SNKE OS
LEAD FAST. LEAD FIRST.

UNIVERSAL DIGITAL OPERATING SYSTEM FOR SURGERY ENABLES HEALTH TECH COMPANIES & START-UPS TO ACCELERATE, SCALE & GROW

Snke OS is developing the first digital platform for surgery designed to be used by industry leaders, start-ups & partners. The software framework, developed by Brainlab over the past 30+ years and with over €500M invested, is an established benchmark in operating room digitalization for specific, highly complex fields such as neurosurgery. The full diversity of its functionalities can now be used by third parties for a broad range of clinical applications. In lieu of initiating their own development from the ground up, existing Brainlab partners, as well as competitors, start-ups & large companies in the pharmaceutical & medical technology industries can build on Snke OS technology & open interfaces to digitally saturate the operating room more quickly, efficiently & cost-effectively.

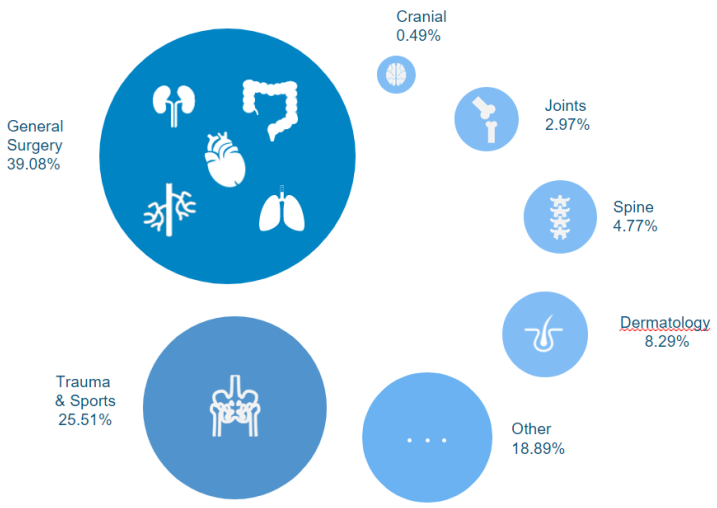

Figure 1 - Range of clinical applications targeted by the Snke OS digital platform for surgery.

PATIENT-SPECIFIC MODEL FOR PRECISION PROCEDURES & OPTIMIZED TREATMENT METHODS

Snke OS uniquely bundles very complex technologies: A universal statistical patient model is coupled very precisely with individual anatomy, aggregated from numerous diagnostic images, creating a digital representation of each patient. During surgery, this patient-specific model is continuously correlated in relation to the precisely captured movements of the instruments used, thus enabling accurate surgical navigation & verification. The anatomy is also linked to video data to extract additional workflow information, document surgical progress & dynamically update the patient-specific model with the help of artificial intelligence (AI). The statistical data obtained flows back into the universal patient model and serves as a central knowledge base for researching better treatment methods.

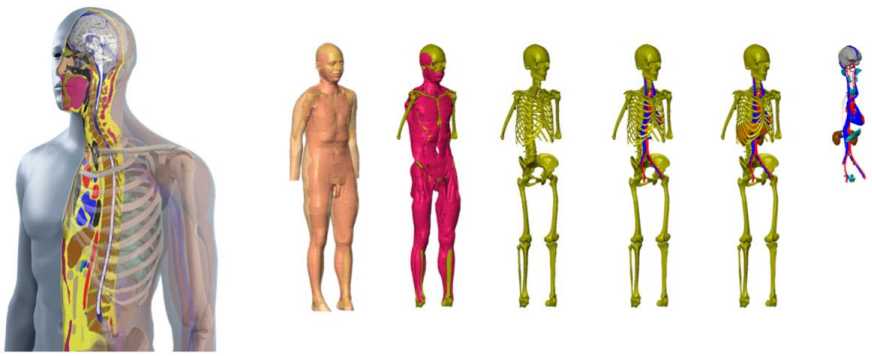

Figure 2 - The universal statistical patient model of Snke OS is matched to individual digital representation of patients based on diagnostic images.

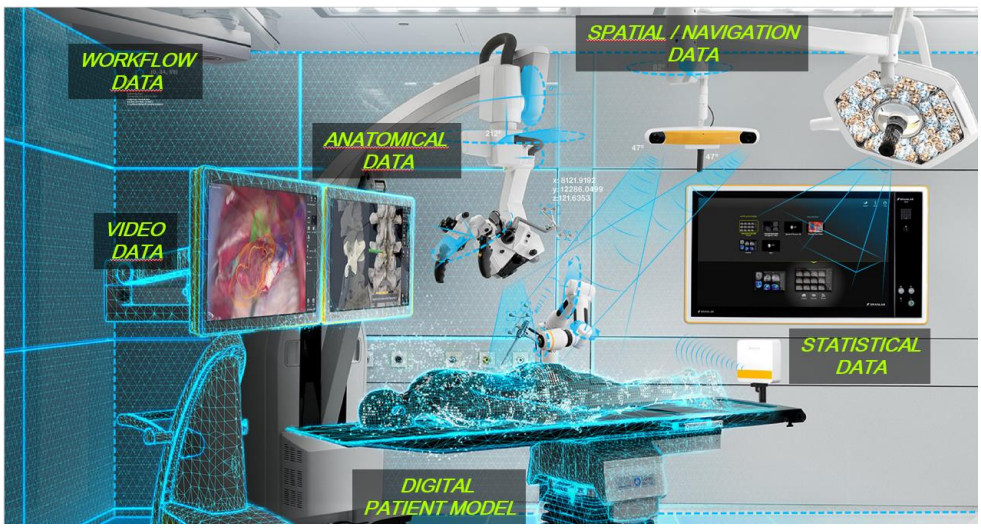

Figure 3 - The digital patient model is linked to data sources in the digital OR: video, workflow & spatial data, as well as statistical models built from patient registries.

TAPPING INTO MORE EFFECTIVE DIGITIZATION WITH OPEN INTERFACES

Snke OS uses open interfaces, making it possible for other medical technology companies to integrate their own solutions for imaging, navigation, robotics, cloud computing, AI as well as mixed reality into an overall system to more effectively tap into the possibilities of digitization. This expands the platform's utility and opportunities in other surgical specialties like heart, liver, craniomaxillofacial, spine & ear, nose & throat (ENT), as well as in oncology.

"Surgical procedures are still very analog," said Stefan Vilsmeier, President and CEO of Brainlab. "With the data obtained from deep digitization, efficiency deficits can be analyzed & treatments individually optimized for each patient." Key factors are facilitating & accelerating the need to scale the digitization of surgery: Surgical interventions represent a substantial value driver for hospitals; & the coronavirus pandemic has revealed the necessity for change.

Andreas Giese, Managing Director, Snke OS, explains the background of Snke OS: "The physical & organizational separation from Brainlab facilitates the expanded & dynamic development of our software architecture, which in turn expands its utility to a much broader spectrum of clinical challenges. Snke OS will deliver universal functionality across the healthcare data economy. To achieve our goals, we're searching for talent, especially in the AI domain." Snke OS is hiring for the company's headquarters in Munich, a global epicenter for AI & data analysis, as well as for satellite offices in Tel Aviv & San Diego. Learn more at snkeos.com.