

Michael van de Weg

Interviewed by

Richard Sharpe

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Via Zoom

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Welcome to the Archives of Information Technology, where we capture the past and inspire the future. It's Monday, June the 21st which is the summer solstice but it's raining outside—2021 and we are meeting on Zoom. My name is Richard Sharpe and I've been covering the information technology industry, previously, in my sector called the computing industry, since the early 1970s. And just about that time, the man who is going to make his, erm, contribution to the archives today was born and he has already contributed much more to the IT industry than I've contributed in my longer career. The man is Michael Van de Weg.

Michael, you were born in 1974 in what was then, Salisbury, Rhodesia, what is now Harare, Zimbabwe, what were your parents doing there?

[00:01:01]

[coughs] so, my mother was born in Harare, in back in I think 1949 and then my—she married my father, previous to that when she was doing her nursing training in Durban, South Africa. My father is from Durban, South Africa and they ended up travelling back again to Zimbabwe, er, where I was born later. I was their second child born there in 1974.

[00:01:32]

In 1974, in erm, the now Zimbabwe, there civil rule—war going on, yeah, 9 eh, 8 years... 9 years before erm, the white, erm, supremacists had declared UDI and ZANU and ZAPU were fighting that in guerrilla warfare. And also, in the computer industry, we should point out, we had early relational databases, we had the Cambridge Ring, an early 1...local area network and Intel were producing just the 8080 and we had IBM's systems network architecture and a little protocol, which became rather important in technology, TCP/IP was formed. So, you came on the scene exactly at the right time, Michael.

[00:02:23]

[laughs] I did... I did for about 6 months, not much longer than that, my parents moved back [unclear sound loss 00:02:31] South Africa and er, we grew up in Merryhill Park which was essentially—there was nothing there at the time, we were the first house, in fact, in the road. We had to boil our water and no electricity. And the story that my mum always talks about is, there was no work, and my dad went to stand in the line, which was the South... the South African dole, to collect his money. And he just saw, what he said, was a long queue of...of men, who were feeling sorry for themselves—as he puts it. And he decided at that point, he wasn't doing that. He went and he borrowed a b... a big van with an open back, he drove around to various erm, sites, and asked if he could clear rubbish for some money. And at the end of the day, he had made twice the amount of money he would have got by standing in the queue and waiting for a hand-out. And from there, he built a small business that went around to collect recyclables.

And so, his—er, continued path of entrepreneurship would carry on and grew it's—a number of always small family businesses but looking at opportunity and when things went down, they didn't work out, as there were many stumbles along the way, find another business and move on with that to make sure that he could feed the family.

[00:03:45]

You inherited that entrepreneurial spirit, yeah?

[00:03:48]

Yes, I...I believe I did. And I didn't think I had until the age of probably 39 years old, 40 years old before it just dawned on me... well, dawned on me, I decided this is a good opportunity, erm, it's time to go to the UK and start a business myself with a friend of mine. And that was the first time I really decided I'm going to do this. Up until then, all the years of working for corporates such as IBM, and Dimension Data, and PwC, my dad had already said, "Why are you not doing... running your own business, why are you working for other people?" And I had said, "I don't think I'm ready for that" and the day just came, and I said, yeah, it's time now. So, that's essentially how I got to start where I am.

[00:04:31]

Would your advice be to other younger people than you, wait for the moment when you're ready for it?

[00:04:39]

I would say that over the years when I've [unclear sound loss 00:04:41] you see opportunities and the opportunities, whether you're 20, 21 years old, or later on, if you see the opportunity, grab it with both hands and absolutely go for it. What I would advise against is just going out there from a young age and just trying absolutely anything, just because you want to do something on your own, rather-build some value, build your skills, build your knowledge-base, build your network, and along that way, you will find an opportunity that comes to you. And when you do, it may be early on, it may be later, grab it with both hands because I've seen opportunities slip by, that I never took with both hands, thinking they would just come by again, or perhaps it was just something I was thinking and seeing them actually turn out to be massive opportunities that passed me by.

[00:05:29]

Right. You went into primary school and your education in schooling was state schools, yeah?

[00:05:41] Yes, it was state schools.

[00:05:43]

Did you have to pass exams to get into a particular secondary school or did that automatically happen?

[00:05:50]

[coughs] it automatically happened, I passed from secondary school in my hometown of Pinetown to the—well, from the primary school to the secondary school, Pinetown Boys High.

[00:05:58]

Right. And so, what was your impression of South Africa at the time as you were a young pupil? It seemed to me, when I was there, to be in terms of topography and geography, God's own country.

