

COVER STORY

Imaging the Impossible

Maurice Nessim

Trailblazing Contributions to Medical Technology



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Maurice Nessim
President and CEO



Imagine a world where medical ultrasound systems deliver real-time, high-quality images, transforming the way healthcare providers diagnose and treat patients. In this niche, **CloudStream Medical Imaging, Inc. (CSMI)**, a new player in the medical equipment manufacturing sector, is making waves. Their mission? To disrupt the medical ultrasound market with advanced integrated solutions, an ambition backed by leveraging technology proven in other industries.

At the helm of this innovative endeavor is a visionary leader, **Maurice Nessim**. With a wealth of experience and a relentless drive for progress, Nessim serves as the **President** and **CEO** of CSMI. His dedication to pushing the boundaries of advanced technology and reshaping the future of medical imaging is at the core of the company's mission.

As the driving force behind CSMI, Nessim's leadership promises to revolutionize the way we perceive and utilize ultrasound technology in healthcare. His vision reflects not just a commitment to innovation, but a deep-rooted passion for improving patient care through cutting-edge solutions that provide greater accessibility and better quality images.

Let's delve into the world of medical equipment manufacturing where Maurice Nessim and CSMI are pioneering a new era of possibilities!

The Imaging Journey

Maurice Nessim is a renowned geophysicist and visionary leader who has left an indelible mark on the seismic imaging industry. As President of WesternGeco, the seismic exploration arm of Schlumberger, he orchestrated a remarkable turnaround, boosting profits to unprecedented heights. In his own words, *"We transformed the game, making us the champions in the geophysical world."* He did this by applying innovative software, cutting costs and processing speed by utilizing new cloud technologies, and solving the age-old challenge of seeing through the salt layers.

Nessim's influence extends beyond the corporate realm. He's donned the hat of President at the Society of Exploration Geophysicists (SEG) and chaired the International Association of Geophysical Contractors (IAGC). He is also a Board Director of the Houston Technology Collaboration Center (TCC) which brings leaders from energy, medicine and space together. With

a 25-year career spanning innovation and leadership, Nessim remains an inspiration to all, proving that seismic shifts can reshape an entire industry.

Scanning Success

In the world of innovation, Nessim's journey takes a new path, one that's deeply rooted in a desire to make a profound impact on healthcare. *"I spent my career studying, inventing and implementing technologies that are related to sound in Energy Exploration. As a physicist, I see that those are the same principles the Medical Ultrasound are based upon,"* he explains.

With this insight, Nessim is leading CloudStream Medical Imaging, aiming to apply the same game-changing strategies from the energy exploration industry to revolutionize diagnostic imaging in healthcare. Their mission is crystal clear: *"Create the gold standard for ultrasound medical imaging by capturing life-saving diagnostic images that are superior to conventional imagery in quality, cost and speed."*

In a world where healthcare often feels like sickness care, Nessim's vision expands the horizon. He believes that the future lies in keeping people medically healthy before they become too sick to recover. *"We believe we can put health back in healthcare by helping people stay medically healthy before they become too sick to recover,"* he asserts. The key to this transformation? **More accurate, earlier, affordable and convenient diagnostic imaging.**

The starting point is simple yet groundbreaking—better images. Current statistics reveal a startling truth—diagnostic error rates in imaging range from 3 to 5%, leading to approximately 40 million diagnostic errors globally each year.

CloudStream Medical Imaging, inspired by the success of seismic imaging, intends to shatter these limitations. CSMI deploys patented algorithms and innovative technology to create images that are not only precise but so lifelike that they blur the line between reality and diagnostics. **Images with the cost and convenience of sonograms... but the visual quality of MRIs.** *"Imagine emergency room images that rival reality and can even see around and behind the bones,"* Nessim envisions.

But it's not just about better images—it's about speed. Traditional thinking would deem the processing power required for such images impossible to achieve



The computation and processing power needed to create these images would be impossible if approached with conventional thinking."





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considering the cost and the literal floor space required. However, CloudStream defies convention by sending signals directly to GPUs in the cloud, where they process vast amounts of data at breathtaking speed, providing instantaneous results. "Gone is the expense of idle downtime," Nessim proudly notes.

And this is just the beginning. CloudStream Medical Imaging has ambitious plans for developing handheld probes that will transmit images directly to the cloud for processing, eliminating the need for large and expensive machinery. These hand-held, uber sophisticated probes would provide unparalleled diagnostic and treatment possibilities anywhere the need or emergency demands.

"Imagine doctors in remote areas or emergency rooms having access to clear, accurate and actionable images without the need for an MRI or CAT scan. Imagine surgical decisions made with greater certainty and speed, all without the headache of expensive equipment upgrades," Nessim envisions.

But the true magic lies in early detection, something that has the power to change lives. "Imagine finding that tumor in a routine check-up long before it becomes a life-threatening problem. Imagine staying well," he encourages us to dream. CloudStream Medical Imaging isn't just rewriting the rules of diagnostic imaging—they're rewriting the future of healthcare itself.

Seeing is Believing

CSMI's vision is an inspiring fusion of technology, taking seismic imaging principles from the depths of the Earth to the realm of medical ultrasound. "Seismic imaging, after all, is an Ultrasound image of Mother Earth," says Nessim, highlighting the interconnectedness of science.

Their mission is clear—to revolutionize the speed and accuracy of medical diagnostics. By harnessing cutting-edge computer science breakthroughs, including AI and GPU technology, CSMI aims to reshape the Integrated Ultrasound platform. According to Nessim, this will result in '**orders of magnitude**' improvement in diagnoses, providing previously unattainable clarity even under the ribcage.

