Capgemini invent

FUTURE SIGHT PODCAST

Ep.18: Connected Health

Future Sight Podcast by Capgemini Invent

As business and technology move forward at a rapid rate, it has become increasingly important to explore new ways to adapt and grow for the future. This podcast is your guide to that future journey.

Join us as we explore a new topic in business, technology, and transformation. Find out more about the challenges businesses are facing today and what they can expect in the future. Listen to leading industry experts as they break down need-to-know, actionable approaches with strategic insights and provide tangible takeaways.

Listen to more Future Sight episodes here: https://www.capgemini.com/podcasts/future-sight-podcast/

Episode Transcript

Ollie Judge: This is Future Sight, a show from Capgemini invent. I'm Ollie Judge. On this show, we explore new ways for you to adapt and grow for the future in business.

This week, we're exploring the complex world of connected health. We'll be looking at why so many digital initiatives get stuck at 1.0 and why in life sciences, behavior of your customers plays such a critical role in your success. To help me make sense of this unique industry, I have Anthony.

Anthony Pannozzo: I'm Anthony Pannozzo, Chief Design Officer, in North America and Asia for frog, part of Capgemini Invent.

Ollie: Shwen.

Shwen Gwee: Hi, I'm Shwen Gwee. I hit up Global Digital Strategy at Bristol-Myers Squibb.

Ollie: And Emily.

Emily Tower: I'm Emily Tower. I lead the Connected Health practice in North America for Capgemini Invent.

Ollie: So Future Sight isn't just about digital health or connected health. It's about a load of different topics. For people that might not be in the know, what is life sciences?

Emily: Yeah, life sciences really encompass every company who is invested in healthcare, but with a strong focus, primarily on pharmaceutical companies, as well as medical device companies.

Ollie: Brilliant. That was lovely and textbook. I'm actually going to push our first, big question, we're going to be talking a little bit about digital products and digital transformation within life sciences. But I think it would be good to start off with understanding what the state of all of that is currently.

Can you give us a bit of an overview of what's going on? What kind of status we're at and what the maturity level is in comparison to other industries?

Let's push on that a little bit more. Obviously, there've been multiple attempts into bringing digital properly into life sciences, but it's not quite as simple as just digitizing the process and sticking it in an app. It's not a bank statement. And that's very easy to take from paper to screen. Why is the life sciences industry perhaps lagging a bit behind in terms of digital transformation?

Emily: I think you've got to consider where life sciences come from, right? Life sciences companies sell therapies, that is what they have brought to the marketplace. And it is such an important leap in terms of providing better outcomes for patients, but they don't necessarily sell care. So, where we've seen digital health really take off is where we've seen care disrupted, but not necessarily therapy.

And so, it's incumbent on life sciences companies to figure out where and how they're going to fit in this new connected care; and where that therapy model is going to either complement or drive new innovation around digital health. So, I think one of the fundamental questions that we're asking alongside our clients in life sciences is – where and how are we interested in that merging of where therapy now meets this disruption in care and how digital health can enable that?

Ollie: What makes life sciences unique? What are the sorts of unique problems in this space that we're really looking into?

Shwen: I think one of the things that we have to consider in the life sciences industry and why it might be lagging compared to other industries is the fact that it's so highly regulated. There are so many things that we need to do to go through the review and approval process, the scrutiny by multiple regulatory bodies, most companies have to deal with SEC and so on.

But we also have the FDA and there are certain requirements that are necessary to ensure the safety of our patients. So, we have to adhere to that. And that goes, as much for the messaging and content piece, as well as for the devices and platforms that we start to develop, all those need to be regulated in a way to ensure safety as well as adhere to the regulations. And they may be different in every country or region.

Emily: But I think Shwen, one of the exciting parts of that is that life sciences companies are well adept at delivering on regulated products. Meaning that while it is certainly a limitation, I think as all of us, as consumers, are glad that life sciences companies would be delivering on connected health or digital health products, because it does mean that it's gone through the scrutiny, the certification, and the FDA approvals.

So, we should be celebrating that. It is certainly a shift, but I see it as an opportunity for life sciences to really lead the pack and demonstrate to the other players who are already entrenched in digital health – tech first companies, Google coming into the scene, Microsoft making investments in connected health products. Life sciences companies should be part of this mix and not simply be held back by what they know to be those limitations and restrictions around the regulatory environment.

Shwen: Agreed. And I think where I was going with that, was really, just saying that because of the regulations and the amount of work, time, money, and resources that are needed to get something approved, there's always a hesitancy to change things. And as we know, in this world of digital innovation, a lot has to do with having an iterative process and changing things based on reaction and data and insights that you're gathering in real time from the end user.

And, so in a world where you're heavily regulated and everything takes time, money, and resources in order to get something to change, there can sometimes be a perception of that being the thing that holds us back because we can't react as quickly as some of the other industries can.

