OMAR: Hello, my name is Omar Abbosh and I'm the corporate president of industry solutions at Microsoft.

WILL.I.AM: And I am Will.i.am - entrepreneur, philanthropist, musician and producer..and my mother's son. And this is Changemakers!

OMAR: There are a lot of people around the world driving change that impacts society. In this series, we'll share stories of transformation directly from the leaders themselves who made the change. We'll talk about their obstacles, their triumphs, their learnings and how technology has accelerated their mission.
So Will, today's topic is, uh, again like super topical. Um, you know, as we've all lived through this horrible pandemic for the last couple of years, how much thought did you actually give to the process of making a vaccine before the pandemic?

WILL.I.AM: Only when I see the science channel. The science channel does a really awesome like how it's made program, like, but really with that, they don't really go into details and, uh, you don't see the importance of it unless you're really, really into it, you didn't see the importance of the scientist, the engineers, the investment, the, um, you know, the, the, the rush and the passion to solve a problem called the vaccine. Right? You didn't see the importance, the gravity of it all.

OMAR: Yeah. I mean, it's amazing, actually, the last two years, it's actually hard to imagine a world where we didn't talk about the process of making vaccines.

WILL.I.AM: Or if you think about like the flu vaccine, like it's been in our lives for a very long time, but you know, applaud to all the folks that are responsible for the flu vaccine. You know, we take it for granted the, the, uh, the passion, the dedication, the education, the folks that have been putting in time and time and time for us to have the flu vaccine.

So yeah. Thank you guys, every single one of you guys.

OMAR: We owe them a lot. We owe them a lot. One person who spends a lot of time thinking about vaccines is Dame Emma Walmsley, the CEO of GSK, formerly known as GlaxoSmithKline. GSK has announced plans to spin off their consumer business, to focus more on biotech and vaccine development and it's a risk that could pay off really big.

The vaccine market itself is huge. People are talking about tens of billions or more being added in the next few years. While business is booming, the path to developing new vaccines can mean high manufacturing costs, complex legalities and consumer anxiety but GSK has a long track record of developing new medical
treatments and therapies and Walmsley joins us today to discuss the company’s bold path forward. Emma, welcome to Changemakers.

**Emma:** Thank you so much for having me.

**WILL.I.AM:** Nice to meet you, Emma.

**Emma:** Great to see you Will too.

**OMAR:** Emma, you've been the CEO of GSK since 2017. Uh, tell us a little bit about what GSK is and what your goals were when you stepped into the role.

**Emma:** Sure. Well, we actually became GlaxoSmithKline, now GSK at the turn of the century with a huge merger between Glaxo and SmithKline Beecham and we are one of the world leaders in vaccines, medicines and actually everyday consumer brands. Our job is to prevent and treat disease but when I was brought in, it was because for a few years, GSK had got a bit stuck, not growing enough, not innovating enough, so we had three big priorities as a company - firstly, to be more innovative - so we'd been investing for years, expanding our R and D budgets, which requires a bit of patience to get to better medicines and vaccines. It is really, really hard; The industry has made it look, I don't want to say easy, but, um, it may look easier than it usually is even what's been achieved in the last couple of years because normally it can take a decade, billions of dollars and has a 90% failure rate to discover and develop new

**WILL.I.AM:** 90%?! 

**Emma:** 90%. So only one in 10 works. That's important to understand when you think about the risk and the investment required for success, but technology is going to help us unlock more productivity.

Just imagine if you could take it from a 10% success rate to a 20%. So that's really what we're focused on. First of all, innovation… second of all, performance and so
we've really been reorganizing our footprint, our portfolio, and the group structure, which is why we're headed into this demerger and then the third priority, which I think every company should have at the heart of its strategy, is about building trust. We're in a serious business where people's lives are at stake, that's not just about health but about access to health, equity of access to healthcare, but also the health of society, all of the agenda around diversity, inclusion for our people, the partners we work with and the societies we serve and of course, health of the planet too.

