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Augnito provides integrated speech recognition for cloud native CIMAR UK



CASE STUDY



Maintaining efficiency for cloud-native solutions in radiology

The ability to access accurate medical information through a streamlined process is at the heart of every radiologist's and clinician's wish list. Where clinical and diagnostic imaging can be quickly accessed, viewed, and reported, anytime, anywhere, it releases the healthcare professionals' time back to patient care.

Every day across the country, the NHS, private hospitals, medical groups, imaging centres, clinical research organisations, and electronic patient information systems constantly wrestle to provide timely and reliable access to diagnostic imaging data across the healthcare landscape.

Where radiologists need to report on their study worklists outside the hospital network, they need a flexible, scalable, and highly interoperable cloud-based solution that delivers a fully integrated reporting environment.

Finding a solution that simplifies the process securely and accurately can

be challenging and costly, in addition the cost to exit legacy contracts can be prohibitive. Such services can significantly improve medical image management processes and workflows, and cloudbased users will testify to this.

The ability for integrated care systems (ICS's) and care networks to connect and to procure directly, can open the door to new patient services, collaborative networks, and revenue streams, deployed rapidly through the scalability of the cloud and the elimination of resource intensive projects with costly technical or archaic tender process barriers.

One such flexible, scalable, highly interoperable solution is Augnito, a cloud-based voice-Al driven speech recognition product suite that can be rapidly deployed either as desktop solution or a fully integrated service to drive digital transformation, improve the depth of reported clinical information and positively impact patient outcomes and business profitability.

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Enhancing Healthcare Intelligence

Founded in 2003, CIMAR UK is a cloud-native medical imaging management (Cloud PACS) and interoperability specialist, providing vendor neutral workflow, image exchange and interoperability solutions, dedicated to making medical imaging and results securely accessible anywhere, freeing clinicians to focus on patient care. It is the sole distributor in the UK for Intelerad's awardwinning Software-as-a-Service (SaaS) Ambra cloud imaging technology.

With teams in the US and UK, CIMAR [Ambra] has approximately 14,000 clinical users in the UK, 250,000 clinical logins daily worldwide and 2 billion images managed in its global cloud, which can be securely shared locally, nationally (geofenced), and internationally. CIMAR UK has an impressive portfolio of clients ranging from NHS Trusts, private hospital groups, private practices, clinical research organisations, and health information exchanges, as well as academic networks.

The following is a partnership account insight by Dennis Wait, Chief Commercial Officer

(CCO) for CIMAR UK, where he shares the challenges CIMAR encountered in 2020 and how Augnito speech recognition technology helped solve these.

"CIMAR is driven to provide powerful workflow tools to streamline the image exchange process and its ever-changing requirements across the healthcare sector. We provide a vital, comprehensive cloud-based solution to enable seamless image exchange and reporting capability and workflows across organisations or hospital sites to reduce reporting delays. This also means that we can help cut rising departmental costs and accelerate patient care pathways."

"Being a cloud-native service provider, we have developed an ecosystem of complementary 'plug-in' cloud technologies that enable our clients to 'pick and connect' other cloud solutions ranging from cloud-RIS to a range of Artificial Intelligence Diagnostic solutions. Vendor neutrality and open interoperable standards have always been central to our services – regardless of the imaging systems our clients choose to use. We can connect them to the cloud and radically improve overall workflow capabilities and capacity."



The Speech Recognition (SR) Challenge:

cimar UK provides an essential part of the puzzle for clinical radiology imaging workflows and interoperability. While it handles all the imaging, viewing, archiving, connectivity and interoperability, it did not previously provide cloudbased SR, competing with onpremise or stand-alone cloud SR solutions tied to a license.

Very shortly into the first lockdown, CIMAR noticed a sudden shift in the need for remote reporting, a solution it already offered. The company knew that change had been in the air for some time in the healthcare sector, and with the COVID-19 pandemic, the need for digital transformation accelerated across the globe. This signalled a turning point in healthcare, and CIMAR heard its customers' message loud and clear. Speech-enabled diagnostic image reporting was no longer desirable, but essential.

"At CIMAR we were already in search of a cloudbased speech recognition solution provider to partner and integrate with. There is little point in having the flexibility of the cloud accessible remotely without all the functionality that clinicians are used to having while sitting at a reporting workstation in their hospital."

"The burden of data entry driven by electronic health records has significantly increased over the last decade, and we know that SR certainly mitigates some of this burden from a clinical reporting perspective. Until recently the business intelligence value from blocks of text in unstructured clinical reporting was limited. However, bringing structured SR capability into our solution with an intelligent back-end meant that going forward we could offer our customers an additional efficiency tool with enhanced SR functionality and business intelligence - vital from a data governance and audit perspective for hospitals and clinical departments."

The Solution

In June 2020, CIMAR decided to act fast and seek the services of a speech recognition partner who could deliver these tools as an integrated solution. Their search led them to Augnito.

"Primarily, we liked Augnito because it is cloudnative, as we are. It already used open API technology that would 'talk' to our cloud-based technologies. We also appreciated its peoplecentred design approach, aligning with our philosophy of finding a solution to a problem or challenge. We found Augnito highly competitive in terms of price, way beyond anything we had encountered in our SR search to date. We really wanted to pass that value on to our customers."