[00:06:15]

[laughs] yes—my... my memories of South Africa, you know, h... have always been one of the outdoors, one of feeling really free, to be able to roam and do what was needed. We were very much of the sea, my parents were avid lovers of the sea, er, we used to have marine tanks, we used to go out every weekend and do snorkelling, dive—catch specimens, to understand both the English name and Latin name, er, and—erm, this was an ongoing... this was an absolute passion right from an early age. I think the first time I got in the water with a scuba tank I was probably about 6 years old.

[00:06:50]

Right, right. And you were able to do that because of the wonderful seas around there, which are warmed, are they not?

[00:06:58]

Absolutely, especially off Durban. Durban is an all-weather, all year round—the stuff of the sea where you could go to the beach—in fact, during July, during our... our winters, it's preferable to go to the beaches then because there is slightly less rain, means that the sea is clearer, the rivers haven't come down and also, the sun isn't going to burn you to a frizzle, you can actually stay out in the sun during the midday. So, it's beautiful and warm, 25 degrees in winter.

[00:07:22]

It seemed to me—er, I was only there a short time, that Durban was rather erm, an English city, is that right?

[00:07:30]

Yes, Durban and KwaZulu-Natal South is concerned the last outpost, they considered that is where the English finally went down before they were—and they weren't driven from there, but that was where they...they created their homes. Erm, there was always quite a lot of conflict back in those days, when we were at school between the Afrikaans and the English. Erm, I do recall somehow wondering sometimes why the Afrikaans hated the South African English so much, even if we had never been to the UK. But now, understanding all the wars and seeing how long those memories can

last—imagine their parents over many generations drilled into them, what it was like to be farmers and have the English come over and attack them and with armies. So, I do get it.

[00:08:13]

You're referring to the Boar War, 120 years ago, but-

[00:08:17]

I am. And that is what they referred to when I was there, so-[laughs].

[00:08:24]

You went to a primary school, and... and what was this—all-white boys or ... or all... all mixed or what?

[00:08:31]

It was a co-ed school, er, it was a whites-only co-ed school, as it was in the days of apartheid where we had the racial segregation and there was the erm, Group Areas Act, which meant that obviously, whites and erm, and mixed-race were not allowed to be in the same areas, unless for work or for other purposes. So, there was a whitesonly co-ed school and then moving onto Pinetown Boys High, that was a whites-only boys school of over a thousand pupils.

[00:09:03]

Again, you played a lot of sport in that, erm, in that school, yeah?

[00:09:09]

Yes, [coughs] absolutely. It... it was, er, it's quite different to what I'm seeing my sons' grow up with here, where you typically do a lot more club sports and the school has focussed sports for those that want to do them. Erm, back in...in S... South Africa, essentially every year—every term, you had to do a sport. The school had to turn out in great attendance when it was swimming season, everyone, had pretty much been involved in the swimming, there were massive teams, we had to turn up to the galas every weekend. It was absolutely focused on sports, yeah, athletics was the same, rugby-- there were mandatory rugby days where you had to support the first

team. And essentially, every year, there was about 6 or 7 teams and you played flatout right throughout the term. So, it was massive rivalry, and everybody was really playing rugby. And you can see why the nation is a rugby-mad nation.

[00:10:01]

Yeah. How was the level of discipline?

[00:10:05]

It was—I'd say it was pretty close to army discipline. So, we were very much kept in line with the stick, erm, you know, the—canings were... were... were commonplace, they were pretty much daily, erm. It's funny to look back now, simple things, such as not having your homework book signed, that would get you 2 lashes of the cane. So, er—moving onto the other things, you know, fights or doing other things like that would lead you up to 6 lashes of the cane. And that was an everyday occurrence, post—er, all the time, you had to have your hair a certain... a certain length, and there were certain ways they used to measure that. After every holiday, they would line us up and we'd have to go for hair inspection; hair inspection was basically conforming to the military style, where it couldn't touch—you know, it couldn't touch the collar, you couldn't have the fringe near the eyes, and that would earn you 2 lashes or 2 canings on the spot if you failed that check and you needed to go out and get it cut again.

Erm, at the same time, you could appreciate they were trying to build boys into men who would... who would have to go to the army, which led to military conscription in those days. Erm, so, during, you know—our, well, our latter years of say, 15, 16 years old, we were, every Thursday, we had to do army parade, drills, learn how to march, learn the ranks, er, learn how to shoot, er, there was a lot of that coming through to the schools to prepare you for your conscription at the age of 17, 18, when you leave school.

[00:11:31] Did your parents support you in... in education, were they keen for it?

