

# How you can directly support the healthcare system

With Thomas Erkert, Prof. Dr. Christian Johner

## Transcript

00:00:05 Speaker 1

Medical Device Insights, a podcast by the Johner Institute for medical device manufacturers, authorities and notified bodies.

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For once, today's podcast is not about regulation, regulatory requirements worldwide, but this podcast is also about technology, it is about

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Podcast is also about healthcare and patients in the broader sense.

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We will approach this bit by bit, but first let my guest of today introduce himself.

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Thomas, could you make that very brief.

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Yes, thank you very much, Christian.

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Today I am very happy that we can do this podcast together.

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My name is Thomas Erkert, I am a project manager for medical I.

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and requirements engineering for various companies.

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I work as a freelancer and in 2009 and 2011 I first completed my Master's degree and then my M.B.A.

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and since then we have known each other and since then we support each other in a matter that we will discuss in more detail in a moment.

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Exactly, and that has something to do with the aid project, Thomas, to which you have been connected since day 1, namely it is about the topic of Healthcare I.T.

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for Africa, a registered association

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what does this association do, what is the goal of it, what does the association want to achieve?

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Yes, actually I have to say, Christian, we have both been there since not day 1, but day 0.

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Because you made it possible for me to do a project work and a student thesis and my master's thesis on a topic as part of the course of study, which actually led to the founding of this association.

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Healthcare I.

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for Africa, as the name suggests, we are trying or we were thinking about how to do it with I.

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to be able to offer help to the nurses and midwives in Ghana and, above all, because we have noticed that the current knowledge is actually not available in any way.

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They have a very good initial education,

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But it will be enormously difficult to bring this modern or up-to-date information into everyday work.

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And so we thought about how we could best do that.

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And in fact, I was able to research it in the two papers I mentioned, then I was in Ghana several times and then investigated what such help could look like in concrete terms.

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And quite simply, we then thought that we

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must take advantage of modern information media to improve the training of nurses and midwives.

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We did that by first starting with services S.

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to call.

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In fact, there used to be, text messages that we used, very narrowband, to basically pass on information opportunities for nurses and midwives out in the field.

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Then we realized very quickly, well, that's actually far from enough.

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We actually have to start much, much earlier.

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We actually have to start training people better, if possible in the universities, in the training centers, and that's why we started to build our first HITA Labs, HITA P.

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Labs.

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And I was there at that time, I had the chance to travel to Ghana together with Christian and we had done an exploration in Ghana there.

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And then we started to build the first 10 HITA Labs.

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That was almost 12 years ago.

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Now we have 40 labs in Ghana in the north, south, west, east spread all over Ghana, primarily in the rural areas and have now connected about 40 times 40 1600 computers there to actually improve the training of nurses and midwives.

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Mhm,

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maybe back to the background, we had also thought about some other things, but we found that they didn't work so well.

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Perhaps also to the larger context.

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So Ghana has a large population, but has almost no doctors.

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This means that the entire health care system rests on the shoulders of these nurses, of course also that of the midwives, because in the area where we started at that time, I think there was a doctor for 180,000 people and you can imagine that there is

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de facto hardly any medical care.

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That's why the nursing staff have to handle all this and that's why, and we found out, it doesn't make sense to send any equipment there now, because we've seen that, a lot of donations have been delivered in the form of X-ray machines and ambulances underneath, but were actually completely unsuitable, stood there as new garbage, so to speak, Because no one could wait for it.

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And we saw the highest leverage in education and that was always the most important thing for them.

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When we asked, what do you want, what would be the most important thing to you, it wasn't that we would like to have more pills or more ambulances or something like that, but we want more education to get our work done.

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And that's why we concentrated precisely on this area of further education, training and further education of these nursing staff.

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And that also with sustainability, as you can see now, maybe we're just going into such a project right now.

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maybe a current project, what's happening right now, that might make it a little more illustrative about what exactly is happening and what they get out of it.

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So at the moment our biggest project is an appeal for donations.

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We actually want and have to after up to 12 years of life of the computers, we now have to successively replace the computers in the existing facilities in the existing P.

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Labs replace the computers in order to actually

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The yes, to get back up to date.

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And in fact, today in this podcast it's about animating and asking them to actually think about how they can pass on computers, mobile phones that have a certain runtime with them, how they can perhaps pass these computers on to an institution like Hita.

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And here we address a point, which is actually sustainability

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It is very important to us in our work that we do not send electronic waste to Ghana, but on the contrary, we need used devices, which, by the way, are replaced in Germany or in Western countries after 2 to 4 years on average.

