Digital transformation in the healthcare & life sciences industry

Cloud Demystified Podcast

Audio Transcript

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Ankur Kashyap, HCL: Hello, and welcome to Cloud Demystified brought to you by HCL Google Ecosystem Business Unit, the dedicated business unit of HCL that helps enterprises use Google Cloud to fuel and enable digital transformation for delivering superior customer experiences. In this podcast, industry thought leaders, innovative business leaders and cloud experts share their views and opinions on various topics relevant for today and tomorrow to unlock the benefits of cloud computing.

My name is Ankur Kashyap, and I lead the Alliance and go-to-market function for the Google ecosystem business unit. I will be your host for this podcast. The title for today's podcast is Digital transformation in the healthcare & life sciences industry. Today I'm very excited to host Ben Howard, National Partner Lead, Healthcare and Life Sciences at Google Cloud and get his insights on how Google is helping the healthcare and life sciences enterprises innovate and create greater value for their customers and shareholders.

Welcome, Ben. Please introduce yourself to our listeners. You have a fascinating background with one of your degrees being in theology.

Ben Howard, Google Cloud: Well, first of all, thank you so much for having me Ankur. I'm very excited to be part of this HCL podcast. It's great for the partnership that HCL has with Google Cloud, not only in healthcare and life sciences but across the board. So as you mentioned about me, I lead all of Google's healthcare, life sciences, partner strategy, and engagement. So its departments, technology partners, and then when customers create unique partnerships with Google like the Mayo Clinic and Ascension and a whole host of others. You mentioned a little bit about my background - I didn't start in healthcare but kind of worked my way here. Theology was one at the undergraduate degree that I did. It was probably my last opportunity to enjoy learning just for learning's sake and didn't have to apply it. And then I later became a lawyer. Then moved from England to the US about 11 years ago. And I've worked at hardware companies, software companies, consulting companies, and was fortunate enough to join Google Cloud just over three years ago.

I had been squarely in the healthcare space since then. So really excited to be part of the podcast. And I'm looking forward to discussing some of the topics.

Ankur Kashyap, HCL: Thank you. Fascinating background, Ben. Look forward to your insights today. Ben, as we see ourselves on the brink of a post COVID world, we are observing novel areas, innovations in the life sciences space, like decentralized clinical trials, intelligent, pharmacovigilance and drug safety, immersive customer engagements to name a few. Also in the healthcare industry, we are seeing a move towards value-based care, which is disrupting the traditional business models and driving a need for modern platforms that support such innovation. So from your perspective, what are the key trends that you have observed in this past year?

Ben Howard, Google Cloud: Yeah, that's a great question. So obviously COVID has really shone both a stark and hopeful spotlight on healthcare. And I think that there's a lot we can probably talk about but it's becoming or become increasingly clear that digital health is the future. I want to say, we believe Google Cloud is uniquely positioned to solve some of those toughest challenges that come with it. And then it kind of falls into three big buckets. One is around driving new digital patient experiences. I mean, the global telehealth market has grown tremendously over the last year and will continue to grow. I think really being able to use insights to improve healthcare delivery. I think what we're seeing across the market is that healthcare executives are using predictive analytics more and more, and the better job we can do to help aid and inform clinical workflows, the better the patient experience and delivery of care will be. And then you touched on it briefly, but obviously being able to help advance drug research, drug discovery, and distribution at scale. I mean, traditionally in the US at least it took on average 12 to 15 years to bring a drug to market. And of course with project Warp Speed and a number of other initiatives they've been able to help bring the COVID vaccinations to market in less than a year. So I think that Google's uniquely positioned

to solve a lot of those. You know who we focus on tomorrow and healthcare is one of the most important fields that technology will and can help transform. And it's a major area of investment for Google. I think one of the big differentiators is that Google is, part of the Alphabet family of companies and there's Google Cloud which is where I work. But then there's Google Health which has AI and consumer health products. There is, of course, Verily that's really improving the quality of life in the pharma biomedical space. There's Calico that does longevity research, there's Fitbit that has all of the health data. So when you bring all of that together, Google is uniquely positioned to help disrupt and transform. And you talked about some of those key challenges in terms of some of the cost pressures, in terms of re-shifting from volume to value, in terms of population, health and how you can help expand, how and where providers deliver care, reduce workforce burnout, we've seen that in COVID, condition burnout and nurse burnout. What is it that we can do to help with transcription and translation to help save note-taking or whole host of things? And there's just some of the more traditional challenges that the healthcare customers face and legacy infrastructure and the lack of data interoperability that's slowly being addressed with the CMS interrupt rules and a whole host of other things. Happy to dive into any of those topics deeper but I think that gives you a good insight into what we've seen over the last year that how Google is uniquely positioned to help solve some of the most complex challenges.