"Ultrasound modality is the safest, cheapest and fastest compared to other techniques, with zero side effects," emphasizes Nessim. CloudStream Medical Imaging's

innovative approach aims to transform this modality, making images '*crystal clear*' for healthcare providers.

Their technology, especially for imaging under the ribs with echocardiography, is poised to "*significantly improve patients' care*." With a focus on enhancing diagnostic capabilities, CloudStream is on a mission to save and enhance lives through the power of cutting-edge ultrasound technology.

Their commitment to innovation extends to their intellectual property, with 10 patents filed in the USA and internationally and 8 currently pending. These groundbreaking advancements have aroused curiosity and opened the door to forge strong partnerships with major Ultrasound OEMs, medical clinics and imaging centers.

Nessim encapsulates their ethos perfectly, stating, "We break the paradigm of conventional thinking in medical imaging by infusing successful accomplishments from the oil and gas exploration and seismic industries. We are breaking existing rules, thinking outside the box and challenging the status quo for Ultrasound imaging." For CSMI, the impossible is merely an opportunity waiting to be seized.

Sound Strategies

In the hands of visionaries like Nessim, his Chief Technology Officer (CTO) Dr. Chuck Peng, an Imaging Pioneer, and his Chief Medical Officer, renowned cardiologist Dr. Asif Ali, the merging of cutting-edge technology and unwavering determination paves the way for a healthier and brighter future. As he says, "We're not just changing the game—we're changing lives."

CSMI introduces its cutting-edge technology through a multifaceted approach. "*Benchmarking, clinical trials, case studies and publications are the vehicles that carry our innovation to the world*," explains Nessim. They showcase the technology's prowess, proving it to be safe, faster, better and more cost-effective through rigorous testing and documented success.

To take this innovation to the masses, CSMI focuses on strategic commercialization. Nessim emphasizes the importance of finding "*the right partners who align with our unique principles*." These partnerships serve as the conduit to bring this groundbreaking technology to healthcare providers, ensuring that it reaches those who need it most.

At the helm of CloudStream Medical Imaging (CSMI) stands a remarkable team of diverse leaders, each bringing their unique expertise to the table. Nessim proudly affirms, *"We are led by an excellent, multi-disciplinary and unique team of proven leaders in Energy, Business, Imaging Technology and Medicine."*

Nessim's vision extends beyond CloudStream Medical Imaging—it's a collaborative journey. *"I am in constant communication with doctors and scientists,"* he emphasizes, highlighting the commitment to engaging diverse voices.

Their **Chief Medical Officer, Dr. Asif Ali**, leads the charge by partnering with medical professionals, clinics and associations like the American Heart Association and others. Together, they explore unmet needs and assess CSMI's groundbreaking solutions.

Simultaneously, their Chief Technology Officer (CTO) Dr. Chuck Peng collaborates with academia, technology centers and OEMs to push the boundaries of medical imaging. This collective effort promises to drive meaningful change in the medical field. Nessim and his team understand that progress thrives on collaboration.

For CSMI, collaboration is a cornerstone. Nessim underscores this by stating, *"One of the main pillars for CSMI is collaborating with strategic partners who are aligned and have the same vision as us and are willing to invest time to achieve those common objectives."*

This commitment to synergy and shared goals propels CSMI forward, ensuring that their revolutionary vision for medical imaging becomes a reality through teamwork and dedication.

A Sound Prescription

CloudStream Medical Imaging, under the guidance of Nessim, is set to transform healthcare for all stakeholders. *"For providers, we're speeding up exams, getting answers faster,"* he says. Patients stand to benefit from *'a better experience'* through ultrasound, eliminating the need for additional, time-consuming and costly modalities with potential side effects. Doctors gain the confidence to make precise decisions, reducing invasiveness, thanks to improved clarity.

Moreover, insurance providers will see substantial cost savings and expedited processes as more costly imaging modalities take a backseat. CloudStream's innovations promise a more efficient and patient-centered healthcare landscape.

Prescribing Precision

In the name *"CSMI - CloudStream Medical Imaging,"* Nessim signals the cutting-edge technology behind their mission. *"Our technology is very advanced and plays a very big role in converting ultrasound signals to high-resolution imaging at the edge and on the cloud,"* he explains.

With the power of AI and ML, CSMI enables real-time data processing, a task humanly impossible due to time constraints. Their innovation promises to revolutionize medical imaging, offering speed and precision beyond human capacity, marking a giant leap in healthcare technology. Nessim and his team are at the forefront of this transformative journey.

Sounding Out Success

CSMI leaves no stone unturned in its quest for excellence. *"We conducted an extensive market analysis, understanding the anticipated needs of hospitals, clinics and imaging centers,"* says Nessim. With precision, they've gauged the production requirements for transducers and software, ensuring readiness.

CSMI is set to make a significant impact by introducing the Integrated Ultrasound platform to the diagnostic imaging equipment market. *"The market has been on a growth trajectory, with a CAGR of 7.2%, reaching \$48.37 billion in 2022,"* Nessim highlights. Projections indicate further growth to \$55.23 billion by 2026.

Their commitment to progress is evident with the Minimum Viable Product (MVP) of the Integrated Ultrasound platform will be available for industry benchmarking to demonstrate -- for the first time-- using Ultrasound behind the ribs. *"Clinics, imaging centers and major OEMs can experience the future of diagnostic imaging,"* Nessim notes.

Commercialization is on the horizon, scheduled for Q1-2026. CSMI's journey to reshape medical imaging is not just a vision—it's a well-planned reality. 