

## **Technology for MovieBeam comes full circle to state**

Tom Sowa

The Disney Corp. has spent a good chunk of money in the past several months selling the MovieBeam product to area movie watchers.

The entertainment giant has taken a gamble on developing what it hopes is a breakthrough system for getting movies to video fans, without complex bells and whistles, without relying on broadband connections and without asking customers to wait for movies to come in the mail.

MovieBeam relies on a 100-movie set-top box that customers connect to their TV sets and then pay a monthly fee to watch any of those films (with additional costs per viewing).

Many experts call MovieBeam a great idea. Spokane is one of four cities to try out the new system; we were selected because we're the great "typical" American moviegoing community, Disney people say.

The Disney people advertise MovieBeam as "a virtual video store back wall in your living room." They won't say how successful MovieBeam has been so far. All they say is the results "exceed expectations."

No more trips to the video store, no more late fees for not returning the DVDs or VCR tapes on time.

The cost is \$6.99 per month, plus a \$29.99 one-time activation fee. Movies cost \$2.49 per viewing, \$3.99 for new releases.

The MovieBeam system replaces 10 of the 100 movies on that set-top box each month.

The amazing feature here is that the delivery system that makes those 10 films go away and then be replaced is due to a startup tech firm called Dotcast, based in Kent, Wash.

That Dotcast system doesn't rely on using any in-house connection like a satellite link, phone line or cable modem.

It's all done over the air, with an antenna

that grabs the data being delivered from a transmitter many miles from your home.

Dotcast uses plain old TV signals to move movies off and on the MovieBeam box. The big innovation is that Dotcast's use of sending data "in quadrature," which means the signal is sent from the transmitter 90 degrees out of phase with the TV signal.

Sent in that form, those signals are not noticed by standard TV receivers.

The MovieBeam receiver, though, knows how to grab that signal and reassemble it into whatever movie is being beamed to your home.

The other major twist in the analog signal is Dotcast's small antenna in your home is at least 200 times more powerful than a typical rabbit-ears TV antenna.

That allows about 1 megabit per second transmissions to any point, said David Serlin, a spokesman for Dotcast.

Dotcast originally developed this system -- called dNTSC -- as a way to help smaller cable companies package more data to their customers. But that plan never fully hatched, said Serlin.

Notably, Dotcast's technology would never have reached its current level of success without a group of talented engineers living in Kent and then working for Boeing Aerospace, said Serlin.

That "world-class group of engineers" left Boeing and took on the chore developing the core of the Dotcast system, said Serlin. That Kent team that then assembled was so valuable, that when Disney decided to launch MovieBeam, they went to Kent and hired the entire Dotcast networking group to run the deployment.

"So we're totally focused now," said Serlin, "on helping MovieBeam succeed."