Anthony: Yeah, and I think there's also a consumer side or a user side of the equation. So, in addition to the regulatory challenges, in addition to all of the, what you might call, inhibitors to say bringing new solutions to market that say the consumer space doesn't really have to address, there is also the fundamental challenge with the behavior of folks. So, Ollie you were asking the question about why? What's the difference between digital transformation and say the media and entertainment business versus digital transformation and healthcare? One thing in immediate entertainment is the average consumer usually wants to be entertained.

They actually want to engage with content. And so, when you look at, say the evolution of blockbuster to Netflix, to the streaming wars that we have, what you have is a huge amount of demand where consumers want to consume content wherever they are, whenever they are. They don't want to wait for a movie to be available, and to the home on the day that it opens. They want to have the choice to either go and see the Avengers the day it opens or watch it on their phone while they're in their backyard. In healthcare, it's different. In fact, the problem that healthcare faces is the same problem they faced even before digital transformation, which is adherence. People don't want to be sick. They don't want to acknowledge the changes that they need to make in their lives. Whether it's taking medicine every day, whether it's taking multiple therapies every day, whether it's injections, whether it's lifestyle changes, exercising more, eating more healthy, it's a tremendous change to people's livelihood and how they live.

And they go through moments of empowerment where they feel like they can improve their condition. Then there's moments of denial, where they want to forget that they have rheumatoid arthritis or congestive heart failure. And in addition to the challenges around the regulatory challenges, you still have those same challenges where people, either no one wants to be sick or when they are sick, they are now suddenly, it's like being given a new job that you have absolutely no training for. Now, they need to learn. They need to educate. They need to change. And they're all doing it all in a context of really being forced to do it versus wanting to do it like watch the Avengers, wherever and whenever they are.

Emily: And I'm glad you're bringing up the consumer and all of this because those same consumer expectations are now applied to the healthcare world and are certainly accelerated by the pandemic. All of us probably accepted that it was okay that you had to call your doctor, that you received paper files as you exited your appointment, that you needed to go to three different places to fill your prescription, gain your reimbursement, et cetera. And the pandemic forced us all to shift to digital.

And now that expectation is being applied to remote patient monitoring and being able to manage my chronic condition outside of my doctor's office. So that is why I'm excited that we're having the conversation about connected health, because those consumer expectations, I see them as an accelerator for what we as life sciences companies need to do to meet those expectations.

So, I don't know that we will delight in the same way that Netflix ever will, to all the points you just made, Anthony. And yet we need to find a way to deliver a seamless experience in the way that Netflix has done for streaming and video.

Ollie: I'm going to pick up on that and this, this is actually a concept that I really liked all of you talking about which is the difference between digitizing and starting off from a truly digital perspective. One of the reasons that blockbuster didn't make the jump into streaming, it was because they weren't born of the streaming. I know Netflix did have a rental model before, but the idea was that they started a product that was designed for the platform.

What are the issues that some of these companies face when they're going into this process, and now they're looking at what they've got and they're trying to, or in their heads digitize it? How would you help them rethink that process? What should they be doing? Where should they be starting?

Shwen: Yeah, I think there's a couple of factors that are challenging in this industry. I think one of them is, first of all, the complexity of the different number of players that are involved in your healthcare. There's the payer, there's the provider, there's the patient, there's PBMs in the US, and so on and so forth.

And so, there are multiple players. And what Emily was describing earlier about, you have to go to get your prescriptions in one place, and you have to go to see the doctor in another place. It's all very disconnected at this point in time. And so that's one factor that's really complex and it makes it difficult because the end user, the patient, is the one that has to actually have all the touch points and connect all the dots.

The other one that's really difficult from the business end is the fact that, whereas in a retail environment, you know who your end user is and who you're selling to. In the healthcare industry and in pharma, who you sell to, who pays for the product, and who actually uses the product, are three different people, and are three different groups. And therefore, there's this confusion of who should we be actually building for, in a sense.

So, I think that's a bit of the complexity that exists within this industry. But also, I think more than that, a lot of times when we look at where we've come from and what we've done at, which has been very successful for the pharma industry, there's this notion that all we need to do is to take what we did before and digitize it.

So how do we just take what we did and digitize it, and not rethink the model in a digital-first way? And so, I think a lot of that has been happening, which to an extent is good because you're giving people access, you're turning it into a format that is much more available to others. But at the same time, when people are much more used to the experience that's been created by an Amazon or a Google or an Apple, how are we thinking in that kind of an experience to deliver the same kind of needs that people have?

And that's where I think we need to start changing the way we think, changing our culture, changing our mindset is to really start to approach it through the experiential piece; and how we can leverage digital as a novel approach to thinking through the entire experience, rather than just saying, let's look at what we have now and how do we digitize what we did and put it online.

Emily: And one thing that Anthony, that you had, you always go back to in terms of where the challenge lies in being able to do exactly what Shwen is talking about, is disrupting the business model, right? Not simply digitizing what we have today.

You say Marriott could not have thought of Airbnb, right? No transportation company came up with the idea of Uber. And so sometimes I think we're in our own way of what truly is needed to disrupt care and bring connected health to the value that we know it can bring.