[00:11:37]

Absolutely, absolutely, erm, my... my parents always felt erm, that they would have loved to go on to a university if they... the funds had allowed, but for them, in those times, they were really just all fighting for survival, making sure that the family had food, making sure that they had to do what they needed to do. Erm, and you know, my mother was doing a nursing course in Durban, which she pulled out of halfway to go back up to Zimbabwe. Erm, my father had—at a very young age, had to earn... earn a keep for the family with his dad passing away at... at a fairly young age. So, for them, it was all about the work and they had always instilled in me that you need to get a good education, a good university degree so that we could essentially not have the same as them—the same hardship. So, they were 100% behind and backing education to make sure that I got what I... the best I could get.

[00:12:30]

How long was your erm, conscription into the military?

[00:12:35]

So, that's interesting—so, a few things we've spoken about now, they a... they changed very much in the final years that I was at... at erm, secondary so. So, in my matric year when we... we were called up to the army, what they did is they also allowed you to defer so you could defer it by going to university first, and then you would have to go to the army, which I did. And while at university, they... they abolished the conscription. So, I never ended up having to do my military service. And the second thing, in the first year of my matric, is that with the... with apartheid now coming to an end, they started to open up the schools to what they called Model-C schools, where they were introducing black and Indian children into the school to start that process of integration.

[00:13:22]

Good timing for you, to miss out on conscription.

[00:13:27]

At... at the time, it seemed great timing because I was able to go to university, my parents were obviously thrilled that I missed it. However, when, erm, I'm still in contact with a lot of my friends from those days, and they still talk about all their great army stories. So, it sounds like a place that you never wanted to be at, but you always wanted to have been in it. It sounded [laughs] like it was a good place and a good year spent from a disciplinary and, ready just from the... the experience perspective. So, yes, I'm glad I didn't go then but I kind of wish I did now.

[00:13:59]

You matriculated, which meant you could go to university without having to do an entrance examination, is that right?

[00:14:07]

That's right, the matriculators—matric exemption meant that you go straight into university, and you were scored by certain points to allow what stream that you were able to do.

[00:14:17]

So, you joined university in 1992, the University of KwaZulu-Natal, describe that university, was it big?

[00:14:28]

Erm, yeah, well, I wouldn't be able to give you the numbers, but it was one of the probably one of the sixth, top sixth of seventh universities in South Africa. Erm, that university served the whole of the KwaZulu-Natal regions, so, the old Natal province. Erm, it was a... at the time going in, it was a fully integrated university so, it was all—erm, black and white. It was quite significant because a) they were bringing all the cultures together and it was a university which was very strong and sporting environment and so I was able to carry on in various sports there. And, as from an academic perspective, erm, with the-- the quality of education was extremely high, they were not accepting any low pass marks, erm, specifically for ourselves down in the science department where we were engaging with our lecturers. Erm, I would say the majority of them were Austrian or German, and they certainly did... did drive home some very high standards.

[00:15:30]

And you learned erm, a sport which I have never heard over, and I can't imagine how you play it—underwater hockey?

[00:15:38]

Yes.

[00:15:39] Describe that?

[00:15:42]

[laughs] Underwater hockey, it's—in the UK, it's called Octopush.

[00:15:45] *Uh-huh*.

[00:15:48]

And erm, it was essentially d...d... developed as a—as a system of staying fit by the spear fisherman, back in the 1950s or 1960s, around that time, so, that in the off-seasons, they could get in that pool and what it—what it—well, what it comprises of is a lead puck, almost like an ice-hockey puck, it's about a kilo, that is coated in nylon just so it's not too abrasive. And that... that slides on the bottom of a tiled pool, and what you need to do, is like hockey, you need to score a goal on the other side. But you are free-swimming, so, you have a snorkel, a mask, and fins and a short stick, probably about that far—and you basically play and your body movements in 3D, but the ball—puck, moves in 2 dimensional. Although you do have the ability, when you are able to learn how to flick it properly, to get it up to er, 50 centimetres even, off the ground and about 5 or 6 metres long. So, there are a lot of techniques and styles, to a point where they've been having world cups, erm, world cup underwater hockey, so, there are many, many nations around the world that play it, and that's even going back to the 1990s.

