

Technology Record

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Starting strong

Microsoft for Startups supports innovation by offering technology services and industry-specific guidance. Sally Ann Frank discusses the values behind the programme and some of the solutions it has helped to develop for the health and life sciences industries

BY ANDY CLAYTON-SMITH

Fifty million new startup companies emerge every year, yet only one in ten businesses will make a profit in their first two to three years, according to data reporting firm DemandSage. Most startups fail because they don't have access to essential technology and expert guidance. This is where Microsoft for Startups can help. Sally Ann Frank, worldwide lead for health and life sciences (HLS) at Microsoft for Startups, explains how the team is accelerating the development and growth of new businesses by offering support and advice.

What was your professional background before joining Microsoft and how does your experience contribute to your understanding of the challenges startups face?

While I have had roles in both the defence and social services industries, I have also worked as vice president of marketing for a Microsoft partner. Starting out as a part-time marketing coordinator while my daughter was a toddler, I eventually took a full-time role, adding to my duties in marketing and sales. The company was essentially a startup when I joined, so that, along with my experience owning two companies, helps me understand the startup journey and the unique challenges of developing a business within the confines of a larger ecosystem.

Please tell us about the Microsoft for Startups team and your specific area of expertise.

Microsoft for Startups has been around for decades, known under various names like Bizspark. However, our team established in 2020 is specifically industry focused. Our team helps accelerate growth for startups in key industries like retail, cybersecurity, artificial intelligence and HLS. From an HLS

perspective, we are engaged with big data plays, generative AI and machine learning. We focus on the delivery of healthcare – whether that is helping healthcare professionals to collaborate, improve patient engagement, or accelerate drug discovery.

My expertise is concentrated on business development strategies, marketing and sales with a bit of technical expertise thrown in. I've been in the technology industry for far longer than I'd like to admit, but my experience has always been on the business development side. This has prepared me to guide startup founders and their teams on how to go to market effectively. I share best practices with the startups, not just those from my own

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experience, but also from what I see in the industry. I spend about an hour every day catching up on the HLS startup news so I can monitor trends and understand what makes some startups successful and why others fail.

How has the combination of a global pandemic and economic downturn across many parts of the world affected the work that you're doing? Where has the Microsoft for Startups strategy for healthcare played a useful role in driving innovation?

We are all aware that the Covid-19 pandemic accelerated the concept of care outside the traditional healthcare models. Telehealth



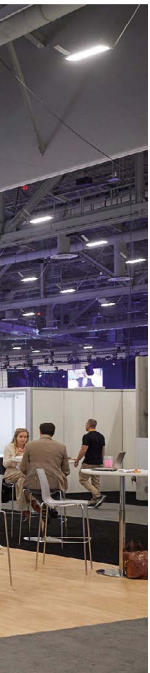
has been around for a long time, but only in pockets. Now it is ubiquitous in areas that can easily support the technology. The pandemic also highlighted the healthcare deserts, not just in local areas of the industrialised world but also all over the globe where vaccines, anti-viral medications and other measures were beyond the grasp of developing countries.

In terms of economic downturn, we have seen the venture capital community become more cautious about how and when they invest in digital health startups. One area that remains popular is generative AI but, even in this area, we aren't seeing the unabashed enthusiasm that we saw from investors just a few years ago.

The benefits of AI products like Copilot is the subject of great debate. Where does generative AI play a part in HLS startups?

Generative AI remains well established in administrative use cases, driven by the amount of risk (or lack thereof) that can be tolerated in HLS. However, as the industry improves with content moderation and effectively ringfencing the sources used in generative AI, we will be able to move towards more clinical applications. Additionally, Microsoft remains committed to responsible AI practices of fairness, reliability and safety, privacy and security, inclusiveness, transparency and accountability, such as through its AI Assurance Program.

Sally Ann Frank and the Microsoft for Startups team exhibited 10 of its HLS startups at HLTH 2023, the healthcare and wellness event, in October 2023



How are partners adding value to the HLS space and how is Microsoft helping to nurture new entrants to the field?

Microsoft depends on our partner ecosystem to bridge the last mile from our tools and platforms to solutions that our customers can use to achieve their organisational goals. For our startup partners in HLS, this includes everything from helping providers to improve patient outcomes with clinical support tools to optimising clinical trials and everything in between. Through our Founders Hub startup programme, we are supporting new entrants in the market with tools and resources, including free access to GitHub for software development and the Microsoft Cloud, \$2,500 of OpenAI credits and up to \$150,000 in Azure credits. Startups also receive a variety of product benefits, personalised mentoring from our experts, and go-to-market support.

What recent successes have startup partners achieved within the HLS industry?

There are so many to choose from and I've shared many in previous issues of this magazine. However, we recently published a case study with AI tooling company BeekeeperAI, which enables AI algorithm development within a zero-trust framework for healthcare predictions. The EscrowAI solution allows the use of sensitive data, without de-identification, to be part of the AI training and testing process. It does this by creating a trusted execution environment in which content is not visible to either data stewards or AI developers, but delivers verifiable results. BeeKeeperAI was able to enhance its solution by adding Azure Confidential Ledger to record algorithm and data set relationships. Originally spun out of University of California in San Francisco, the company is working directly with leading pharmaceutical companies globally to accelerate their safe and responsible use of AI for healthcare services.

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Another recent partner success involved Pangaea Data's product platform helping the UK's National Health Service (NHS) to identify cachexia patients. Pangaea Data combines AI and medical guidelines to characterise patients across 7,000 hard-to-diagnose conditions. The platform mimics the manual review process used by clinicians without transacting patient data, enabling the connection to a larger population of undiagnosed, misdiagnosed and miscoded patients across hard-to-diagnose conditions for monitoring, screening, therapies and trials.

The NHS collaborated with two pharmaceutical companies from the USA and Japan to identify cachexia patients at an earlier stage. NHS clinicians applied Pangea Data's platform to a data set of 8,484 patients who had previously been evaluated using traditional resources such as the ICD (International Classification of Diseases) or symptom-based searches. The platform correctly identified the 41 known cachexia patients and an additional 253 patients that were not identified previously. The earlier discovery of these patients helped halve the cost of treatment from £10,000 (\$12,600) to £5,000 (\$6,280) per patient, resulting in an annual saving of £1 billion (\$1.26 billion) for the NHS due to the identification of 200,000 such patients who are missed in the UK annually. Additionally, it has improved patient outcomes and justified the allocation of healthcare resources with empirical evidence. This enabled healthcare providers to deliver quality care more efficiently and cost-effectively to a larger patient population.

What lies ahead for you, your team, and your partners? What innovations can we expect to see being delivered as we move into 2024?

We will continue to see more AI solutions moving into the clinical realm, where they will be used for everything from diagnostics to imaging and digital therapeutics. There will also be greater adoption of personalised medical treatments, whether it's bespoke implants, chronic condition management or medications. And while we don't talk much about the metaverse anymore, we are seeing growing adoption and applications of virtual and augmented reality, especially in mental health.

Lastly, we will see changes in care delivery systems as more routine visits move towards telehealth, freeing up in-person appointments for more urgent and complicated illnesses. ■