It's not simply about opportunistically taking the technology and applying it to the many problems in healthcare. It's about fundamentally disrupting the model. And Anthony, I know you've got perspective on that as how it all starts with behavioral change.

Anthony: So, I think the two things that I think I see with any kind of organization is that it has a very clear operating model and a very clear business model. And as you mentioned, Emily, life sciences companies are really good at molecular drug discovery, development, and commercialization.

And that whole continuity is really there; it's extraordinary how successful the industry has been and how frankly simple the model is. And so, in order to continue to add value, which I think for a life sciences company, if you look at most life sciences companies, I think that their mission statement is basically, somewhere around we come to work every day because we want to improve people's lives and make it easier for them to manage and live with the illnesses and the diseases that they have. And if you look at it through strictly through that lens, then some of the monetization for them is the same as it is today.

It's about reimbursement. It's about demonstrating that a digital therapy or a digital companion to an existing molecular therapy actually produces better outcomes. And if an insurance company sees better outcomes, that's a good thing. And then they will reimburse. The second approach, I think Emily is what you were talking about, which is, really, you know what Airbnb and Uber and other startups like that do is they looked at the market from a consumer problem perspective. They didn't look at it from a business optimization perspective. And I think, Shwen was talking about changing the culture of organizations and whether it's a life sciences organization or really any other sector, it's really hard for them to see the opportunities outside of their current structure, investments, strengths, assets, et cetera. And so, I think that's where that focusing on the patient, focusing on the provider will help.

If you think about it, it's not that hard. All you need to do is talk to six healthcare providers, six oncologists to really understand what is awful about their job and what they love about their job. And if you can focus on creating a value proposition on the awful part, to turn that into something that's less awful or enhance what they love about being an oncologist, then that's the seed of an innovation. And if you can carry that through, without it having it being, ultimately, disrupted internally, by it doesn't meet this requirement or that requirement based on the business, then that's where I think all of these organizations missed their opportunity because they do have a lot of the insights. They just don't know how to convert those insights into value.

Emily: Yeah. And it's so much more than just a technology story. It's not simply what can we do with the technology, but how do we affect change? And truly impact that, that court insight as you mentioned.

Anthony: Yeah. In fact, one of the things I love about the term connected health versus say digital health, is that when you say connected, what I think of is connecting not only people, through technology, but connecting people to other people through technology. If you look at a lot of the tele-health, what tele-health has really done, it's really about connecting people.

It's still a patient and a provider, they're just intermediated through and conveniently so through a digital platform and a digital technology. So there's what the technology can do to help us as to, whether it's to adhere to our plans or to better manage the emotional stresses of having cancer.

But then there's also the ability to facilitate connections to people and to other people that have that condition, so the social influence. So, when you look at people, technology, and providers, and say a community of people that share a shared experience like cancer, it's enabling all of that to work its wonder. And this isn't just about the technology. It's really about what it's enabling people to accomplish.

Shwen: I think you both bring up great points and that's part of the challenge as well, which is really understanding what is the pain point, or the true problem that we're trying to solve for. And sometimes because there's so many cool technologies out there, we get distracted by the fact that we start with the technology first and go, okay, what's the problem we can solve with this.

And obviously that's not the right way around because we want to be solving for the pain point, not trying to leverage the technology for something cool. And I think, it's inherent in the culture and models that we've built around how we do things that sometimes we get caught up in that instead of really understanding the areas where we can really create the most value.

Anthony: Yeah, that's a really good point. And it reminds me of an example of a work that my frog colleagues in San Francisco did, a few years ago. A client – a hospital – had come to us, asking if we could help them develop a a low-cost VR headset to be used with burn victims as a form of therapy. So, when their bandages are being changed daily, they can literally put this headset on, try to forget and disappear, and really escape into an alternate reality to avoid focusing on the pain, because the bandage changing is extremely painful. And, at first glance, because we didn't understand burn therapy, we thought, okay, this felt like it was technology looking for a solution.

But then when we talked to the healthcare providers, we learned that part of the existing standard of care is distraction. It's getting people to not look over here while they inject you. But this was more of a sustained distraction because the process, depending on the severity of the burn and the amount of coverage on the body, it could take an hour or so to have the bandage changed. So, because there was a proven pain point and a proven standard of care, this idea of using distraction as a way to get people, to not feel the pain as much, that made the technology application viable because it wasn't that they were excited about VR, but they saw it as the best possible way to create a distraction.

Emily: Yeah, I think that's a great example. And conversely, we so often hear that as you brought up early on, Anthony, adherence is a problem, right? We can't get people to stay on medication. And so often the opportunistic solution is what if we could just create a smart pill bottle or a smart blister pack to remind people when they haven't taken their medication, assuming that the core pain point is just – I forgot. Not that I don't take it because it doesn't make me feel good. I don't take it because I don't want to be reminded that I have this condition. I don't take it because I'm trying to spread out my treatment because I can't afford to buy this every month.

And so, it's ignoring so many of the true potential pain points and going for one where technology can be the easy solve of, if only it alerted you, every time you open your pill bottle, then we should have solved adherence. So, I agree with you wholeheartedly. It's about looking at those root causes, the core vulnerabilities, and really understanding that patient or end-user.