[00:16:55]

You must be extraordinary fit to play that. [00:17:00]

It...it...it fitted in perfectly, which is why-erm, with the same kind of group of people, the same people that had been doing-playing water polo, erm, more importantly, they had been doing spearfishing. So, going out, going crayfishing in the Durban waters, you're crayfishing anywhere from 5 to 10 metres, and that is constant up and down, fighting on the rocks, all free-diving, there are no tanks allowed to crayfish in...in...in erm, in South Africa. Er, and to add onto that, you need to go a bit deeper, you know, go to 20 or 30 metres, you're going down with a spear gun and looking, er, for...for fish. So, it really is a good replica of the kind of fitness you need, which helps underwater hockey, so, each sport helps... helps the other one and er, it was great... great cross-training. So, it's a problem when you still are trying to get fit, because if you can imagine picking up a rugby ball and making a break or a try, but if you're too tired, so, at about the 20... the 20-yard line, you would stop and you would put the ball down, that is the equivalent of running or getting a runaway with the puck from your own back wall. But if you run out of breath and you have to go up, you're not very well-cheered amongst your teammates for not scoring that goal. So, you pretty much go until you pass out, you don't come up if you're going to break away.

[00:18:14]

What... what were you learning there at university, what were your subjects?

[00:18:18]

Erm, so, I did a BSc in Computer Science, a Batchelor of Science, erm, my main focus—or main subjects were computer science and business information systems. Erm, I carried physics to the end of Year 2 and then they made a slight adjustment where I had to carry a third-year subject outside of that, which I did maths. So, I did drift theory in my third-year—third-year maths.

[00:18:40]

Why had you chosen computer science?

[00:18:44]

So, back in—erm, [sounds], er, late '80s, I was 12 years old, so, it was 1980...86, erm, my dad bought a-he loves computers so, he loves to go and build things, build nets, build houses, build cars. So, when computers came up, why not build software? So, he bought IBM XT with 2 floppy discs, and there was a programme in there called Basic, so, Microsoft Basic. Er, I got the programming book and I learned how to programme and from there I learned how to do spreadsheets and you know, write all sorts of different things. And it really captivated my idea of what one could do with computers. So, for me, it was a natural progression to go and do computer science erm, at university. So, that was a real drive around the computer science side and business information systems really is allowing you to write business software with the technical skills of computer science, which was very, very, er—this... er, it was very technical, not very much business-related to the computer science side, you almost had to build the computer from scratch, a microcomputer from scratch, it was—so, the two, erm, contrast each other very, very nicely to be able to, erm, go from there into, graduate into IBM, which is where I was hired as a graduate, up—to move up to Johannesburg.

[00:20:00]

And at the university, what was the computing setup, what computers did they have?

[00:20:07]

Well, we were quite fortunate in the science department, because out of the 30 computers that we had, 4 of them were colour monitors [laughs] so, 26 of the other monitors were monochrome orange, and er, it was a lot of command line, this was really touching Windows, the first version of Windows was just coming out onto the personal computers so, we were a bit behind on that. And so, we had... we had everything that we needed for what we were learning, I mean, at those points we were busy learning protocols, coding structures, learning the thoughts behind, the methodologies behind, the algorithms. So, really, all we needed was to be able to code, we didn't need all these fancy high powered computers. But it was funny to look at what we were doing back then to see what we're having to get away with and

what we were having to use, but it definitely served the purpose. By the time I had left, I'm happy to say that all the monitors were colour.

[00:21:01]

[laughs] I remember the day I was taught the shell sort—you know the shell sort, yeah? You look in pairs along a list and then when you no longer have to shift any of them, you've sorted it. I just still remember that day, it was an absolute revelation to see algorithms like that. Are you good at algorithms?

[00:21:23]

Yes, er, definitely—I'd definitely say I'm good at algorithms. Er, it's been some time since I've ever written... ever written a line of code, to be perfectly honest and where we are—the company I'm in now, someone else is actually, running the full technology side of things, I'm focused on the business side, but algorithms was always a strength and for me, it was always the fascinating part of staring down a major problem, of how is this going to work, how is going to be quick enough and how is it going to give the output you want in the least amount of code? There was always a—always a keep the dream-- as in being able to use things, such as recursion that actually worked to apply the computer science theory into a model that actually works. And erm, those are fascinating, to get those algorithms right, so, er, I particularly enjoyed algorithms. Erm, and what I didn't like, was when you noticed—you saw the way out the problem, you built the algorithm that works and then you had to spend another 3 or 4 months building up all the other bits of the programme around it, just so it was useable.

[00:22:22] [Laughs] yeah.

[00:22:25] Once you have the mains you lose the excitement.

[00:22:29] Erm, have you got a lot of patience or not?

[00:22:34]

With...in... with what-- I have a lot of patience with erm, oh, let's think, would my family say I have a lot of patience? They would probably say no [laughs].

[00:22:43] *Right*.

[00:22:45]

For sitting and being able to knock out a very complex problem, I have a lot of patience. I enjoy chess, you need a lot of patience for that. And so, yes, I... I... I would say I have a lot of patience. I would say that it is definitely starting to wane, in er, my...my more recent years, I think it's just because it's so much on the go.

