

NUANCE COMMUNICATIONS: EMPOWERING THE FUTURE OF HEALTHCARE WITH ADVANCED AI SOLUTIONS

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When it comes to making a difference in the world with artificial intelligence, one company that is clearly leading the way is Massachusetts-based Nuance Communications. Originally founded in 1994 as a spin-off of SRI International's Speech Technology and Research (STAR) Laboratory, the company's initial focus was to commercialize the advanced speech recognition technology that was developed for the US government at SRI. Today, Nuance continues to be a pioneer and leader in conversational AI innovations that bring intelligence to everyday work and life. While the company delivers AI technology and applications that help cars read drivers' minds, reports write themselves, and virtual assistants predict users' needs, its spotlight at the moment is shining brightly on a single industry that itself has been doubling down on the promise of AI: healthcare.



It seems that new focus is paying off. Nuance made headlines last week when it announced better-than-expected profits on revenue, topping company guidance in 1Q18, and boosting its full-year EPS expectations on the strength of its growing healthcare channel which recently topped \$1B in revenue. Revenue grew 9.3% overall, and while healthcare was the biggest growth driver—including its **Dragon Medical cloud solutions**—the company also reported strong performance in both automotive and enterprise.

Nuance's new CEO, Mark Benjamin, is a recent addition to the leadership team, coming on in April 2018 from his role as president of NCR. He also spent 24 years at ADP. Attracted to Nuance for its reputation, foresight, and innovation, Benjamin believes Nuance is at a pivotal point in its decades-long evolution. Once on board, he took steps to improve governance by overhauling and strengthening the entire board. He also streamlined what had been a dizzying menu of products and solutions, trimming five divisions down to two through spinoffs and divestitures, and honing in on the healthcare division—the crown jewel of the business. As a result, customers and investors alike are now able to understand not only what the company offers, but also its vision for the future. Moving forward, Benjamin is working to improve corporate transparency, to continue to improve operating margins, and to generate more meaningful cash flow. The company reported over \$300M free cash flow as of 2019 guidance.

An established leader in electronic health records (EHR), the emergence of real-time intelligence has created a shift to what Nuance calls 'ambient clinical intelligence'—voice activated solutions that enable physicians to interact with EHR systems using speech rather than a keyboard. Equipped with this advanced technology, exam rooms are able to 'listen' and reports are able to write themselves. Most importantly, this enables doctors to document everything without ever taking their focus off what matters most: caring for their patients.

To continue to improve its industry-leading Dragon Medical solution, Nuance recently moved the solution to the Cloud and embedded real-time intelligence into the process with the help of virtual assistants (powered by Siri) and decision support. Its PowerScribe and radiology business are next in line for migration to the Cloud.

The company's solutions integrate and embed clinical speech recognition, clinical documentation improvement (CDI), computer-assisted physician documentation (CAPD), transcription, and diagnostic imaging within leading EHRs. Nuance also offers RIS/PACS and workflow solutions for mobile, web, and desktop. Using Clinical Language Understanding (CLU) and AI, these solutions deliver real-time queries to physicians at the point of care to produce measurable outcomes that are clinically and financially compliant.

With healthcare playing a dominant role in Nuance's future, the recent flood of announcements in this area comes as no surprise. In 2017, the company expanded its portfolio by launching the **Dragon Medical Virtual Assistant**. Powered by AI, the tool understands sophisticated conversational dialogue and automates clinical workflows. In 2018, the company **announced the integration** of its virtual assistant platform into the Epic EHR system to more deeply integrate technology into the physician's workflow. Other partnerships in this area include Allscripts, Cerner, and Meditech.

In February 2019, the company unveiled Ambient Clinical Intelligence (ACI) that is built on its popular Dragon Medical One cloud platform. This new category of AI-powered healthcare information technology surrounds the doctor and the patient with assisted workflows, task and knowledge automation, and ambient sensing hardware to "reinvent the doctor-patient experience" by empowering physicians to focus on their patients instead of a screen.

Nuance is also collaborating with another ROBO Global index member, **Nvidia**, to enable radiologists with the power of AI algorithms that are capable of scanning large quantities of medical images to match patient symptoms with the most appropriate treatments.

Of Nuance's \$1B healthcare business, 50% of that revenue is coming from its document capture business. With the estimated Total Addressable Market (TAM) for Cloud solutions in the US sitting at about \$550M, as the market leader (Nuance currently has less than 50% of TAM, with the nearest competitor far behind), the company is looking at a significant opportunity to capture the remaining 50% of the market.

Overall, Nuance appears to be poised for meaningful growth over the next few years. Sales, cash flow, and EBITDA margins should recover nicely as the company places greater emphasis on higher-margin recurring healthcare revenues. If all goes as planned for Nuance, it seems that physicians and investors alike will reap the benefits.