a new consumer product in the early stages of market adoption. The response was lukewarm. There were also problems with the battery, which was too large and didn't have a long enough life span. This resulted in having to substantially reduce the price of the unit. Things were further compounded by the company's inability to do a timely IPO to raise capital for the build-out of the market.

3. Why did the second business model fail? Could that failure have been avoided?

The second business model failed because Command Audio did not have the capital to carry itself in the event of unexpected delays from its licensees. It was clearly undercapitalized, and this didn't give the company many options.

4. Was it necessary for the company to go through three business models before it found the right one in order to build a sustainable company?

If Bogue had not changed the business model the first two times, the company would probably not have survived, because it was severely undercapitalized. There is also a learning curve in launching a new business. Even after substantial preparation prior to launch, entrepreneurs can't foresee everything that might happen or every change in the market.