[00:23:05] You are becoming more impatient?

[00:23:08]

Yeah, I... I think the need to have things done a lot faster, and...and overcome certain frustrations, and that—er, I think it's by necessity that I've become... become less patient, because there is less time to do things and...

[00:23:20] You joined—sorry, go on.

[00:23:24]

Yeah, no—but I said the... the patience is definitely something that is learned patience is definitely something that--- really er, er--apply in the areas that, erm, you've always got to remind yourself [laughs] what you're doing.

[00:23:36] You graduated from university, and you joined IBM.

[00:23:41]

Yes.

[00:23:42]

Did IBM find you or did you find IBM?

[00:23:47]

Erm, I'd say it was—I'd say it was a bit of both really, in that what IBM do is, especially in those days, they would look to do a recruitment drive and part of that was to hire undergraduates and they would then go out to all the universities, and they would have the university day around the country and out of that, they would come back with the CVs, and then the managers would look at the CVs. They might have one or two openings and they would then come back to the university and say, right, we would like to hire-or we would like to interview the following people and select from there. So, it was a process that I was involved in, er, they looked at the CVs, they...they found my CV and a gentleman called Maurice Levy, he has sadly passed, er, away fairly recently. He decided to come down to Durban to interview me and erm, he was one of the top, erm, top engineers in cryptography within I'd say, that IBM, not just South Africa, he's got a lot of things that he's done all around the world really. And he decided that he liked my CV, erm, he liked what I'd done, but not because my marks were particularly good but because I had a great balance of sport and a great balance of the technology and the...the... erm, the science elements that he needed, and he brought me on board.

[00:25:07]

What did you think of IBM when you joined it, what did you think of its disciplines and culture?

[00:25:14]

It... I knew nothing else really, so, for me it was this...this is how... this is how business is, this must be how it all works, it was extremely well-structured, we—our onboarding was er, meticulous. Erm, to—er, er, as a graduate, you go to work and on Day 1, you'll be given your mobile phone. Think back now, we're 1997, so, you were given a mobile phone, you got a laptop and yeah, you've walked around, and you've been introduced to everybody in the department right up to the head of banking services who is, you know, some major leader that is within the business. And you know that week, you're all at someone's house being introduced and going over--some drinks and some cocktails out in--. It was... it was, it just felt like you know, I had arrived, it was... it was a fantastic feeling. And then within 5—8 months later, in August of that...that same year, erm, I was heading across to... to Canada, I went to Canada, to help with one of the projects. And I still remember the first evening opening a... you know, up on the 10th floor of a Hilton Hotel, looking out over Toronto and just thinking, 8 months ago, I was a... you know, trying to pull pennies together as a student, and here I am in Canada, with IBM, it was an amazing feeling, er, you know.

So, IBM I...I have a lot of respect for. It was a very—it still is a very well-run company with a lot of erm, really fantastic processes. But I made a lot of good friends there and you know, friends of which I am still in touch with today.

[00:26:50]

IBM was allowed back into South Africa erm, after the end of apartheid, erm, the, erm, Sullivan Laws had stopped IBM working in there, and erm, you were in Johannesburg then, is that right, in IBM?

[00:27:05] Yes, I was in Sandton.

[00:27:08] Er, where?

[00:27:09] Sandton, Johannesburg, yeah.

[00:27:11] Sandton?

[00:27:12]

Yeah.

[00:27:12]

Erm, yeah, I... I ... yeah, I went through there to see IBM, er, some... some years about that time actually. Now you were involved in a project, I understand, um, that got IBM out of a little difficulty—can you explain that to us?

[00:27:29]

It... it was an interesting one because it is essentially taking you to do something that had nothing to do with what you had trained to do at university. It was about just getting a job done and basically, what it was is we had just... IBM had just sold to Absa Bank, the largest bank in South Africa sold them these stripe card and pin paired readers. And they had put out about 10,000 of these devices out into all the branches, I think there was about 1,800 branches at the time. So, you can imagine, this massive deployment, things were going well initially and then they started to just completely lose all their memory, so, the bios would just be lost, and they couldn't use them. And this fault kept coming up and kept coming up and I asked-- our department was the department that had actually bought the device—this didn't come from-- we had a whole team and a centre in Taiwan. However, this was designed and manuf... and... and... the whole deal was done from South Africa. So, we were responsible for it.