**OMAR:** Amazing.

**WILL.I.AM:** Wow. Wow, um are you excited about, um, uh, personal medicine? Pardon my lack of vernacular in this, in this, in this space, but like, I've been reading a lot about -

**EMMA:** Personalized medicine. Yeah.

**WILL.I.AM:** Yeah. personalized medicine while, while we advance, you know, RNA and bio and biotech. So synthetic.

**EMMA:** Well, I mean you're raising lots of really hot topics at the moment. Um, uh, well, and I think these are right at the heart of why everyone is so excited, despite the serious challenges in health that the world faces at the moment and they are big ones, you know. I mean in America alone, every minute, three people are diagnosed with cancer and one dies of it because we don't have all the solutions yet. One in three of us - so three of us on this call, one in three of us will personally be fighting dementia or some type of neurodegenerative disease or Alzheimer's and there are no really effective treatments for this. So, and then you have, you know, life expectancy in many countries, in developed countries - in the US has been going backwards for 10 years because of all the chronic diseases, obesity, diabetes, addictions, you know, all of these questions. There's a lot for us to still keep working on and innovating for. This discovery of genetics and all, all of us, you know, have a very personal biological identity in that sense, will be able to unlock more precise treatments, but there are still some shared challenges that have, can have huge scale impact.
So yes, there is more personalized medicine opportunity, but there are some big opportunities that many people are facing into challenges for, which are part of the priority too.

**OMAR:** Amazing. And Emma, when you think about the….how the whole industry has been under the spotlight for the last few years, what have you learned about leading during this period?

**EMMA:** Well, so much and, uh, I think one of the wonderful things about work is that, you know, you're always learning and this has been a challenge for every leader, whether it's a small team or of a, of a, uh, multinational in the last few years. I think one of the first things is, um, people, you know, it is a human endeavor. People are capable of absolutely extraordinary things when they work together and in collaboration against a shared objective and a, with a shared sense of urgency. I think we've all learnt, you know, we have rockstars that we celebrate in the world, but there are, and Will alluded to this again, in his opening comments, we've all learned a new found respect for a new kind of superstar - the, uh, scientists, the epidemiologists, the uh, frontline workers. I mean, how humbling has that been to see the courage, the bravery and the commitment? The people in our factories? We had to keep 70 factories open every single day through the pandemic to make sure that we were able to provide our HIV medicines, our cancer medicines, our respiratory medicines or everyday vaccines to the people that needed them and that meant people working through every day and of course we were hugely mobilized behind finding solutions to the pandemic in partnership on vaccines, but also with our antibody treatments as well. So I think it's been incredibly humbling um, around, uh, this sort of power of the frontline and I think we've all learned a different kind of, the necessity of a different kind of resilience and the inspiration we can get from this purpose.

**OMAR:** I'm sure our audience also loved the way you cast your arms wide around the set of people who've made everything that you've just described possible. Uh, so we appreciate that a lot.
EMMA: Well, not least the tech sector, if I can say, I mean can we just imagine for a minute what the world, what this pandemic would have been like without the big tech company's support. How would we have been able, I mean, it's been really tough on the education, to both the providers and the pupils. Just imagine if we hadn't been able to drive access, we've seen an explosion in telemedicine to allow access to basic health care uh, more remotely, that's never going to change and go backwards.

We've been able to keep our companies running, um, uh, you know, under extraordinary circumstances, not just in my sector and many others. So I'm frankly very grateful, uh, that we've got this power and this, uh, purpose and this opportunity backed by, uh, by the large tech companies too, we'd have been, uh, it would have been impossible without it.

OMAR: There's no question. The folks at Microsoft feel at a very personal level that they can contribute to help the world and they, in these times.

EMMA: And they’ve been amazing.

OMAR: And, um, and you're right. I mean, if this had happened 10 years earlier, the telecoms networks, the broadband, you know, things like Teams would just would not have been there. Uh, and that's uh

EMMA: Yeah we’re all addicted to Teams now.

OMAR: Thank you. We appreciate that.

WILL.I.AM : You guys had some success with COVID-19 antibody therapy.

