MindMaze combines immersive virtual reality, brain imaging and 3D technology in real time to build novel platforms for Neurorehabilitation, Game Training and 3D Imaging. Our neurotechnology products enable tailored interfaces matching the user’s abilities across different applications.

Business Summary: Built by neuro-scientists, MindMaze has successfully combined advanced brain monitoring and virtual reality platforms to build a robust motor rehabilitation solution giving doctors & therapists the tools to design tailored treatment programs for each patient across acute, sub-acute & home phases. Repetitive training, measurement and interpretation of patient progress in the early phase post brain injury or stroke is crucial to motor recovery.

Products and Services: Our products maximize independent patient practice from the early acute phase. MindplayPRO, XPERT & LITE come with tailored features catered to hospital and home rehabilitation phases. Therapists & doctors can now focus on qualitative aspects of treatment and accommodate more patients. Telerehabilitation & cloud services ensure smooth monitoring of treatment and patient progress at home. Home products leverage our cloud platform to provide vital physiological markers, diagnostics and motor rehabilitation in one unique portable device.

Customer Problem: Current solutions are labor and resource intensive leading to limited therapy time with little/no opportunity for independent patient use. Recent solutions (Robotic & Gaming devices) have complex architectures & limited portability leading to a late introduction into the therapy cycle. They miss the crucial time window to facilitate neural recovery. Additionally, lack of objective quantification leads to a one size fits all approach. Therapists need solutions to objectively track patient performance, accommodate more patients and save hospitalization time & costs.

Target Market: Globally, up to 8 million stroke-survivors suffer from upper-limb movement disabilities each year. In the USA alone rehabilitation accounts for 3-4% of healthcare costs for stroke:$65 Billion/yr. In Switzerland, top 5 EU markets & the USA around 960’000 patients/yr need upper extremity rehabilitation. Up to 44% need continued home rehabilitation. Revenue potential of our stroke rehabilitation products is close to $ 1 Billion. Additionally, current products can help brain injury and amputee patients (phantom limb).

Customers: MindMaze has identified first markets in EU and the USA with high prevalence, ageing populations & an established rehabilitation infrastructure which account for 1.3 million stroke incidences/yr. Market figures estimate a 5% increase in incidence rates/yr. Hospital costs account for 45% of the total costs. Phase I: Hospitals/Rehabilitation clinics/Therapists, Phase II: Home Use (Patients). Our product portfolio covers both hospital and home segments. We have identified over 1300 comprehensive stroke centers in primary target markets.

Sales/Marketing strategy: The sales strategy can be articulated in three key phases: Phase I: MindMaze collaborates with identified key opinion leaders in neurorehabilitation to introduce MindPlay products. Phase II: MindMaze targets specialized stroke centers and hospitals in key countries including EU & USA. Phase III: MindMaze adopts a ‘managed growth’ model offering products for both hospital and home rehabilitation with the reimbursement model established.

Business model: MindMaze intends to sell units both directly & through a distributor network. We are looking at the leasing model & pay per use models for the hospital (accelerate sales cycles) and home markets directly from MindMaze or through partners who acquire the devices. Partners include stroke centers & home medical care providers. Exercise bundles, analysis & cloud services for online data management and processing will be recursive sources of revenue.

Competitors: The neuro-rehabilitation market is fragmented & growing. Basic virtual reality (VR) / gaming solutions (direct competitors) and robotic devices and exoskeletons (indirect competitors) for upper limb motor disabilities are usually hospital based installations and are highly dependent on specialized therapist availability. Introduced late in the rehabilitation process, they miss the window of optimal neural recovery.

Competitive Advantage: MindMaze products are specifically designed to maximize independent practice to stimulate targeted brain areas repeatedly from the early phases. The correlation of brain activity & motor performance provide a unique platform for therapists and neurologists. We have filed for 6 international patents covering our unique platform technology. Many aspects of our platform will be difficult to circumvent without infringement.

Status: Company created in 2012 (Technology Development from 2010) | Team Size (FTE): 8

Funding: We are in the commercialization phase and look for strategic partners & funds for market launch of our CE Class I products in the EU & USA (510(k) exempt).

Company: MindMaze is a spinoff from the EPFL (Swiss Federal Institute), founded by Dr. Tadi with +7 years in neuro-technology. The company brings together a multidisciplinary technical team of scientists. Business operations are handled by a senior manager (15+ yrs) from the medical device industry and consultants have been hired for regulatory affairs/quality management, sales and finance. The advisory board consists of international business and scientific leaders in medical devices, neuroscience, brain imaging and virtual reality.

“MindMaze’s non-invasive, immersive virtual reality platform is very powerful for rehabilitation. The patient does not need a therapist to practice constantly. He is independent and accountable, which increases his motivation and maximizes training times”.

- Dr. Rolf Frischknecht, Director of European Rehabilitation Board