Shiva Kannan – Vice President, Commercial Chief Information Officer, GE Healthcare



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Shiva Kannan, VP and Chief Information Officer for GE Healthcare in over 120 countries, discusses the company's journey over the past few years and the company-wide digital transformation he has led the implementation of. Moreover, he explains why GE is looking at a subscription-based model for some of their hospital equipment and the internal processes which are leading to leaner operations.

Can you start by describing the role you play for GE Healthcare and the scope of your responsibilities?

I have two parts to my role. On one side, I am the Vice President, Commercial Chief Information Officer, meaning that I am responsible for the commercial processes and platforms for our commercial workforce.

GE Healthcare has around 6,000 sales reps globally; we are predominantly a face-to-face selling organisation. We are supported by a robust network of Channel Partners who help to expand our reach in various countries globally. We have an equal number, almost 6,000 people, that are supporting the front line so they can be efficient in supporting our customers to create value. My team manages the enterprise process and tools.

The second part of my role is much more regional in nature. We have global enterprise platforms, and, within GE's structure, the regional CEOs have a CIO that owns the entire enterprise digital and IT strategy to make sure that every aspect surrounding contact with customers is taken care of. All of the regional CIOs report to me.

I came here in 2013 initially to be the CIO for the Asia Pacific region. Asia Pacific at that time was defined as Japan, ASEAN and Korea. Since then, my role has grown and morphed to a point where I'm now running global teams that are sitting across 20 countries.

How did GE's divestment from the biopharma business impacted your operations?

In order to understand the changes, I must first provide some context on the company. I have been in GE Healthcare for almost 20 years. There is still a lot of pride that runs within all of us, including the long-timers, about what GE stands for. There is a true sense of pride.

GE Healthcare has been undergoing a multitude of changes in the last 5 years due to both external and internal forces. The transformation has been unfolding. Change is not always easy but we all take a lot of pride in going through that as we believe in the fundamental value of the products we provide and our purpose of improving lives.

Today, Larry (CEO Henry Lawrence Culp Jr.), after taking charge, has basically gone back to basics. When you look at our reports, "lean" is mentioned several times. We are a Six Sigma company; that was our DNA, and, in some ways, we went away from that. "Lean" means having a sense of priorities and measuring them through key performance indicators (KPIs). Everyone has KPIs to measure them and this back to basics approach is helping us to deal with real problems and come closer together.

If we look at other business franchises like aviation, the pandemic has presented a great challenge, but it has also given us an opportunity to go back and reset the business. We will be much stronger when we come back; we have the best franchise in the world.

When you look at healthcare, the divesture of biopharma, which was our most profitable franchise and is involved with some of the vaccines saving the world right now, has allowed us to become leaner and meaner, similar to aviation. We are focusing on the things that really matter. Covid added a few wrinkles along the way. Some of our customers are still struggling financially but we have been with them all along.

In many ways, we have the right products and are investing in digital transformation. If you look at data and healthcare, some of the trends that are coming up are the issue of access, where over 3.5 billion people in the world still lack good access to healthcare, even in developed countries. The second trend is the fact that liquidity is tight for many healthcare providers and we are looking at ways to support them. Third is the quality of healthcare. 20 percent of the regrettable deaths in the world are because of medical errors. That's something that we can work with our customers, the hospitals, to support and help.

From a digital transformation standpoint, data is not the issue for hospitals, they have plenty, but only 5 percent of the data is analysed. It is why we are excited about the digital transformation. If you combine our 100-year legacy in terms of building medical device products, understanding how the data comes out, and the physics behind it, we can work with our customers to drive outcomes and insights out of that data.

Many companies in healthcare are already on a journey to digitalisation. What has been GE's approach to this task?

I will take it from two angles. One is the internal angle. We have been on this journey of streamlining, transforming and standardising for the last five or six years. When I started at the company, its size was around USD four billion; before the biopharma divestment, we were close to about USD 20 billion. Today, we are a USD 18 billion company, so we have grown in leaps and bounds. We operate across 160 countries and are going to continue to grow via acquisitions.

Over the last five or six years, we cut down from 100+ enterprise resource planning (ERP) systems, which is our backbone. Today we have three ERPs, and we can't go further because we have one for our pharma business, which is the pharmaceutical diagnostics PDX, and one for our software business. That has given us wing-to-wing visibility of what is going on. It is huge in terms of supply chain visibility, transformation, and simplification.