EMMA: Yeah.

WILL.I.AM : Uh, what has that experience taught GSK?

EMMA: Well, we're learning all the time and in science, you're always learning from your mistakes, your successes and others too. Um, uh, in this case, uh, what
mattered was speed - incredible speed, and we worked with a partner in the biotech industry, Vir Biotechnologies, uh, focusing on the science um which was a differentiated science in this case, uh, with a particular antibody that was able to, uh, stand up stronger to different variants and then of course, the variants keep evolving so you have to keep doing more in this case, and then also, and you alluded to it earlier, the manufacturing technology involved in being able to mobilize around that with a lot of agility, but I think it's yeah. So the question of the science, the partnerships, the speed, um, uh, would really be, um, uh, at the heart of that and, and I think, you know, we've learned that things that used to take decades can definitely go faster with the right kind of collaboration and we want to keep an eye on that for future endeavors.

WILL.I.AM : Is that machine learning and predictive algorithms that like allow you to progress out and not have to, you know, rely on time to do that telling, but awesome, like trusted machine learning practices.

EMMA: Well, I think machine learning is good and AI is going to change absolutely everything in the value chain of, uh, of the biopharma industry. I mean, we've talked about how it can impact uh, R and D by improving the success rate with all the genetic analysis, but it can also change the way you run clinical trials, It changes the way that you, uh, predict risk. It changes the way that you, uh, run commercial and medical field forces because of next backed action and sort of predictive work on there. It can completely change the way we look at manufacturing. There’s, you know, lots of people talk about digital twinning to allow us to, uh, you know, shorten timelines as you, as you, as you said Will, and it changes the way we actually work together, you know, the future of work, modern, uh, ways of working.

So it matters for everything we do, It's changing every industry Will.

WILL.I.AM : What if you go out and do a research and the machine learning and the scientists come up with like a sure shot solution to eradicate it all. And that would, would that, and then is that bad for the shareholders, but good for society? Like what, what do you, what happens when that happens?
EMMA: You know, I have never, ever met anybody in our industry that isn’t foundationally motivated by preventing and treating disease. I’ve never met anybody whose first goal isn't to find some kind of miracle that is going to make diseases things we no longer worry about. Uh, there is always more opportunity - uh we have globally aging populations, there are huge disease burdens in the world. So, uh, you know, I think bring it on - the more solutions we can get to the faster, the better off the world is.

OMAR: You mentioned earlier that you're spinning off the consumer products business very soon, um, as part of a bigger strategy, um, focusing on specialty medicines, medicines and vaccines, um, and, you know, tell us a little bit about why, why now and how you think about that in the context we're in now, you know, for example, from a people point of view…everyone's talking about this great resignation, how you’re prioritizing and thinking about culture and keeping people happy during this giant transition?

EMMA: Well, two big questions there. So first of all, yup, we are demerging our consumer business, spinning off our consumer business. It's the biggest demerger in Europe ever. We’ll be one of the biggest listings on the London Stock Exchange, a company called Haleon, the roots of which are in main health and strength, and this is a business that I've been very involved in building up, uh, in the last few years with some major deals first with Novartis, then with Pfizer - brands which I hope you have in your desk drawers or your bathrooms, whether that's Advil or Panadol or Sensodyne or Tums, or, you know, everyday brands.

But we now feel we've built that business up to the size where it should have its independence, its freedom to grow and invest. Uh, and, uh you know, it's really on world scale and the first purely dedicated consumer health company…so very excited about that and particularly for the people who are taking, uh, on its, uh leadership. And it's also the moment, this catalyst for us moving into this new chapter of growth, uh, for GSK, as I've said, and one of the advantages of doing the demerger is that we massively strengthened the balance sheet of GSK and this gives us billions more to invest in innovation. So both of these companies will
impact health at global scale for the years ahead and that matters, um, and is really the anchor, uh, to, uh, the culture that both these companies will have, which will be independent and distinct, but are really anchored in this purpose of health.

