

Medtech innovation in the time of COVID-19: Resilience and growth during a crisis

COVID-19 is a threat but also a call to action for organizations improving the delivery of healthcare services. Executives from four leading med-tech firms share how they have thrived during this crisis by applying their business-building capabilities.



Building a new business requires disruption, but what do you do when a worldwide pandemic threatens the health of millions, shuts down activities for months, and shakes up the global economy? If you're a leader, you innovate, responding to unexpected customer needs at unprecedented speeds, leaving the competition far behind.

During a recent virtual discussion, Gayane Gyurjyan, a partner in McKinsey's London office, explored the business-building imperative in the medtech industry with Benoit Clinchamps, president of MicroPort CRM; Anton Kittelberger, CEO of mySugr; Florian Nickels-Teske, director of Helios Health Institute; and Hartmut Schaper, CEO and general manager of Security & Safety Things.

Joining the discussion were Ralf Dreischmeier, senior partner and the global leader of Leap by McKinsey, our business-building practice, and

Chris Llewellyn, a senior partner in the London office. What follows is an edited transcript of their conversation.

The time to act is now

Gayane Gyurjyan: Ralf, could you share some of your observations on new-business building, particularly in today's environment?

Ralf Dreischmeier: First, business building means taking a disruptive idea, building a business from scratch, and then scaling it. What's important is bringing all the good things that a start-up environment gives you in terms of speed and leveraging existing assets from the incumbent, whether that's customers, infrastructure, or intellectual property. This combination creates an advantage we believe makes a huge difference in business building.

Panelist and company biographies

Benoit Clinchamps is president of MicroPort CRM. MicroPort's focus is cardiac-rhythm management (CRM); it develops, manufactures, and sells active implantable devices such as pacemakers and defibrillators globally. It is the smallest of five players in this field and has four sites in China, the Dominican Republic, France, and Italy.

Anton Kittelberger is CEO of mySugr, an integrated diabetes-medicine solution that operates in more than 80 countries and 26 languages, with millions of customers. The company was acquired by Roche in 2017 and has a team of more than 180 people. Anton is also an early-stage investor focusing on the combination of connected devices, medicine, and digital services.

Florian Nickels-Teske is director of the Helios Health Institute. The institute is part of Helios Health, Europe's largest privately-owned provider of hospitals and healthcare services, operating about 150 hospitals and caring for more than 15 million patients annually. The institute coordinates all real-world evidence projects across the Helios Group, mainly in Germany and Spain.

Hartmut Schaper is CEO of Security & Safety Things (S&ST), a Robert Bosch corporate start-up. S&ST is in the security-camera business, a vertically integrated industry with a history of slow software innovation. S&ST disrupted the industry by building an eco-system to provide an open platform where software developers can build apps to run on many different types of security cameras. The platform went live in the middle of the pandemic.

Even before the crisis, we observed trends like corporate longevity reaching an all-time low. Increasing numbers of companies need to find new ways to grow, and the traditional ways of transforming themselves are often no longer good enough. So what do they do during a crisis?

The interesting thing is that previous economic crises have always been opportunities to create new businesses. Airbnb and Uber were created during the 2008–09 financial crisis. Microsoft and Dell were created during the oil crisis of the 1970s, and Disney was built during the Great Depression. There's no question that the current crisis will result in the emergence of new unicorns.

We are also seeing paradigm shifts that will fundamentally disrupt new and existing sectors and create opportunities to build new businesses. Those opportunities will include different ways of using data, new ways of collaborating via platforms, and a fundamental shift to a total remote service provision we believed would never happen or at least take many years—and ended up taking only weeks or months.

Responding to unforeseen needs with unimaginable speed

Gayane Gyurjyan: Speaking of disruption, Hartmut, could you discuss the platform-based approach you put in place with Security & Safety Things? How do you see this approach playing out now in the time of post-COVID-19 next normal?

Hartmut Schaper: First, the platform brings together a lot of players that are used to competing. We have several camera manufacturers that used to compete and app developers that used to work for specific camera manufacturers, because this is a very vertically integrated industry. We are in the middle of revolutionizing the industry, although we are not completely there yet. But I think it's changing the way people interact.

We also founded an industry association together with key partners to provide a neutral forum where competitors could talk to each other in a reasonable way, and we're trying to convince them it's better to work together, because none of them has the necessary scale for fast software innovation. It's a highly fragmented industry, and if you're only a small player, it's very hard to get software, scale, and speed for your part of the platform.