Ollie: I want to dig into this design thinking around these applications. As Anthony said, that there are better ways to think about technology rather than just in the use cases that you have. And to Shwen's point, there's an awful lot that has to go into this. And Emily, you touched on this too.

There's regulation that there are so many different little problems and interpersonal problems. Like we're talking about, we're talking about an industry that relies heavily on human contact, as well as any kind of digital connection. ~~A~~nd something that you've all brought up is that how health care providers can get to this point where they build this amazing app that they've spent years and years doing.

And they've got it through regulation and all that kind of stuff. And then they stop at 1.0, so that they get their one out. They've done it and then they don't touch it. How do you avoid that? And what kind of practices and what kind of habits do you need to start introducing to your organization to prevent that?

Shwen: I think, if you look at the history of the types of mobile apps that we used to produce. We used to be a very one and done model. Like the launch was the really where the goal was to get, that was where the end goal was. Once we've launched it, we're done. And yet when you look at, when they first pitched the idea, when they first wanted to sell it into leadership, it was all about look at this health app, it's number one on the app store.

And they had 2 million people downloading it and using it. But what we don't realize is that app went through an iterative process to get to launch first of all. So, it went from 0.1 or 0.2 or 0.3. And once it launched, there was so much more work that went into actually making sure that it was adapting the features and how it worked and reacting to user data, to how people were actually engaging with the product.

And yet we tend to think once we've built it and launched it, that is the final one. And then it's all about the person downloading it. And we put all our money and all our efforts towards just selling it, in a sense, rather than making sure that it's going to work for the people that are using it. And I think that's the mindset change that needs to happen is how do we ensure that. We start to look at the tech industry, for example, which understands this notion really well. Start with the basic sort of minimum viable product, get as much information as you can, as early as you can, and then start to adapt the product for how people are using it.

And so that's where the ed tech industry went, I think now that they're coming into healthcare, they're really starting to play a very big role in shaping the experience because they understand that philosophy so well. And that is to really, consider launch as the starting point for where all the work needs to go into shaping the product, not shape it to the finality at the start and then launch it and not touch it again. And I think that comes with a bit more of a product manager mindset rather than a project manager mindset. And so that's one of the things that I think we can really start to think about how do we start to move into that kind of a world.

And the other part to that is also just understanding how it fits seamlessly into the lifestyle of the end user, whether it's a workflow for a health care professional, or just the daily activities of a patient. Don't make them do something more than they already have to in order to use your product and make sure that your product is actually creating more value or making it easier or making it more frictionless for them to achieve their goals.

If you're adding things to their schedule, more effort for them to actually use it than not, then you're just going to drive more resistance towards adopting it.

Ollie: I want to take slightly into this behavior notion. So, the technology is, let's call it the enabler like that. I think from my perspective, it like you've got the behavior from the corporate or the company that's building these products.

And Shwen, as you just said, you've got to get thinking in the right way, but then you've also got to other sides of things you've got healthcare providers or the sort of end-user, but they're the professional. And then you've also got me, the person that needs help. So how do you design for adherence?

How do you design to make this, the invisible technology that people are just happy to use, because it feels part of their lives rather than the super shiny app? It's not Airbnb. You're not going to surf for all different kinds of ways of fixing yourself. You need help solving a problem then and there.

Anthony: Moments that matter, surprise, and delight. There are a lot of ways to describe, what are the, what may seem like somewhat sometimes the mythical moment where, a person becomes engaged with your product or service.

Regarding the behavior change, first of all, I don't presume to say that we have cracked the code on adherence. It is a very complicated area. You're getting into the domain of psychology, of social science, behavioral science, and design technology. It's so intriguing. I think it's one of the reasons why Shwen and Emily and I are focused in these areas because it's an incredible and stimulating area to focus on.

But what we've been talking about a lot within Invent and in frog, in particular, around is behavioral science. Behavioral science looks at outcomes and you identify, so part of the process is what are the outcomes that we're trying to achieve here? And then you ask, what are the behaviors that are necessary to achieve that outcome? So, a very simple way to look at this, or as an example might be what's happening in today's headline.

So, I should say many of us have a desired outcome that the entire population gets vaccinated for COVID-19. So that's the outcome that we want. So, then the next question is, what are the behaviors that lead to that. Well, one behavior is that people make an appointment or go someplace to have their vaccine. But then you say, what then needs to enable that behavior? And so, this is where you look at the pressures that either promote that behavior or inhibit that behavior. So, the pressures that promote that behavior are access, like convenience. So, this is generally based on the assumption that, or this is for folks that they're motivated, they want to get vaccinated, so let's make it easy for them.

And so, then we could look at pressure. What kind of pressure would make it hard for you to get a vaccine if you wanted it? I got to drive two hours to get the vaccine, or I have to leave work early to get the vaccine, or, I have no childcare. So how do I manage my children while I'm getting the vaccine?