"That critical element of Augnito's ability to integrate with our systems at CIMAR, coupled with its ease of use, simplicity, and ability to 'unpack and go' drove much of the decision-making process."

"The complete integration process with CIMAR's already cloud native PACS solution was completed in under six months, with the first client using Augnito as part of the solution soon after. Since 2021, Augnito has been included as an integral part of our solution offering to customers and is featured in our product demonstrations."

"Everyone at CIMAR UK uses Augnito speech recognition, with around 70% of the company using it either directly or indirectly from a clinical perspective. We are keen for this to become a valuable tool for our US teams as well. We love the fact we can roll this out to clients quickly as an end-to-end solution, and have it set up for them during implementation, something that the legacy solution providers struggle to do. The agility and beautiful simplicity of having cloud-based SR available via any device and with a 'portable' profile allows a user the possibility to be anywhere in the world and still have access to a full suite of functionality."

The Results

From the outset, CIMAR UK felt that the Augnito sales and support team understood its needs and vice-versa. The relationship came together quickly through effective communication between two very technologically competent companies. It was also evident that the Augnito team would deliver and meet expectations.

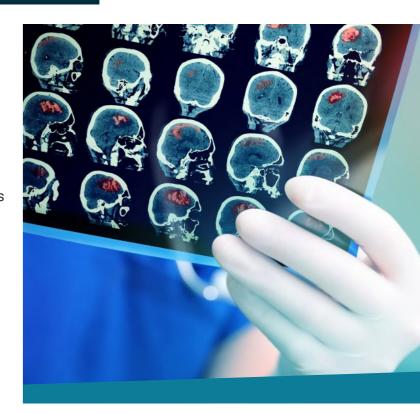
From a product perspective, a key feature of Augnito is its centrally updated language models (LMs). Potential hurdles in speech recognition are often found in complex LMs. Augnito's self-sufficiency makes it easy for customers to switch between specialities such as radiology and cardiology, and their associated LM's.

All customer's level-one support requests are addressed by CIMAR UK in-house. Complex customer requests, if needed, are dealt with directly by the Augnito IT team, available via a dedicated support phone number or web chat.

"We are still in the process of discovering how extensive the use of Augnito can be. The fact that we can talk directly to the Augnito team is a joy, and because of this, issues are ironed out very quickly. Rapid response and agility make this SR solution very appealing. Second to that is the single interface reporting tool – meaning there is no need for additional software between the reporting platform and SR functionality and controls."

"Augnito seems to create a happier, healthier, and more streamlined working environment for its users with improved team relationships and efficiency. An obvious, but probably under-recognised feature of using SR is the visual prompt to other team members that the healthcare professional is in process of reporting."

"After almost two decades of use, clinicians using SR still spend the same amount of time reporting, but with far less interruption in a busy clinical environment. Using an SR handset or headset makes it clear to others that you are 'dictating', making for focussed clinical reporting. Whereas traditional transcribing through typing did not allow for this visual prompt, and you were more likely to be interrupted."



SR vs typed/dictated reporting – is the time saved a myth or a fact?

"It depends on your typing skills!" says Dennis Wait. "Skilled touch-typing vs SR delivers little time gain, but it delivers the ability to do more than just typing reports. Whereas, if you are the standard two-finger typist completing a three-hour clinic, one hour can be spent on typing reports – and this is where SR absolutely allows for significantly improved efficiency with the same workload being completed in under 30 minutes. This represents a reporting timesaving of 40 - 60% and more. The benefit of overall time-efficiency gains is clear and well understood, hence a requirement in client business cases. Most reporting clinicians are familiar with, and happy to use, SR."

"Intelligent solutions such as Augnito continually learn and 'assist' the user to adapt to it, by improving their user profile and enabling them to use simple voice commands to pull up templates for example, or insert a macro, saving yet again more time, improving reporting accuracy and standardising documentation."





The Conclusion

"Augnito adds important functionality not only for radiology reporting but also as an example of an integrated solution for cloud PACS providers such as CIMAR UK and is, therefore, a valuable partner going forward."

"Any new cloud-native solution such as Augnito, in an established SR market, bringing about such a significant cost saving compared to the traditional solutions, must raise the question as to why the incumbents cost significantly more! Clinical healthcare can be both change and riskaverse, so new, lower-cost solutions need to show clear and easily understood advantages over legacy, on-premise, solutions to drive adoption amongst change fatigued healthcare professionals."

"Augnito adds to the CIMAR UK solution range in a "best-of-breed" approach. With SR increasingly requested as an essential must have, Augnito provides the flexibility for remote reporting in a post-pandemic world where working practices have changed forever."

"It is a fact that many industries cannot return to traditional working methods and for good reasons. Digital transformation is happening in the healthcare sector and proven cloud technologies will be vital to driving revolutionary price differentials. Health sector cloud technology will make health provision less expensive. Education paving the way for wider adoption and a 'cloud-first' approach will make this a reality, delivering what is at the core of what we do - better patient care," concluded Dennis Wait, CCO CIMAR UK.

