



Cross4Health

Awarded Projects Interview

Awarded Project	Virtual Recovery
Company name	Kreativitetsbanken

1. What is the company's business activity?

Kreativitetsbanken has made pedagogical VR, documentary VR and ART-VR since 2014. This is the first time making anything in the Health sector. Now we plan to do more ART4HEALTH in VR. Founder Åsa Egnér is educated in Performance Art and theatre for 5 years and with 15 years as a professional theatre director and project leader of big events. Åsa Egnér has been running “the VR room at Stenkrossen, Lund” since 2015 and works as a VR designer and does lectures and workshops about VR. Åsa is also a theologian with a focus on ethics, pastor of the Swedish Church and has been a member of the Medical Ethical Board in Lund for 13 years.

2. What is the XXX project?

Virtual Recovery is VR ART –a VR- experience where the player moves within beautiful virtual paintings at the same time as the game facilitates training: *Move and wonder through the red wood forest or the sea garden and listen to the birds, create dewdrops, grow flowers and trees.* Music and nature sound can create mindfulness and VR can distract from the pain in these stimulating and relaxing places. The players are doing yoga and physiotherapy by mimicking a personal trainer, a motion capture figure inside VR. The mimicking simplifies navigating in 3D and the game rewards the player inspiring intrinsic motivation. VR-Design for people with long-term illness and cognitive disabilities in cooperation with professional physiotherapist`s and yoga-teachers. The technology can be used in institutions and home environments

3. How did the idea come about?

Inspiration: “A colleague's child had cancer and has amputated his one leg. He didn't want to move because it caused pain breakthroughs so severe that they must give him anaesthesia. The risk for blood clots were acute and the parents and the physiotherapists were very worried. Then he tried VR. Inside a VR-game he forgot that he was moving and somehow there was no pain breakthrough” “Kreativitetsbanken have also tried VR experiences on people with cognitive disabilities in earlier projects. VR creates joy, mobility and stimulation for those people who often have limited mobility in their everyday lives”.

4. Who are the core partners of the project?

Programmer Johnny Nyman, modellers from Evermotion, programmers from Softwarehut Polen, 3Dmodeller Peter Flygenring Holt, Motion capture lab Lund University, Innovation Skåne, physiotherapist's, yoga teachers and partner Theis Madsen Copenreality ApS.

5. How did this collaboration between the partners arise?

BoostHbg was informing Kreativitetsbanken about the C4H project. After some initial doubt Kreativitetsbanken was deciding to do the project, the big issue was to find a main partner from another country. It was stressful because of the time limitation before the application ended. Denmark was the first option and after some research we found the partner Copenhagens ApS that both had a medical education and an interest in VR. It was quite a fast decision. Kreativitetsbanken was writing the application and the main partners did not meet much before project start. Programmer Johnny Nyman was contacted to do the main programming and he had several successful projects with Kreativitetsbanken before. After getting the funding, it was a less stressful

activity to find partners. We discussed a lot before getting Evermotion and Softwarehut on board and compared with other modellers. Hum lab from Lund University had the right technique and Physiotherapist was recommended via Region Skåne.

6. How did you hear about the Cross4Health project?

Through Boosthbg. They had been in contact with Magnus Wallengren from Innovation Skåne. Boosthbg have supported a lot of Kreativitetsbankens VR-development, hackatons etc.

7. What is the current status of the project?

We now have demonstration pilots. We have concluded 2 pitches and 2 prototype-experiences. We have VR experiences of about 15 -20 minutes. The player will be able to train yoga and physiotherapy with a virtual trainer, create flowers and trees and make them grow. We made a calm and comfortable and meditating experience in beautiful, relaxing worlds as well as facilitate training. We use motion capture techniques with 3D models for the player to mirror to make things happen in the game. It is quite a way to go to have a near market solution but we have demonstration pilots to make progress from in many varied directions.

8. What are the next steps?

To make an industrial pilot we must be able to measure movements and progress in a more substantial way. The next technical steps due to a to implemented product is to start making industrial pilots and start to programme pilots with measurement techniques and data relevant to different diagnoses and special movements relevant to specific patient groups. The project-made prototypes with "core movements in yoga and physiotherapy" can also be built together into a game where there is the opportunity to add personal data and personal login to measure movement and improvement and different levels. These steps will be possible but will need additional finances and a lot more programming and iterative try-outs on patients' groups and making the product ready to market due to medical technical regulations and quality consultation. Kreativitetsbanken owner has just started a new company specialised on health sector.

9. How Cross4health can support the development of your project?

It would be very good to keep getting support from C4H in terms of contacts in the health arena, being able to invite us to oncoming conferences like Vitalis or other similar conferences in the future and keep in contact with C4H in Norway and continue the good cooperation with Innovation Skåne and other similar partners in Europe. Overall to let us be part of the complex network of people and organisations that Cross 4 Health is part of together with institutions and companies that promote innovation and recommend us for investors and medical institutions etc.

10. Would you recommend Cross4Health to other companies?

Absolutely. It has been a great pleasure and a great learning process to be in a new arena and C4H has been so helpful and has so much knowledge and contacts. About partnership; decide in clear written agreements on what each party will distribute to the joint project and on the final product ownership agreement, preferably with a lawyer. Clarify collaboration issues before applying for funding.