Ankur Kashyap, HCL: Yes. No, absolutely. I agree, Ben. And I loved your reference – volume to value! Absolutely fascinating. You know, and we also know that healthcare and life sciences industries have their own nuances, right? And really we'd like to dig in a little bit deeper on each one of them. Would love to have your views on healthcare. Our audience would like to learn how Google Cloud is helping healthcare companies.

Ben Howard, Google Cloud: Yeah, sure. It's a really good question. We're able to help I would say in a number of ways and we can break it out by - how we're helping providers, how we're helping payers and health plans and how we're helping life sciences companies. I think that they all face unique challenges that require kind of a unique set of services. I think for the providers, we're investing in the future of virtual care. We have a strategic technology partner with Amwell, where we're looking to embed artificial intelligence in that platform. Being able to help with remote monitoring and device integration, how to expand care outside the four walls of the hospital. What is it we can do to help clinician and physician burnout with natural language processing, document processing, transcription, translation, and then the whole host of the healthcare data, interruption, analytics, and then collaboration? In addition to that, we have this continuous innovation across Alphabet with as I mentioned, with Nest or Verily or Fitbit or Ads where we are really bringing out some solutions that can accelerate or solve challenges. We have a healthcare interrupt accelerator that really helps customers reduce the time and optimize the resources and keep costs low while the pre-built APIs, healthcare insights, we know they want to gain a centralized holistic view of data from multiple sources and we have a public case of Emory university there. In terms of solutions like high-performance computing for pharma, where there's access to hardware and software that can burst to scale for any workload. So I think that there are some core solutions that Google is working on and delivering whether it's air quality and risk AI to help with HEDIS reporting. For plans, whether that's a healthcare data cloud, which is really bringing a secretary flyer store to enable a longitudinal patient record, whether it's a health plan data interrupt solution to help accelerate that the compatibility and compliance with the CMS interrupt rules. What we're really looking to do is remove friction, remove costs, remove the technical burden for healthcare customers. They should be focusing on the healthcare element. And Google is one that provides the technology to help, I would say deliver a lot of that innovation. And that's the key. We know that hospitals and healthcare providers and plans and researchers and drug makers, that's their job. And our job is what can we do to help solve their problems, whether it's building systems of engagement, clinical data, repository, and fire, enabling an application ecosystem by interrupt through fire API, it's creating analytics and machine learning models of joint datasets. There are really things that we want to do to make the life of a doctor, the life of a drug researcher, the life of a health plan administrator, easier and faster. So hopefully that was kind of an overview and I'm happy to dive into any specific areas.

Ankur Kashyap, HCL: Absolutely. You know, on the same topic, do touch on your focus on the life sciences industry, right. And how you are creating value for this industry. It's been in the forefront for the past year and I think will continue to be. So some nuances there will be great from your perspective.

Ben Howard, Google Cloud: A great question. So of course, life sciences is a priority at Google. You know we are working to accelerate every life sciences' organization's ability to both digitally transform and reimagine that business through kind of a data powered innovation. So driving value through data is key. Life sciences organizations need to transform how they integrate and harmonize and allies. And we think about that in three buckets - that's the research and development element. High throughput screening of molecular candidates, compounds, genomic processing. We want to be able to decrease the cost of compute so R&D can proliferate at a lower cost and a higher rate. In the manufacturing supply chain, we want to help. Whether it's to predict supply and demand and reduce time to clinical sites and the time to patients using a more efficient inventory management. And then how do they have a better commercial and patient value proposition, the digital patient engagement and support tools and smart devices for the actual administration. So can we increase the average time on therapy? Can we increase the TRX and rebuild? So we very much think about accelerating time to market, transforming operations having a very patient centred experience. Then are there new business models that they can reimagine. And we want to accelerate the pace of innovation of new drugs and devices but that's genomics insights, real-world insights. That's augmenting the value to patients by improving outcomes with a seamless digital engagement. We have great partnerships there as well as helping leverage data-driven insights and decision-making to really improve clinical and operational efficiency, but that's predictive maintenance using water machine learning, vision, connected factory, top-notch operations for machines, better predictive analytics and supply chain management. I think that Google intimately understands the value chain of life sciences customers, R&D acceleration, research, data management, and enabling digital decentralized clinical trials and have all of the technology underpinnings for somebody to come along and use it in a very frictionless way. So hopefully that kind of gave a good overview.
I'm happy to dive in further.

Ankur Kashyap, HCL: Absolutely. Yeah, it did. And there are many things that you touched on, you know, as you talk to customers day in, day out, and our enabling partners. Aren't their top two or three use cases that you see that you would advise your partners or customers to focus on? Also, I do have a follow-up question. What is your advice or best practices that you would recommend to our listeners who are planning their cloud journey? So, if you can touch on these two that will be great and really help our listeners.