This was done literally, the year before I got there and then they identified that the issue with it was there was something that when the electricity spiked, it caused a flush and it basically spiked on the bias and the bias was flattened, and it couldn't be used. So, what they had to do was put a little transponder into the device that would protect it. Now, that is an easy... that's an easy solution. However, you have 10,000 devices out there in 1,800 banks, around the country and you've got to get all these devices back to a central place, make that fix and then send them back out again and reinstall them. So, that was a mammoth task, and the... the project was... was failing, it kept falling behind, kept falling behind. It was not getting the attention it deserved, there was some of the devices were going out and although the fix had been made, something else had broken in transit, so, it wasn't working. And it was taking

absolutely ages for somebody to have to get out to those branches, try and find out what was wrong, and it was just failing, and they were losing face to complete [unclear sound loss 00:29:44] with having all them pulled out.

That was a 40 million Rand produce, and think back in those days, er, 1997, that's 2 million pounds, that's a massive project back then. So, effectively, my job was to go to work in the middle of Johannesburg where these devices were sent back to, manage the companies that were going out there to retrieve all the devices-- Work with a...a whole group of technicians under me inside a trusted centre, to define... define a process of what we were doing, of how are we going to go through the fix, the check, the test, the communication, get those packaged up, get them distributed back with technicians, make sure they landed at the trusts or make sure they landed at the different banks at the right time. Make sure the engineers are there at the right time. Make sure the software is installed, give the feedback, and make sure the loop is done to... so that we can actually get sign-off.

So, it was a mammoth task but if you think about it, it was not something that required a lot of rocket science, it just required a lot of damn hard work. And I built this up, put out the process—so, I remember sitting down on the first day and I was... I think I was 22 er when I joined IBM—22, 23 and it was—all these technicians were 28, 29, 30, and I thought the only way I'm going to get respect here is to show them that I can do that job as well. So, I sat down at each station and did it for about half a day to learn exactly what was needed, and all the stations with them. So, at the end of it, I knew exactly how to do all those so they couldn't pull the wool over my eyes when things were slowing down if things weren't working. So, I fixed that part first and then I looked and said, right, how many devices are failing when they reach the different banks? I looked at that to make sure that there was enough extra devices, to go in, so, that we could make sure the bank was signed off and the other devices came back—there was additional cost—it was far cheaper than it was costing the bank to stay down and losing the project.

So, there were various things like I did along the way and then just methodically went down through this list of 1,800 banks, 10,000 devices that were out there, picking up the phone—is it—are you guys up—yes or no? If it's up, yes, if it's no, what is it?

And a lot of the stuff I started to learn how to fix over the phone—get them to go to a server, it was small things. So, you—like, er, some of the trusts, out in Kathu, which is out in the Northern Cape, it's about 600 kilometres, from the nearest er, s..s..shopping centre, the nearest bus station, the nearest anything—the nearest office. So, to be able to do that, it tremendously sped everything up and it got right down to the point where, the last-- on the wire, on the Friday, we had to be done, and I think it was the Saturday, the next day, somebody went in on their own time, just to fix the last device. And er, we managed to turn that project around, that was failing but I did it on time, and 3 months later, IBM came around and said, right, thanks very much, that worked, we're happy, can we order another 5,000 devices?

[00:32:49]

[Laughs]

[00:32:51]

Er, and it taught me a...a... an amazing lesson, it's just—you can fix everything really, I mean, most things, huh, and there were times were... they would... I needed to have a cer... certain number of SAT junctions that had to go in before this order otherwise there weren't going to be enough, it was going to delay it, there was a knock-on; there was a whole lot of different things like that. And I would phone, and I'd say "Right, I need them", and they'd say to me, "Sorry, we cannot from the Albion centre, we cannot give you any more, that's as many as we've got." I'll say, "Well, who's the manager? He has the manager; he would say the same story. "Well, can you work overtime to make more?" "No, we can't, we...we... need, you know, [unclear 00:33:28], "Who is your manager—who is your manager?" and sometimes I went right up to board level, and he's wondering who this graduate is who is phoning him at the board level? And each time I was explaining the impact on IBM's biggest banking customer, and they would just get it done. And it would come back done and I'd get my devices and I'd get my T-Junction and I'd get my stuff. And it just taught me really that the first time—it doesn't work, the second, that doesn't work. You need seven no's to truly believe it's going to be a no. And the whole day long, there is a way, if you really want to get it done, you will be able to get it done, you've just got to make the right calls and just go in the... in the right sequence of things and you will get the answer that you need.

[00:34:06]

You're very tenacious.

[00:34:09]

An...and do you know what... I w...wonder sometimes if I could have done that again today. So, sitting here as...as a 47-year-old, to go through that and I look at it and I guess, do you know, it's the same tenacity that made us, or enable us, with my partner... business partners, yeah, with... for Image Systems, enabled us to get through this time. They are obviously, equally as tenacious, that's why we've got this far, but it is the tenacity that's it, we will not fail, we've just got to make sure that we just keep doing what we're doing.