But then there's the issue of the people who are not motivated to get the vaccine. So, what's inhibiting them? What are those pressures that are inhibiting that behavior? And this is where you get into the aspect of they, they believe it's unsafe. They believe there's a conspiracy. They believe it is fundamentally against their values, as say in the United States, to be told what to do by the government. So, behavior change is about really drilling into what are those pressures that either promote the positive behavior we want; in this case, it would be that everyone gets a vaccine. And then what would be inhibiting, and then what inhibits those from getting a vaccine and how do we reduce the inhibitors?

So really, if you think about adherence, you can look at it very simply as we just want you to do this. Or behavior change looks at it and says, looking at the motivations, what inhibits and promotes, and behavior change in designing for adherence is really about; let's make sure that we enhance the promoting factors.

So, what are the things that make the behavior change possible, leading to that outcome, and what minimizes or even eliminates the inhibiting factors. And so that's really, at a high level, what it's about. And I think, this is why when I hear things like, we're going to offer free cup of coffee coupon to people to incentivize them to get the vaccine. That assumes that the thing that's really limiting them is that they want a cup of coffee, like where they want, like you, unless you're certain as to what the real inhibitors are, any kind of intervention to help enhance it, could be a complete waste of time. So, what we try to do is just really like design for those promoters and inhibitors.

And if that manifests that as well in the service, whether it's the digital service or the physical service or the combination between the two, then we see good outcomes.

Emily: I think one other angle around adoption and utilization of connected health products has to look at not adding another thing to my life. So, one beautiful aspect of the Apple watch, which is such a familiar example, is that it is tracking everything for me, without me having to do much of it. Not only is the user interface fantastic. And it delights me to look at how many steps I've taken a day, what my average heart rate was, how often I was

balanced on both feet, a measure that I didn't even know I cared about until Apple brought it to my attention. But I have to do absolutely nothing to gain that information.

So, I think inspiration for that is to look to what are we doing every day? What can be a smart coffee pot that could monitor my daily routine to see if I'm off routine? What can we learn from the automotive industry where any part of my body that is touching the car could potentially be a biosensor tracking my vital signs?

So, to be able to make it truly frictionless, that's how we're going to achieve adoption, which ultimately leads us to our own goals, which is medication adherence or treatment adherence. That's very much for something that we want. Not that the individual necessarily wants. I've never heard a patient say, I wish I could adhere to my medication, help me do that.

That's what we want them to do because we know it will lead to the outcome.

Ollie: Let's imagine a world where life sciences have gone digital, and everything is great. And we're tracking things in all the right ways and all that kind of stuff. What does that look like? Is it completely invisible to the end user?

Shwen: I think the people that are actually doing this sort of seamless, the people that are doing this seamless connection to health are probably the tech companies and Emily brought up a great example with Apple. Where they've actually built clinical grid consumer devices that are ubiquitous and prolific around the world.

And so, they've also got a standard, which means people understand what the data means, and they don't ask you to do anything other than put it on or use it the way you would normally use it. And so, they are probably one of the leaders in the area of, actually generating health data, which provides insight that may lead to behavior change, as a result of just building devices for what people typically use, but then including health as a measurement or a feature within those devices.

And when it comes to life sciences industries, I think the ones that are starting to leverage these ubiquitous devices to then tap into the proliferation and adoption of these devices already within the population to do the work they need to actually drive a behavior change are the ones that are being successful.

Emily: Yeah. And I to maybe add on to that point of what will it take to get there. Life sciences companies cannot do this alone. There is no pharma company that is going to invent the next ubiquitous connected device, like an Apple watch. So, I think the lesson learned or the, what will it take to get there, it's partnering. It's health plus tech partnering together. And at the center of that marriage are the needs of our end user, the needs of our patient or our provider, or both for that matter.

Ollie: If you are a leader in this space and you were beginning to build a product or we're working on a product right now that you're trying to bring to market, what would your team look like? Shwen, you touched slightly on, startup talent and thinking about that, but maybe there's an element here of, you can't be too green to the industry because too much is at stake. So how do you begin to think about your team makeup? As a manager or a leader, or even as someone that's a part of the C-suite of a company who would you all stick on your team and why, and how would you like them to work with each other?

Shwen: Wow, that's a loaded question. Maybe, we could redirect that a little bit to just talk about some of the challenges with partnering before we get to that kind of a question.

So, when it comes to partnering with, the external digital ecosystem, I think there are a number of challenges that we have set up as a company that are really good for when we work with big fortune 500 companies that have very well-established teams for contracting. However, when we work with startups who may be a team of two, a team of five, and may not even have a legal counsel inside, it's a very different proposition.

And I think that the processes we've set up all along the way are challenges at each step. We already talked about some of the challenges around just identifying the right problem first? If you give the startup the wrong problem to solve and they solve it, then are you truly solving the right problem?

But that's one step, is the problem solving. The second step is about then identifying who is the right startup. A lot of times we just go with the first one we saw at a conference or heard on a podcast and said, oh, they're cool. We got to work with them. And then we go find the problem that we need to solve.