And this leads to the current situation, which happened much faster than people thought possible. In a matter of weeks, our partners developed new apps for face-mask adherence, social-distancing measurement, and automatically alerting users about the number of people and any unsafe clustering in retail stores. No one had developed apps for the average distancing of people before COVID-19 emerged, so our partners could react very, very fast. And having an ecosystem with an open platform proved itself to be much faster than the vertically integrated industry model.

Also, our camera operating system is multipurpose, so you have the flexibility to deploy future software for applications that were never imagined and run them concurrently with other applications. So the platform model has shown an increased flexibility and a huge increase in speed, because none of the integrated vendors could ever have acted as fast.

Gayane Gyurjyan: Having previously spent several years in the medtech industry, I'm very curious to hear your learnings for the industry, particularly with this platform-based approach.

Hartmut Schaper: When we started, a lot of people told us, "There's a reason why this industry is so vertically integrated, and you cannot do it, because it's never been done this way." But if something has worked in another industry, like decoupling hardware and software, I think it's worthwhile taking a good look at it to see if it wouldn't also work in your industry. And the best thing you can do

is turn something that used to be a strength of your competition into a weakness, like having them cling to this fully integrated stack and experiencing increasing difficulties.

Gayane Gyurjyan: Benoit, MicroPort is a relatively small player in the cardiac-rhythm-management space. How are you thinking about business-model innovation, and what do you regard as key success factors?

Benoit Clinchamps: We are operating in a very large, very mature, very open, and very competitive market, and we are the smallest player. So we are used to seeing things differently and trying to define new business models. You can approach a business model from different angles, but I want to share two approaches. The first one is the customer-supplier relationship, and the second is technology innovation.

We develop complex life-sustaining devices and traditionally offered an intensive service to physicians and hospitals to help them implant these devices. But we are trying to change this model and do things in a different way. So we're introducing deeper training of physicians and cardiologists to better understand the products and make it easier for them to implant these devices. Transferring this type of service to hospitals and other parties allows us to do things with fewer people than our competition.

Technology innovation is another way to disrupt the way we do business, and remote monitoring of connected devices implanted in patients' bodies is key for us. We've developed devices with Bluetooth technology that enable us to connect implanted devices with different hardware to provide various services for patients, physicians, and hospitals.

Gayane Gyurjyan: Do you see any large shifts or changes now, given the post-COVID-19 next normal?

Benoit Clinchamps: Yes, and I think that COVID-19 has only strengthened the remote-monitoring need. We must avoid overcrowding

in hospitals and waiting rooms, as well as unnecessary trips to the doctor. So remote monitoring is very important now, far more important than it was before.

Ralf Dreischmeier: I think it's important to recognize that speed has taken on a completely different dimension. Although we talked about speed and moving fast before the crisis, the rate at which new businesses are being built today is extraordinary. And you hear it everywhere now—how two years of digital transformation is now happening in two months.

The need for innovation during a crisis

Gayane Gyurjyan: Executives often ask how to get started with business-building efforts. Can you all share some advice?

Benoit Clinchamps: As mentioned, this is the time to build new businesses and a new way of doing business. We've been through an unprecedented and unforeseen crisis with COVID-19, which has been heavily disruptive for everybody. We'll continue to be impacted in our daily way of working and in our overall business.

And I think this new environment is going to change, because we will get back to normal, I hope, very soon. But what's the new model going to be after this crisis? So we all need to stay on top of it, and stay very close to customers to recognize their needs.

Florian Nickels-Teske: I think there is a shift under way, due to the huge impact of COVID-19 on digitization—the perception of what digital can do and how new business models can leverage that. So I would use that opportunity right now, as long as it's there.

Hartmut Schaper: If you want to generate innovation, it's important not to be too focused on perfection. Because if you have this perfect

company where everything is planned down to every minute and every portfolio position, you're not leaving people space to breathe.

In my experience, some of the best innovation comes when people have a little bit of time and space where they can think about new ideas and discuss them. But they also need to know you will support them if they have an idea and will provide seed funding to try something out. It's also important for people to know they won't be punished for trying something reasonable that fails.

This is the only way to get people to come up with good ideas. I know it's one of the hardest things for large companies to behave like that, but it's critical.