[00:34:37]

So, what is Michael's scheme of managing people, because you're managing people now in that project?

[00:34:46]

Yes, it is something that is—for me if... you're there to manage the output. The only way you can manage the output is by looking after the people. If you have to tell them what to do, you've got the wrong people, so, make sure you get the right people who know what to do, manage it—and the only way you can do that is by supporting the people that are doing it. And that is something that I have been doing. And when I heard Colin Powell, the ex-Secretary of State at one of those big talks in—I went to Houston with Microsoft and he just spoke about the only way that you can get people above you, or people below you to do what needs to happen, is to manage from the bottom and support all the way up. And that is the way you get your output and it just rung true to me. That fits, it's... it's managing from the ground up rather than asking from the top down.

[00:35:41]

IBM erm, sent you to Canada—why?

[00:35:47]

There was a project on the go at the time, which was called er, Visual Banker, essentially, it was to replace all the telesystems within one of the large banks. And this, er, IBM had gone in... in partnership with a company that was a Canadian-based company to basically look at the software there and sell that software to this large bank. So, part of the journey was, for me to go along and if you imagine, this was my first year of... of working-this was a massive deal, some of the top, er, guys at... at...at the banks were going across to have a look. And so, my manager was going because he was heavily involved in this, he wanted me to come along, for two reasons. One, at the same time they were having courses that showed us how to implement and roll out this technology. At number two, this key factor was, he wanted me to start building up relationships at that C-Level, which he knew that I could do already because I was... I was doing it off that project-that's what I had to do. So, then I could actually have access to C-Level while understanding the underlying problems deep down if we were to ever go ahead and implement that software, so, that was the strategy around that. So, I was doing courses in the day and wining and dining at night.

[00:37:02]

IBM, even then—'97, '99, was quite a paternalistic company and would have had a career mapped out for you. Did you have a sense of that?

[00:37:18]

Yes, I...I. I did. Erm, I—one of the... the heads of—well, he headed up banking, er, financial securities—he took me... he took me aside, quite... quite early on, and I would say probably, er, my second year there or just 18 months in. We had a conversation, he first took me to erm, the Currie Cup Final, at Loftus Versfeld, he took me in the box, with the CEO of MidBank and er, watched me interact and we had some beers, and we enjoyed the game, there was just three of us. And then, afterwards, on the journey home in the car, he said to me that erm, very few people I would—basically, integrate and discuss at C-Level at such a young age, but also have the technology experience at such a... a... to be able to do the low-level things I'm doing. And they see a path for me that takes me up through that... that...that base to be able to go up to be a... a... a leader in some form within IBM. And they wanted to put a plan in place in for me that would essentially do that over the next 8 to 10 years.

[00:38:24] But you said, no?

[00:38:26] That scared the death out of me [laughs].

[00:38:28] Why?

[00:38:30]

At 25 years old, there are so many different things you want to do, you're experiencing new things all the time and what you-- someone has done is they've said, "Well, we're going to take away the excitements of the unknown and we're going to provide you with a very nice, clear, direct path and that's where you're going in." And that was... that for me, was not what I was looking for. I didn't—I never saw myself as joining a company and 40 years later retiring, that just didn't work for me. Erm, and what it really did is help me galvanise what did I really want to do then—what did I want to do? And one of the things that came up—and having gone through London, erm, on my way to Canada to... to meet up with a friend of mine, yeah, was looking at how the... the buzz of London and the opportunity. And so, when that happened, I made a call and I said, do you know what I'm going to do, I'm going to go to London. I'm going to London and I'm going to contract, I'm going to do my software development over there and I'm going to go and see the world with my... my girlfriend, who is now my wife, and see the world. And that is exactly what we did. I sadly handed my resignation, erm, and we flew over to London and started a...a life here which was... which lasted for about just over 3 years until we went back to South Africa.

[00:39:48]

They wanted to keep you, how did they try and keep you in IBM?

[00:39:52]

They offered me more money, they offered me an...an... another position that I wanted, they offered a move—they had these gateways, so, I was still on a Gate 6, which is your—erm, I was IT Specialist I think in those days. And then Gate 7 was something that was—needed to be 2 years away—they offered to move me up a gate so that I could then be open to different management positions. Er, they offered me courses—they really offered me what I needed, what...whatever would take me to stay, erm, and the only way I could turn them down, which they... which they respected, was to say, my heart isn't in it. So, if you keep giving reasons to someone why you can or can't do something and... around facts and dimensions, they can argue against each and every one and this can go on forever. And if you truly don't want-- it's not for you, I find that if I say my heart's not in it there, there is nowhere to go with that but to respectfully accept.