I think you have to be exceptionally deliberate about culture and so we say, “Yeah, we work for patients, of course. We work for shareholders and we work so our people can thrive and thrive means helping people grow and that means helping them feel good physically and mentally in their work, helping people grow is really investing in manager skills, in development opportunities, careers.

I mean, again, Will was talking about, uh, the kind of opportunities trying to create for people. We need to be able to do that with the most open approach to diversity and inclusion and representation. You know, I've spent my career living as one kind of diverse representation. We've all seen in the last few years, how much progress still has to be made on other aspects of that inclusion and representation, whether it's, uh, racial, LGBTQ, whether it's disability, um, where we can bring some of the most extraordinary abilities but also, everything in terms of neuro diverse talents and the combinations that can be brought to play there and we also want to make sure we make this a place where people have access to resources on their physical and, uh, and mental health and of course, I mean, we…our factories and our labs, people need to physically be there, but for all of our office workers, we have a, uh, we define that as performance with choice, which is about having the flexibility to… we haven't mandated X number of days in because we think people can, should work wherever they're able to be their most creative and productive if they don't need to physically be online. So, we're very deliberate about our focus on this, but I don't know if you have any comments to add to that from a Microsoft perspective, because you know, that's a really hot topic and I've often been inspired by the work that's done there too on this.

OMAR: Thank you, Emma. I mean, I think those of us who’ve been in technology for a long time figure out quickly that all the things that you spend time on - it's just for people, and that's the whole point and so if you're, you know, whether you look at it through the lens of ‘is the experience good, you know, am I solving problems? Am I increasing productivity? Am I helping collaboration?’ I mean, it's all about people. The whole, the whole thing is centered on humans and
**EMMA:** And never more so, even if technology is this grace advance, I love the notion that it just makes us all…. can make everybody a superhero with superpowers if we are able to give access to it effectively and affordably, by

**OMAR:** I mean, and you, and you do know that at Microsoft, we care enormously about accessibility.

**EMMA:** Yeah, it's been so inspiring on that.

**OMAR:** And so when I, um, when I first heard about it, I was like, you know, we empower every person and every organization on the planet to achieve more and I thought it was nice words and then early on in Microsoft, I was talking to a lady four weeks into the company on Teams. We were talking, it was in the middle of the pandemic and halfway through the call, she said, “Hey, Omar, I assume by now you realize I'm deaf.” And I had no clue. I actually didn't realize and, um, and she explained to me that the Teams’ captioning was helping her track, what I was up to and what I was saying and it was a very intentional part of how we think about product.

**EMMA:** It is incredibly visible in Microsoft. I know that's been a huge push for all of the leadership team and I'm sure there'll be further leaps forward.

**WILL.I.AM :** Um, with the, with the big move that GSK is making, um, there's, there's a few critics that, um, question the direction of the company. What your, your leadership, um… how do you balance doubt with your vision? As as loud and noisy as the world is, you have people that applaud, you have people that question, um, and it's there for everyone to see in this hyper-connected world, this technological glue that we all move with. How do you balance that?

**EMMA:** I mean, the first thing I'd say is you should never take on these roles and the privilege of these responsibilities, unless you are prepared for that kind of public inspection and, and you ready yourself and those around you, uh, for a level of resilience. Um, it absolutely has to start with a real clarity of purpose, strategy and values that underpinned why you're doing what you're doing and so, at GSK, we… and I know Microsoft does the same - we literally have on one single page
that is available for, you know, the hundred thousand people that work in the company and everyone that partners to us, what we think our purpose is, which is to combine science, technology, and talent to get ahead of disease together. The why and who for - we do it for shareholders, for patients and so that our people can thrive. I am deeply in the belief of a multi-stakeholder capitalism. It is that the shareholders matter. We have to make sure we're growing so we can keep funding our future innovation but the reason we exist is to prevent and treat disease at global scale and then alongside that purpose, we have real clarity of our strategy. We're invested in vaccines and specialty uh, medicines. We pursued diseases and infectious diseases and HIV and oncology and immunology and respiratory, but there's a lot of stuff we don't do and we always prioritize innovation, performance and trust. And in our culture, we want to be a company that is ambitious for patients, accountable for its impact, and always does the right thing because with integrity and care, because people count on us. So if you have that on a page…in the difficult moments, whether it's commentary on your strategy, deciding what to do in the horrific circumstances of the invasion of Ukraine. Do we keep supplying our medicines? Which part of our portfolio is irrelevant or not, what to do if the factory has a quality problem? When you've got these, um, clear markers of what matters, what you stand for, uh, what you'd be prepared to step away for if it was right… when you have that set of values, actually the difficult decisions can become very easy and at the end of it, it's about putting the patient first and everything else will follow. But what would you say, what would you say though, Will in terms of, uh, keeping true through all of the public opinion?