Anton Kittelberger: I think what this crisis shows us is the importance of being able to lift off from how things are normally done and trying to free ourselves from cannibalization fears and things like that to really enable us to think without any constraints.

And I think that if a leader, especially of a larger corporation, allows that and creates a space where people can do that, it's probably a prerequisite to true innovation. And I think this crisis has inspired many people to see what they could not see before: that this is possible.

For us, the next normal is a great world where suddenly things that would have taken decades to create took only a couple weeks. This newfound trust and belief in digital therapies and digital ways of treating people is unprecedented. I think there's a bright future for innovation in medtech.

Leveraging incumbent advantages

Gayane Gyurjyan: There's this notion of "unfair advantage" that incumbents have over start-ups, such as a strong brand or access

to capital. Florian, how were you thinking about these advantages when you started conceptualizing your new venture? And to what extent did the notion evolve over time?

Florian Nickels-Teske: First, I would argue that there are natural advantages that we had to leverage in a new way. We explored what is possible in the space of real-world data and evidence by leveraging our assets, which are direct and trusting relationships with our patients and a vast network of experts across the entire group. We have 86 hospitals and just over 1,000 chief physicians in Germany alone, as well as world-leading scientists in our various institutes and university hospitals.

Patient data is, of course, and for good reasons, subject to rigorous data privacy and security regulations. We thus decided not to sell any data but only analyses on such data. Our aim is to leverage data to always generate public health benefits, to find out what works in health and what doesn't, and to help our partners to do the same.

So when a partner comes to us, we can help them with single and multicenter studies to, for example, identify patients in underdiagnosed therapy areas, develop patient-journey analytics, or better understand disease progressions. By providing hospital services to patients, we are thus expanding to working with data and providing services via the Helios Health Institute.

In terms of evolving, I think it was relatively constant. We have the experts, and we have those direct relationships. What changed over time is our ability to access and analyze data. We're still a good way from being fully digitized and able to press a button to get insights, so we still have a bit of work to integrate all our different data sources within the bounds of what is possible.

Gayane Gyurjyan: Do you see any of this changing, considering COVID-19?

Florian Nickels-Teske: Yes, especially when it comes to experts. Many of our physicians, especially the cardiovascular and intensive-care-unit specialists, have been very engaged with COVID-19 in Germany and Spain. These people were on the front lines saving lives, so they had understandably little time to engage with us on projects. That said, during COVID-19 we nevertheless saw an influx of requests for projects, making it difficult to handle this high demand for more projects while so many of our people were engaged with COVID-19-related matters.

Handling the mothership relationship

Gayane Gyurjyan: Anton, mySugr originated as a start-up before being acquired by Roche in 2017. How did you maintain this start-up culture while being part of a larger company?

Anton Kittelberger: When mySugr was acquired, Roche needed to reinvent and experiment, which is quite hard if you've been profiting from decades of doing business the same old way. So being acquired and experiencing that kind of culture comes with a lot of difficulties, and Roche was very aware of that.

They wanted to keep us separate to protect our culture and speed. And looking back three years after the acquisition, I think it was a wise choice. But if you do this, you really need a long-term perspective. Because if you plan to integrate the asset you acquired over time, you need to be very conscious about the fact that a company and its culture cannot necessarily be separated. So you need to think about the strategy and integration of that start-up at the same time.

I'm not saying we didn't do a good job, but some of the issues that we have today have a lot to do with this notion of "we have to keep the company separate," which creates certain dynamics within the broader organization—competitive scenarios

and things like that that can harm a relationship. But in times of change, it's all about trust. And if you have relationships that are built on trust, you can transform a business easily.

Finding talent inside and outside the organization

Gayane Gyurjyan: Hartmut, you've built Security & Safety Things from scratch. How did you find the right balance between bringing in talent from within the organization versus attracting it from outside?

Hartmut Schaper: We grew from a very small group to 120 people in about two years. Our focus was to hire as many people as possible from the outside but still hire a few key people from within Bosch, such as the heads of human resources and finance. But those people who wanted to join us from Bosch had to join our legal entity and were not given any return ticket, because we wanted people who were willing to take risks and succeed together.

We're not a classic start-up, so we don't give shares. But we still have a different compensation scheme. So there's a longer-term component, where you can earn more money than if you stay with the mother company, but you also have a higher risk. Our outside hires were mainly those with experience in other industries or platforms, because we wanted to change the industry, which is harder with people from within this industry.