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In Ghana, we drive or work with these computers for another 1012 years.

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So, when we talk about sustainability, it's sustainable use.

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In addition, it is simply very important to understand that we and this is what Christian has thankfully already brought in, what we are doing is actually empowerment.

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We are not only trying to train nurses and midwives better, but of course there is an approach behind this that we also have the I.

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people so that we actually put the Hita P.

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Labs

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Being able to maintain and keep it in operation on your own, and that's actually the fascinating thing about it.

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Incredibly, we now have, I think, four or five start-ups, especially in the IT sector.

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In Ghana, people who we trained, who then became self-employed and have now taken over some of the maintenance work for these schools.

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There are a lot of small examples of how you can see that even as a small club we can actually achieve an incredible amount with such an approach and that's very exciting.

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And we can also see that the lever is training from the fact that many of these nurses and midwives we have trained have also trained in new ways.

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that they have become coaches themselves today and are training themselves with the new ways they have learned with us.

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And that's everything else as a matter of course.

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So, anyone who has seen that, at 100% humidity, in rooms where there may be no doors and no windows, where we of course also have partly different hygienic conditions, to keep computers running for over 10 years in such an environment, which are not stolen either.

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These are

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everything else like things I would have expected now.

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So, I think we were lucky or somehow did the right thing, obviously, Thomas.

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I think it's actually about two things.

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So, I think we have managed 1 that we can get a sense of what it actually means to maintain the thing for the operators of the facilities, who have a, I think, of what it actually means.

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But we also had a lot of approaches and had to have them completely.

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that's also a learning curve, which we're going to report on today.

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In the beginning, we thought, O.

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K., we install and then it runs.

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No, that's exactly not the case, but you have to stay in touch all the time, you have to be a contact person, you have to remain a contact person and we actually have to stay in.

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in a certain way and this is extremely difficult for a small association, we have to maintain a service and for this we have to train in turn and we have now done that by having cooperation agreements with 2 universities, which form a kind of hub for us and that is our know-how hub, will be at these universities or is at these universities, that's once in Hoh in the Volta region

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And then in Fiabre, which is attached to Sunyani in the Bono region a little north in Ghana, also in a rural area.

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And from there, we become in or act as a knowledge center, as a hub, as a knowledge hub, and from there we can then go to the smaller facilities, to the other Hita Labs, and then the people there can basically.

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in order to then in turn ensure that the, that the computers and the labs act in the long term.

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For us, if I may add that, it was perhaps, that was one of those highlights that Christian has now rightly pointed out.

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We did last year.

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visited all the labs again and when you then notice that out of 40 installed laptops and PCs, 26 are still operating and working and being used after 12 years, then you can also see how sustainable this approach actually is.

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And I would like to go into this again in particular.

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It is not so important to us that we get the super fancy Hörst and all the most modern equipment donated by you, but for us

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are actually prefer huge desktops, which you don't even have anymore, or large laptops, because they are easy to repair and we can just unscrew the things, clean them, they still have large fans, which are excellent for the climatic conditions.

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So, if you think your old computers are not fancy enough, then you are wrong, on the contrary, we are looking for exactly such computers, which we then prepare accordingly on site

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and then be able to wait accordingly.

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If I say about the preparation, then perhaps a comment on it.

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We have entered into a cooperation with a school in Frankfurt and there in an upper school the computers are all processed, so all their computers are deleted accordingly according to the data protection directive, the data is cleaned.

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we also have a certified one with a certificate to guarantee you accordingly and we prepare these computers in a project that we call Students for Students, and in such a way that they can then go to Ghana preconfigured and then be set up there very efficiently in a network.

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For all those who are interested in this now, who want to contribute, what would be there

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best next step, if you still have such computers in your basement or on the shelf, who is the best thing to turn to?

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The very best thing is to always go to the website [www.hita-ev.org](http://www.hita-ev.org).

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There you will find a call for donations under current and there you will also find all the various e-mail addresses,

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One you would have to remember, which is the donations at [hita minus ev.org](http://hita-minus-ev.org) and then you have the opportunity to contact us directly.

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Perfect, we will link both in the show notes, both the website and this e-mail, so that nothing should stand in the way that we can continue to equip Ghana with computers for the next 12 years and thus make a contribution to health care.

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Perhaps a little more unusual,

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in a different way, as we usually do here.

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Thomas, thank you very much for this interview.

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Thank you, Christian, for your time and tireless support in this project.

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Thank you.