**WILL.I.AM**: Well, world of medicine and care and solving problems via science and people consuming and needing that for survival…uh, that's, you know, you have, uh, you know, first off salute, um, cause it's awesome to see a woman at the helm -

**EMMA**: Thank you.

**WILL.I.AM**: - but that's, that's a very heavy load you carry to have to endure, you know - the critics, the skepticism, um, everyone is afraid of, you know, big companies online. It seems as if the world is like, oh, I don't trust when… and trust is currency and, uh, I, I don't know how I would handle that.
EMMA: I mean, just, I think when, when I think about what this sector has been able to contribute to - HIV aids was a death sentence and one that carried a huge amount of stigma. In fact, the first funeral that I ever went to, uh, as an adult was a very close friend who died in his early twenties, you know, obviously many decades ago. Uh now, you can live with HIV as a chronic disease, lifelong and in fact, we have new innovation coming through, um, which allows you instead of taking multiple pills every day, you can actually get, uh, an injection, which can be six times a year, and we're working on making them longer acting, longer acting.

And we have, uh, new, uh, preventative medicines just approved actually that will, you know, really help us to prevent the infection rates and these were trials that were stopped for efficacy against standard of care. So science is making miracles. We no longer worry about our children dying of measles and smallpox, uh, because of vaccination. We vaccinate 4 in 10 children, uh, in the world. So, but there is still so much more work to do Will. There's so much more work to do.

OMAR: Well said. Um, Emma, you took, so you mentioned Vir biotech earlier

EMMA: Yeah.

OMAR: And so when you think about… how do you evolve medicine with biotech and how important do you see biotech in the future of medicine?

EMMA: Well, biotech is kind of two things. The word is, is two things. It's literally using biology, the technology of biology to develop new products. So in our case, that's medicines and vaccines. I mean, technically beer is biotech because I mean, you know, just what it is

OMAR: Some of us like that biotech.

WILL.I.AM: Yes. I just had my first pint of Guinness yesterday.

EMMA: Well, well done. Was it warm?

WILL.I.AM: It was warm and smoky.
EMMA: And delicious.

WILL.I.AM: And I was like, I really, really enjoyed it. It was great.

EMMA: Okay, there you go, I'm sure Diageo will be thrilled to hear that.

OMAR: So will all the Irish. Yeah.

EMMA: So, but what I'm saying is biotech means using tech, you know, the technology of biology to make new products. Um, and that's in contrast often to pharma, which is using chemistry. Okay. So, but what's true in our industry is in the last couple of decades, the move has been towards more biological based solutions and you add to that all the work in genetics, in CRISPR, in RNA of which mRNA is just one part of it. There's huge focus on the science of immunology using the body's own systems, uh, to address disease. So there's been a huge kind of flood forward and opportunity there and that will be a big part of, it is a big part of our pipeline and what we do, uh, all, uh, you know, a big chunk of our innovation, but we describe ourselves as a biopharma company because we also keep using chemistry and it's these collusions of these sciences, uh, that can get you to the best magic. There's another part of the definition of biotech, which is a part of the industry. So this is the sort of startup, super sexy community, often in core core parts of geographies of the world. You have a lot in the Bay area, you have a lot in Boston, you have a lot going on in the golden triangle, in the UK, between London and Oxford and Cambridge, a lot of going on in China where huge amounts of innovation, obviously often connected with academic institutions is coming through, but not necessarily with the scale of execution opportunity of, especially with a big biopharma. So that's also really important. That's where we do a lot of our business development. It's completely insane to think that you've got all the answers inside one company. So we just announced a massive vaccines deal last week for a new technology in vaccination. We just, uh, had another deal announced on a biotech in oncology. So that's a huge part of what we do…so absolutely key.
**WILL.I.AM:** Do you, do you think this next 10 to 20 years is gonna be like…I don't want to use the word *bio*, it's too techie; I don't want to use the word *pharma*, it's too spooky.