But instead, are we actually looking at the broader digital ecosystem at the landscape of who's solving this problem and finding the right one? And then once we found the right one, let's not just assume it's like an RFP

where we go from found the right one, let's go to implement right away, and spend lots of time and money on implementing it.

How about putting them then through some level of experimentation, some level of testing, some level of getting as much insights as possible for whether they can truly solve the problem? So, it's that sort of MVP approach that we talked about, a minimum viable product, and really building the validation for whether it will work to solve your problems.

Now, once you validated that they can do that, it's about then understanding whether they can drive the right outcomes. And then integrating it back into the business as part of the overall business strategy, not as a sidetrack alongside the rest of the business. So how do you make sure it's part of the process and part of the overall business plan.

And from there, once you've done it in one place, how do you then scale it broader to other regions other geographies, and other therapeutic areas. And so, I think all along the way, there's a lot of challenges that we set up just by operating the way we've always done when working in a more traditional market of more established vendors; whereas working with startups, I think there's a lot more, subtle nuances and changes that we need to do with the operational processes that could really help, facilitate, and maximize the ways of working with a startup.

Ollie: Cool. So, once you got over that partnership hump, then you, and you've brought it together and I'm going to hit back on this question because I think it's important to think about much like any big reorganization or, if you are talking about innovation, everyone always brings in the startup talent and then they choke on themselves a little bit because they find it tricky in a larger organization.

But is there a role we talked a little bit about product manager. Is there a specific role that you would see that would be largely helpful? If anything, just to get the ball rolling. Maybe it's bringing in Anthony and Emily to help you, think about things in the right way, but what would you think is the most valuable thing that someone can have on their team as they're going through this sort of like product development process?

Shwen: If I had to think about it, the person and that I think is going to be critical is the one that can actually start with the first question that we talked about, which was identifying the problem. Somebody who can ask the critical questions to know why there are the problems that we're trying to solve and then crafting the right type of what we call the problem statement so that we can go out and find the right partners. And so that kind of critical thinking the experience of knowing how to break down a topic into the right, bite-sized chunks of whether it's the right problem we're solving is one element of a person that would, I think be needed in this new era.

The other one is probably around understanding the external digital ecosystem and who is out there that might already be solving your problems, and being able to maintain and, the relationships and networks to keep up with all the different, emerging technologies and vendors and startups that are coming out every day; and then having that relationship to be able to bring them in to address specific problems.

I think those are two key elements. And then also more importantly, I think once we've found the right partner, how do we then start to design the right type of experiments and the right type of tests that we need to perform to develop the initial learnings that we can then decide whether we want to move on, to successfully partner with this product?

And then it's about bringing in the partner to really start to work together in an experimental way, to test and learn initially to get that minimum viable product, to understand whether they are going to be able to solve that problem, create the value you need, and then move it to the next stage of developing a more robust pilot that then gives us more proof to go on to the implementation.

Emily: And so, what I'm even hearing from you Shwen is, it's less about solving for an individual capability and more about the enterprise overall, enabling innovation, and having the innovation capability, because with that, you can identify the right problems, create the right experiments, ultimately have that test and learn mindset, and be willing to fail as well.

Be willing to put many experiments out there, and truly have it be an experiment, not simply putting something into market.

Shwen: Yeah. And I think the challenge there is going to be around the term innovation, which has so many definitions. And everybody can take it to mean different things. On the one hand you can have sustaining innovation which is extremely important. But it's about exploiting your current business models and products to really ensure that you stay competitive; and, then you can have more transformational or disruptive innovation, which is something that is really going to change the way we do business and is completely out there.

But that probably needs to go through more of a testing and learning model first. It needs to be incubated and we need to understand if it's actually going to drive that kind of outcome that we're looking for before we fully embrace it. And then there's a lot in between as well. And you can look at different models from like Jeffrey Moore or a strategizer or Garrett Paisano and they all say the same thing.

What are the things you're doing that exploits your current business model, and then what are the things you're doing that explores new business models and how are you testing and incubating that piece to really start to then disrupt things that you are doing?

Emily: And I think connected health fits into both of those so well, it's not simply about that disruptive innovation. We don't need to reserve connected health products or development for only disruptive innovation. It absolutely can be optimizing what we have today and can be so complimentary to the molecules and the therapies that are already in the market.

Shwen: Absolutely. I think connected health, again, there are going to be some connected health solutions that are going to play a part in really just making it easier to take a current model, but maybe make it easier for the patient or the end user. And that they're going to be connected health, solutions that are going to be completely disruptive because they changed the way we do things.

They change the experience, and they provide a lot more value than what the way we used to do things.

Ollie: I've got all of you who have worked on these projects before and like any industry, I'm sure that you've heard some terrible advice and strategy that is banded around as the savior of the industry that kind of thing. I'd be interested to hear about the things that when you're sitting in a boardroom during a meeting and everyone's discussing stuff that every time you hear it, it makes you roll your eyes.

Anthony: A couple of things do come to mind. So one is, if somebody says we want to build an app or we need an app, what I'm really hearing them say is, so you think you've got this, you think, you know what the problem is.