Ben Howard, Google Cloud: Yeah, sure. So, both great questions. I think what we've seen, and I don't think this is unique to Google - Google Cloud is just a risk tolerance. What is a way that they can really drive better business insights through data that's frictionless, low risk and high reward? And of course, that's where Google really excels – it's in leveraging data to do new things. It is a very easy on-ramp to leveraging what the cloud can offer. So, I think directly answering your question is what are some use cases that customers are adopting to begin or accelerate their cloud journey leveraging GCP? I think that I can answer that in a couple of different ways. If we're thinking about providers and the health system value chain, it's in a number of areas. It could start small in appointment and procedure scheduling. How can hospitals or providers get smarter? Can they predict when someone's not going to show up for an appointment? So double book that time, because it's raining on a Tuesday in Arkansas, or is there a way that they can help improve and reduce claims QA and error resolution? So, it's tactical business problem that they need to reduce costs, increase revenue, improve efficiency. That is a very relatively low risk on -ramp. Same thing if you think about talking to life sciences customers. Whether it's in preclinical drug discovery and research or if it's in inventory management or you know, how do they help optimize the warehouse to the retail pharmacy piece? Where do they need to have the drug, which distribution center and what time to reduce the time it takes for delivery. So, these are all real problems that they face day in and day out that Google has the technology and the experience and the partners like HCL to help deliver in a relatively short period of time. It's about building those bridges to trust where it's not about saying, "look, come in and move your entire on-prem footprint to the cloud". Now that would be great, but it's not realistic. So, I think the more we can do to help our customers with a level of comfort and confidence day over day, week over week, month

over month, solving real problems that they face is a great way to kind of get started. So those are some early use cases. And I think that we've got some great examples, both online and solutions that are meeting today's needs, whether that's for making more data-driven clinical operational decisions, whether that's advanced research at scale like genomic data processing and analytics, or helping with FDA MyStudies, which has come gathering data for medical research. If they use an open-source platform and then, you know, help to recruit and enrol and engage study participants in a medical study, those are real things that people need help with. And then I think to your second question, just to make sure I kind of got it right. The question was, what advice would I give based on the experience and working with some of the largest payer-provider and pharma customers who are planning or thinking about cloud adoption and what does that journey look like?
Was that the second question?

Ankur Kashyap, HCL: Yes. Yeah.

Ben Howard, Google Cloud: I think it's a great question. I think it can fall into a couple of different categories. Either customer knows where they want to go and just not quite sure how to get that. Or they don't really know where they want to go and they're looking for help in understanding. How and where, and why do I use the cloud? And I think that there are two ways to do that. We've partnered with organizations you know, for example, to navigate COVID-19 by moving fast, innovate and collaborate, and then looking at what we've done. Whether that's Sanofi with whom we worked to accelerate treatments, vaccines, and diagnostics or the Mount Sinai health system that uses Google maps to monitor and communicate with COVID patients in isolation, all in real-time. There are things that, you know, people have done. And then there's also in working with our partners and understanding, you know, what are those challenges. How do we, you know, drive a new digital patient experience? There's a longer than expected customer hold time. I want to have a better customer experience when somebody is calling into a health plan to get information about - am I covered, am I not covered. Being able to say, okay, that's an easily addressed problem. Leveraging technology that saves the human interaction for a higher priority need reduces the cost of serving that member and provides a better member experience. So I would say it's a multifaceted question where the not sure what you're doing and that of course, Google and our partners can help do that. Or it's thinking about what are my most pressing needs? Who in the business needs the most help? Whether it's a clinician where they need help for diagnosis and treatment, whether it's in-patient monitoring engagement or it's within the business and how do we have a more efficient revenue cycle management or in a, in a pharma company? We need to be able to identify and validate compound screening faster. Well, we need to be able to manufacture and sourcing procurement, the raw materials fast or predict when do we need what and then figuring out what's the technology that applies. Technology is always secondary to - what is the problem we're trying to solve. And what's the value that either has to a patient or clinician to a member and a plan or to that end customer in the life sciences value chain.

Ankur Kashyap, HCL: Thank you, Ben. These are very valuable insights for our listeners. And if I was to pick on three words that really define, you know, how Google Cloud and Alphabet are adding value to this industry - Experience, Insights and Acceleration come to mind based on our conversation. It's been a pleasure to have you on the podcast and to our listeners, I would like to thank you for tuning in. Watch out for our next episode of Cloud Demystified.
Until then it's Ankur Kashyap and Ben Howard signing off.
Thank you so much for your time today, Ben.

Ben Howard, Google Cloud: Thank you so much for having me.