

## Creates lip/audio synchronization

The Norwegian company Animaze will revolutionize audio in dubbed, animated films and games. If things go as Animaze plans, Norway can become the place where lips and voice merge for the world's computer-animated characters. Today, this is a big problem in both the film and games industry. The films are mostly American and the characters' lips move according to English speech only. When they are dubbed into other languages, it is easy to see the discrepancy between lip movement and the audio voice. Normally such films are dubbed into about 30 languages and a very large number of films are made annually.

### Lip synch

The idea which has now become the company Animaze originated in Tel Aviv in 2004 --when the founder of the company, Yossi Somer, with his 37 years in the film industry, met mathematician Dr. Nachshon Margaliot. They discussed how technology could solve one of the film industry's major headaches. Now the technology is ready and the work of developing the company's products is in the final stages. It has its first contract, too: Animaze will ensure that the popular Norwegian series about the little rescue boat, "Elias", is perfectly lip synched into several languages. The series will be distributed by the Jim Henson Company worldwide, and is expected to be translated into several languages.

### Advanced Technology

"Imperfect dubbing is an old problem, but for computer-animated movies, it is possible to use our technology to solve it. What we do is get a 3D model of the talking heads of the characters in the film. We also have audio files that the local voice over actors have recorded using a low-resolution copy of the film. The software we have created makes it possible to run the digital sound and let it control the lips of the digital characters. What we provide to the studios is the key information that makes it possible to adjust the movie characters as desired--heads only and perfectly synchronized with the voice audio," says Somer.

Today's 3D technology makes it possible to render small parts of movies again and put them into the ready film squares. So the extra computational work required is not particularly large. The fact that all languages can be dubbed at the same time means that the new technology represents both a process simplification and savings, in addition to the much improved entertainment experience.

"In addition, we also have a large potential market in other areas such as the replacement of the English words on signs and maybe backgrounds in the film, according to territory demands," he said.

### Hollywood wants it

Somer has been in Hollywood and presented the technology and has engaged employees there. He has also been offered investment if he relocates the company to the USA, but he will not. At least not yet.

"I have my family in Norway and we have gotten very good support from Håkon Nyhus at Innovation Norway, and advisors such as Harald Norvik and Christian Butenschøn. Here we can build ourselves up as an independent service company for all the studios, without being swallowed up right away. So I will be here," he said.

Besides, Hollywood sees Norway as a place that can safely handle the intellectual properties they create. Today, it is a very big problem that the movies that are sent around the world to be dubbed are being pirated. With our technology, we can ensure that the film is not copied before it reaches the market. The file is not sent to dubbing. Instead, we bring the actors' voices to our studio.

## Huge market

The market for 3D movies and games was 120 billion dollars in 2010. In 2016, this figure will double. If Animaze establishes a central role in this market, there can be very great demand for its services.

“Now we are moving out from the laboratory to the industry. And even if the market is large, we will build gradually and focus on film first. But games are very interesting and the problem is exactly the same. What we do know is that no one else is working on a similar technology, so I think we have very good chances to achieve the goals we envision,” says Somer.

## Olsenbanden

The company Yossi Somer has established is currently located at the Entrepreneur Garage, an entrepreneurial environment established by Simula Innovation at Fornebu, while Animaze pursues industrial development.

*Here ( picture ) the technology is tested on the Danish animated film Olsenbanden -The Olsen Gang .*



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