Because you've clearly determined that an app is the solution. And I think that's just one thing that I think, you just have to just recognize that just because you built, we've talked about this earlier, you just, because you build an app, like if, like I used to think. If adherence is your problem, if someone's not taking their pill every day, then why is the same person going to download your app, log onto it, figure out how to use it, and use it every day.

You have to just make sure that, when you use terms like app or even VR from the previous example, although that one was a positive one, it's a solution. What's the problem? So, I would say the first thing is do we really know what the need is?

Do we really know what the problem we're trying to solve is? And then I think a corollary to that is, when you talk to consumers, if you spent time interviewing people that have, you named the chronic condition and you talk to them, you talk to their family, you talk to their friends. What you often are hearing are, you hear firsthand just how difficult it is to live with cancer. And you hear about all the problems that it causes. And so, you get this overwhelming like bolus of problems to solve. But in healthcare, as Shwen had pointed out earlier, the user is not the buyer.

And so, what happens is that you can often be, you can often find problems that are legit real problems; but you actually haven't figured out what the business case is to actually provide, in order to provide a solution or provide value, you need to capture it. You need to be, if you're not being, this is business 1 0 1, right, where you need to generate revenue in order to provide the service. And so, I think another thing with digital health is there a lot of problems out there that are identified that, that the current model of a payer may or may not provide it may not see the same problem as their responsibility to pay for.

So therefore, you need to find out, find another way to monetize that. So, I would say that would be the second one on that.

Emily: One of my pet peeves is the word digital actually. I'm tired of sitting in rooms and talking about digital transformation or digital healthcare. It's almost the analog that we had a decade ago when we were talking

about digital marketing is marketing. Digital healthcare is healthcare. And when, as soon as we start to cleave it off artificially, we've lost that user in our thinking, right? When we're trying to look at how to solve for digital we've clearly carved out a very narrow scope that ultimately will not meet our end user's needs. So, my pet peeve is removing the word digital, removing the word technology, and not having that be the defining scope of how we're looking at healthcare problems and healthcare needs.

Anthony: Oh, Emily. That's wonderful. Can I just build on that real quick? So, I would love it if the entire healthcare industry and maybe it's life sciences, but maybe it's that we said, if somebody asked you at a cocktail party, what business are you in? And you would say I'm in the health outcomes business – like my job is to produce health outcomes that people either prevent or they are cured or they're managing disease.

How do you do that? Oh, I'm a chemist. Oh, I'm a data scientist. I'm a designer. I'm a program manager, product manager, like the, how is any way, any expertise you bring to the table that can contribute to improving health outcomes? That's the secondary thing, but we're all in the business of improving health act like that should be the job.

Sorry. I just, as you said that I was really inspired and…

Emily: I'm taking that to my next cocktail party. Consider that to be my new intro title.

Shwen: Put it on your business card.

Emily: Exactly right. Thank you, Anthony.

Anthony: I'll even throw the cocktail party.

Emily: Okay.

Shwen: I hope I'm invited cause I'm a neighbor. I was going to say Emily that I think, it's funny, you were talking about it, about cleaving off. And I think about it the other way around, which is about how do we make sure it's integrated with our current business plans? It wasn't so long ago you had teams that are sat here that did everything.

And then there was the digital team. In fact, some places still exist. And so, then digital becomes a parallel path to the actual business strategy versus an integrated part off the overall strategy for that business. And so, I think that's an area that, I think is the other side to what you're talking about.

But, to answer the question, it's funny because what Anthony said upfront was exactly where I was going. I was going to say that it's when people say "we need solution X," is usually my biggest pet peeve and where that usually comes from, especially when I was running a lot of open innovation initiatives was people that came up to me and said, we need a hackathon.

And then I would explain to them what a hackathon was. It's a random group of people meeting for 48 hours, forming teams, and coming up with ideas that aren't necessarily implementable. And there are no companies that you can work with right away. And they go, no, that's not what I want. And I go that's, then let's get to the problems of what you really need to solve.

And so, then we would end up with an exercise of how do we get to the root cause of what you need to solve for, and not just assume you need a hackathon. So, for me, those words "I need a hackathon" can sometimes be very positive, if they know why they need it; but most of the time it's the starting point for, really saying I'm trying to solve a problem, but I, and I think that's the right solution, but I'm not sure what it really is.

Ollie: We're now going to talk about the future. And so, my big question here is what happens if the life sciences doesn't move into Emily's favorite word, digital. Okay. Could that be effective or is this an inevitable thing that, again, to Emily's point is just going to become part of life sciences and healthcare, that we have these digital products. So, what does five years' time look like?

Emily: I don't think there's a world where therapies in medicines are going away. So, there is still a viable business model for life sciences companies to not embrace connected health or digital overall, even though I just swore I wouldn't use that word. So, in there, there's no burning platform for pharma companies to do things any differently. That said if they choose not to do it right and then meaningfully engage in connected health, they will absolutely be overstepped by big tech companies who have invested in this understand product design, product life cycle. And we, as consumers, will be talking about Google as our health assistant in five years' time, not Pfizer as the company who delivered the first COVID vaccine.