**EMMA:** Burdened. It's burdened. Yeah.

**WILL.I.AM:** Let's say it's a Wellness Renaissance

**EMMA:** Oh, we love that word.

**WILL.I.AM:** that, that's about to kick off - similar to what the mobile renaissance that happened in 2008 to 2022. Without the iPhone, you wouldn't have as many developers because of iOS and then iOS to Android. And now you have this huge, uh, fleet, flock, herd of, of amazing engineers that solve so many of the world's problems in the form of an app. Do you think in the next 10 to 20 years we're going to see something that we've never seen before when it comes to, you know, the wellness renaissance?

**EMMA:** I deeply hope so, and I believe so. I just hope we do it in a way that is also driving equitable access for all, because the challenges aren't just the unmet needs of innovation, they're making sure they get to more people on the planet. So I'm, uh, I'm super ambitious for that. There are lots of hot topics, issues, challenges to address. The world is a noisy place but every single family, company, country cares more about health, thinks more about health now than they did probably a few years ago. And in the end we all, every human being faces a personal health crisis at some point in the end. So I, and it's hard to think of a thing that, that matters more to our planet's performance and productivity…by the way, the health of the planet is incredibly linked to, to human health as well.

So, um, I'm, I want us to be crazy ambitious for this, and I think there is a lot the tech industry combined with the biopharma industry, combined with the passion and talent of, uh, the next generation of scientists, engineers, dreamers, and doers, and, uh…you know, let's be, let's be really, really ambitious for the impact we can have together.
OMAR: What an inspiring note. Thank you so much for being with us here, Emma.

WILL.I.AM: Thank you, Emma.

EMMA: It was great fun. This was great, thank you.

OMAR: That was an excellent conversation. Thank you.

EMMA: Take it easy. Good to see you.

WILL.I.AM: Thank you so much.

OMAR: When you step back, Will, what do you think of that whole conversation?

WILL.I.AM: When I step back, I think one, she's inspirational. I loved learning from her and having the, the, uh, the pleasure and the honor to, uh, ask her questions and have her answer, um, with ways that give me a little bit more understanding of the field that she leads. Um, I love how honest she was about, you know, a hard question.

How do you address, um, the potential of machine learning and AI eradicating an issue and then at the same time have to deal with shareholders and the ongoing profit of medicine. What happens with machine learning and AI, you know, lead you down a road where you don't need to continue to dish out medicine and her answer to that was…wow. That was an amazing, amazing answer and I love that and I'm so happy, so happy that we have an awesome woman. So freaking happy. We need more awesome women leading companies. Yes, yes to that. Boom! All the way. Let's go mamas.

OMAR: I mean, I think that our listeners are going to love hearing that little speech from you Will and you're dead on. I mean, you cannot underestimate the heavy lifting she must've done to get into that position and drive that amount of change in a company that big against the whole load of vested interests and opinions, and often, you know, coming from blokes who are not always on the
same page. So it's amazing what she's done. I totally agree with you and I love the way she brought in the, um, inclusion of, you know, startups and companies out there that they need to work with to collaborate, to figure out new things, whether it's on the tech side or the biotech side or some of the other areas, she was probing on genetics and so on.

**OMAR:** Let's leave it there. It’s great to chat again, Will. I’ll see you next time.

**WILL.I.AM:** Always a pleasure.