So we're a combination of a corporate start-up and a well-known company that can move very fast, because Bosch allows us to ignore many of the standard corporate rules if we do it for the right purpose and, of course, stay legal and compliant. This really helped to attract people who wanted to be a driver of change within an industry—to do something that has never been done before in this industry.

Building businesses remotely

Gayane Gyurjyan: Let's shift to the remote environment we find ourselves in today in much of the world. How are you approaching business building virtually?

Florian Nickels-Teske: We moved everyone into home offices at the start of the pandemic, but it was interesting that we didn't see any decline in output, and I would say productivity even increased during that time. We have a very liberal work-at-home policy anyway, so people slid into this quite easily and happily.

In the beginning, we set up regular meetings, though, such as morning and evening check-ins. What surprised us was that people complained about not having enough interaction, like you would normally have in an office environment, such as a coffee chat. So we started introducing casual video conferences—having half an hour or an hour where we were not allowed to talk about work while interacting with each other. That made a huge difference, especially for those living alone. Nevertheless, most were happy when we were able to move back to the office again. I wouldn't recommend home offices and video conferencing for everything, but it worked fantastically well for us in terms of not having to travel, and we're rethinking how much travel we really need to do moving forward. In the end, it's good to have a home office plus an office. That's what we learned in this phase.

Anton Kittelberger: While we've always developed digital services, we were never meant to be a remote kind of company. We even designed our office around collaboration, with an open floor plan and team spaces. Then suddenly, the crisis comes, and the whole setup is no longer ideal. And we also moved everyone to a home office.

I can also echo what Florian said. Productivity went up, especially for those people working in small teams. The focus time increases, you

save the travel time, and it's interesting how many things that typically required a meeting suddenly didn't anymore.

We were also used to having time and space at the office to meet each other, drink a beer, and spend some time together. So during the first week, some people came up with the idea to fill this space virtually, where you bring your beer and go into these rooms, and they even decorated them. It was interesting to see how people wanted to have these same experiences in the virtual world.

The most challenging part we face now is returning to a situation that is in between. How do you handle your remote workforce with the in-person people? How do you make that same collaboration possible?

Hartmut Schaper: We've had similar experiences. The interesting thing to me will be the longer term. We are currently involving our people in discussions about what happens if COVID-19 goes completely away. What kind of split between home office and office do we want to do? And it's a very lively discussion, which I think is good.

Those that fail to innovate now will pay the price later

Gayane Gyurjyan: Chris, can you share some of your insights based on the discussion today?

Chris Llewellyn: This is clearly a unique moment in time, and it's clear the world is going to be a different place coming out of this crisis than it was going into it.

What's different now is how medtech companies go about that innovation, because the process is very different compared to how it was for many years.

There's quite a big risk for many players to get left behind, but my sense is that those that act quickly and with conviction will put clear water between them and competitors. The good news is that there does appear to be a recipe that works—a very customer-centric, agile recipe.

I heard about several keys to success today, one being the will and conviction to act—not being afraid to get it wrong and asking for forgiveness rather than permission. Another is the importance of a purpose and mission that serve as a compass for innovation—be it the product, the value proposition, or the organization—and help attract diverse talent. Building on that, a third key is the importance of a diverse team in charting the path forward, because we heard a lot about how much the industry can learn from other industries that are either adjacent or outside of medtech.

We also heard about a willingness to challenge the orthodoxies within a company, which I think is the critical success factor. Those that are willing to challenge the norms gain the benefits of being able to move fast with a very customer-centric, disruptive approach to developing innovation in a way that really leverages the full might of the organization.

Finally, it's clear that the current operating environment under COVID-19 is not an excuse for inaction. It's quite the opposite. I fear those that don't seize the moment won't just be left treading water but will be left looking up at new Goliaths in the industry, saying, "How did we miss our opportunity? There's no coming back now."

Benoit Clinchamps is the CEO of MicroPort CRM; **Anton Kittelberger** is the CEO of mySugr; **Florian Nickels-Teske** is the director of Helios Health Institute; and **Hartmut Schaper** is the CEO and general manager of Security & Safety Things. **Gayane Gyurjyan** is a partner in McKinsey's London office, where **Ralf Dreischmeier** and **Chris Llewellyn** are senior partners.

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