Anthony: I agree with Emily and it's possible that there could be in the future a world where there are life sciences companies that just do what they do best and they continue to do it. We wouldn't, if you think about all of the need with which we needed to develop vaccines and quickly deploy them, only a Pfizer or a Moderna or an AstraZeneca, J and J, only they can do that, because that is bringing to bear their superpowers, and making something happen that the world desperately needed.

And you could argue that digital health or connected health did not really play a real vital role in that. Not that didn't play any role at all. So, I do think that there is a good future for the traditional, let's call it the traditional legacy, life science. I think where they have to be careful is in the, is really recognizing what the world really cares about sometimes. So, for example, diabetes is, Walmart is now offering low-cost insulin.

There are situations where, you know, when the challenge is about care and ensuring that, comorbidities and complications of diabetes don't create bigger healthcare costs. That's the issue that, that insurance companies and payers care about.

How do we reduce the cost of the lifetime cost of, of these patients, of these members or however they're described. And I do think that there could be some erosion of their business and their value proposition if they don't, in certain therapy areas, think we shouldn't be thinking about therapy.

We should be thinking about managing the living with a chronic condition. And I think that they're going to be some areas where, they, others will disinter, basically, disrupt them. But look if they could cure diabetes, that'd be, I'd rather, I would say put your effort there rather than trying to manage it because they're probably losing the management game, but their strength is on the curative side.

So that's, and yes, to Emily's point, the big tech, unless they get broken up are going to become much more involved as the primary care pathways for our day-to-day health.

Shwen: I'll add to that. So, I don't think there's a future where pharma isn't digital. I think every pharma will really start to get a lot more digital, so to speak. But of course, that depends on your definition. I think the question is more around how much will pharma and the life sciences industry be a part of shaping the patient experience and starting to leverage digital to really improve health outcomes for the patient? Will the future of the life science industry mean that every traditional prescription drug will also have a digital companion that would allow us to then get a lot more personalized, in terms of how we care for the patient support the patient gather data that will allow us to then optimize that care and ultimately demonstrate the value of our actual traditional product, as well as start to, show better health outcomes as a result of addressing some of those personalized needs?

And how far will we get into that space? Where will we play in that? I'm not sure, but I do hope that's an area that we're moving towards. If not, I could really see the big tech companies playing a big part of that. And it's only a matter of time before the first big tech company is going to acquire a biotech or a pharma company maybe, and start to, think about it remodeled from the ground up in digital first, and really start to change the experience altogether.

And to an extent, there are some companies like Alphabet that own two life sciences companies already. They've got Verily and they've got Calico. So, it's not so farfetched to think that could happen.

Anthony: Shwen, we haven't mentioned it a bit, but I think in the realm of what's happening with clinical trials, that's an area where it seems like life sciences could be well-positioned to really be a driver in digital and connected health. I don't know. Maybe you want to talk a little bit about that.

Shwen: Sure. The life sciences industry, I think more, really, a lot of what COVID drove in the life sciences industry, was really this sudden inability to meet in person, which is what most of their business models are dependent on. And in the clinical trials or drug development phase of the process, a big part of that was how do you get a patient to be part of a clinical trial without being able to bring the patient to the trial site? And so, a lot of priority with given towards things like decentralized trials, how do we start to run some trials at home? How are we doing remote patient monitoring?

How are we starting to have consults through tele-health? So, it was really trying to find a way to really connect with a patient that didn't require them to be put at risk by coming in and exposing themselves to a potential virus during the pandemic. But I think what came out of that was also realizing that leveraging these types of tools and solutions and platforms made it easier for the patient.

It was a more natural environment. It was much more accessible to more people. And it drove much more equitable, access to clinical trials because of this type of rebuilt, type of, capabilities. So, I think that's an area where there is a lot of interesting problems to solve that could really benefit the industry, and everybody as a whole.

Ollie: Life sciences is still finding its feet in digital. But the lessons they're learning through rethinking how healthcare can work in a connected world, also hold value for other industries in really understanding user behavior and interaction. A big thank you to Shwen, Anthony, and Emily. You can find out more about them and their work in the show notes.

If you've enjoyed this episode, you can subscribe in Apple Podcasts, Spotify, or wherever you find your podcasts. This podcast was brought to you by Capgemini Invent. We'll see you next time.

Capgemini invent

About Capgemini Invent

As the digital innovation, design, and transformation brand of the Capgemini Group, Capgemini Invent enables CxOs to envision and shape the future of their businesses. Located in more than 36 offices and 37 creative studios around the world, it comprises a 10,000+ strong team of strategists, data scientists, product and experience designers, brand experts and technologists who develop new digital services, products, experiences, and business models for sustainable growth.

Capgemini Invent is an integral part of Capgemini, a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of 270,000 team members in nearly 50 countries. With its strong 50-year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering, and platforms. The Group reported in 2020 global revenues of €16 billion.

Get the Future You Want | www.capgemini.com/invent