It is important because now we can see across the value chain. We have been able to connect across the digital ecosystem to create a digital thread. Today, if an ultrasound product manager looks at how new products are performing, he or she can look across the entire world and see where it is selling, which features are doing well to understand what the customers really want. That is the simplification and standardisation that comes with it.

The external side, on the other hand, is where we have been investing heavily in digitalisation. There is a large amount of data available which has not been used to its full potential. For healthcare in particular we have begun using Edison, GE's intelligence platform in which applications can integrate and assimilate data from disparate sources, and apply analytics or advanced algorithms to generate clinical, operational, and financial insights.

If we look at our computed tomography (CT) machines, we used to sell a separate CT machine for cardiologists, a separate one for primary care and so on. But now, we are looking at selling a base hardware and then apps for different specialists. In other words, a subscription model. And it will not be only us, we can open this platform as a marketplace, partnering with researchers, hospitals, etc.

Eventually, subscription will go beyond software and be for the whole equipment; hardware plus software where the shift will happen from capex investments upfront to a more sustained opex expense over a longer time period

Another area where we are leading the way is our command center which looks at patient flow, patient throughput, how centers in different hospitals are performing, the occupancy of beds, and can detect shortages and make suggestions to be more efficient.

What are the things that you find in Singapore that are conducive to strengthening the position of GE and operating in a leaner fashion?

Singapore, in many ways, is the headquarters for this part of the world in terms of support from the government, openness, the efficiency with which things get done over here, the access to talent pools, and the neutrality that this place brings. All of that is, in many ways, very conducive for executing our strategy.

Particularly in the healthcare setting, cybersecurity is fast becoming a very important need. You keep hearing about customers and our partners being hacked for ransom. Since we are talking about sensitive patient data, we have to play a huge role and Singapore is a great place from a cybersecurity standpoint. Our cybersecurity leader for Asia is based here. Overall, Singapore has been a great partner for GE Healthcare.

You mentioned that a few of your colleagues left the company during the past few challenging years. Why have you stayed with GE?

I think the future looks exciting right now. In many ways, a lot of us are still here because we can make a real difference, there is a purpose to what we do every day. The purpose is something that is inspirational and part of the reason why I'm still here.

Regarding the future, that there's so much that can be done, and this is just the beginning. Covid has accelerated a lot of that transformation. Digital is going to be a key part of this. In addition to what we talked about earlier, our customers also want to interact with us differently across newer and multiple channels (face to face, inside sales, digital) while maintaining high levels of customer experience. While transforming our go-to-market strategy, it will also allow us to elevate the experience we provide our customers.

What is GE's therapeutic footprint and what solutions are you looking to bring to the region outside of digital services?

Our range of solutions covers diagnostic imaging equipment such as MR, CT, X-Rays, cyclotrons, ultrasounds, to life care solutions such as patient monitors, ventilators, baby warmers and more. This equipment isused across a range of care areas including oncology, gynaecology, cardiology, trauma, neonatal infant care and intensive care.

As APAC's medical device sector becomes more attractive to international companies and breeds more domestic players, what is your strategy to continue competing in the market?

There are two aspects to this. The first is ensuring that we offer the most innovative products and solutions that help our customer achieve precision health, at the right cost. Precision health is a developing industry-wide movement towards making healthcare more patient-centric, data-driven, value-based, and more precise. This can be done through several ways such as improving the technological capabilities of our equipment and leveraging digital technology such as AI, big data and virtual monitoring to support the patient's healthcare experience and improve a clinician's diagnostic confidence.

The second is through partnerships with complementary partners to offer customers an end-to-end solution that can be scaled to optimise their operational efficiency and healthcare outcomes across

the hospital. GE Healthcare has a number of global partnerships with companies such as Nvidia and Intel to offer supercomputing performance on GE Healthcare devices, to Amazon AWS and Microsoft Azure to offer compelling cloud environments for our Edison platform. Edison is our cloud-based platform that offers our customers access to apps from start-ups which can be deployed within our devices. Partnering with start-ups allows us to offer customers access to innovative solutions as soon as they are ready for industry use, without multiple vendors and projects.

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