[00:40:52]

So, you came to the UK, and you became a software development contractor. One of the companies you worked for was Linx, what were you doing there?

[00:41:03]

So, at Linx technology, they had a field service erm, solution that they were writing. Linx technology was all about going out installing various technologies, break/fix, servers, etc. They had a whole load of field engineers and they wanted to build an inhouse erm, solution that was able to manage those engineers, manage all the stock, erm, you know, essentially—what one would use an SAP on Oracle for, we would build that in-house. So, they hired me as a contractor to build up the, er, the... the front end and some of the middle on that. So, that was what I went over there to contract for.

[00:41:37] Where were you based?

[00:41:40]

That... that business was based out in Esher. So, I lived in Putney, and erm, that business was out in...out in Esher. Erm, funnily enough, bef... when I came over

here, I came over without a job and my—I was happy to take any job I could just to make sure I didn't run out of money and end up going back. And my first job was a two-week job installing network cards in some London bank overnight. We started at 8... at 8 erm pm and you ended at 8 am, and er, you... you moved around fitting network cards and then wiping the blood off your hands because they're as sharp as damn it [laughs].

[00:42:15]

Laughs.

[00:42:16]

But that was for two weeks. I then got... then I found this position which was a more permanent position.

[00:42:22]

So, you said you were in Putney.

[00:42:25] Yes, we... we lived in Putney and ended up buying... buying a flat in Putney.

[00:42:30] Plenty of Springboks in Putney, were there?

[00:42:33]

It...it definitely is the er, Antipodean belt, certainly, the South African belt that takes you down from er, Putney—you know, it's Fulham down to Putney, South Fields, and Wimbledon.

[00:42:44] It's where I... that's where I am, Wimbledon.

[00:42:49] You're Wimbledon? [00:42:48]

Yeah, yeah, yeah, and there were several pubs around here that were full of you Boks all the time.

[00:42:54]

[Laughs].

[00:42:57]

You moved onto Dimension Data. Did erm, Y2K pass you by?

[00:43:04]

Y2K was an absolute blessing for me.

[00:43:07] [Laughs]

[00:43:09]

Because [laughs] because when I went to... over to London, I went to London in July '99 and that was at the same time that every experienced programmer that they could find was sucked up into the big banks to make sure that the world didn't fall apart. And industry had to carry on, so, when I got involved—I only had about, you know, 2 or 3 years of actual commercial experience, I was being offered salary... you know, er, contracting rates, you know, upwards of £35, £40, even sometimes £50 an hour and er, it was absolutely amazing. Er, it was just absolutely incredible—absolute drain on the market. In 2003, they had all dumped them all back on the market again, and contracting rates just went through the floor [laughs].

[00:43:53]

We've done quite a bit of work on Y2K the Archives and asked lots of people about it and some say it was a very good con, and some say, it was absolutely essential. Where are you on that spectrum?

[00:44:07]

It... it was... it was absolutely essential. I'll tell you... I... I'll tell you why. If... if everyone had stood back and said, do you know what, we're not what is going to

happen but there are so many lines of code written there that no one has access to, we're just going to assume that everything had come crashing down like a ton of bricks and put the world into a war because all currency has been lost or you know... or whatever could have happened. It would have been a case of why did we not just go in and double-check, make sure that things are right. So, it was absolutely necessary, to go and double-check and make sure that everything is perfectly right and...and ready to go. And the fact that it turned out not to be a major issue, well, that's great—that's a great thing to be, that's...that's great that we got out of that. It...it could have been pretty bad; it could have been pretty bad. I mean, for the simple thing such as the Melissa Virus where you're just inserting something into an email that sends another email to your inbox, brings down 80% of the world's servers back in—when was it—2 or '99 or '98? That is a simple thing, imagine what it could have happened to all the bank systems if the code didn't... wasn't able to work properly with the digits and this was er yes, absolutely necessary.

[00:45:20]

You worked with and for Dimension Data during this period.

[00:45:26] Yes.

[00:45:28] *Tell me about that?*

[00:45:30]

So, on returning from the UK, er—I looked at Dimension Data, I always heard a lot about them, they were the Golden Boys who had just grown at tremendous rates from the back of the er, Cis--the popularity of Cisco and the er, you know the...the wide deployment of Cisco. Erm, it was er, yeah, a company I wanted once again, I made a lot of really good friends and very, very smart people. Erm but more so, it was also a company where I really got my teeth into the Microsoft Stack, er, Microsoft technology. I had always been building and developing on Microsoft but more of a coding perspective, whereas, in Dimension Data, I was tasked as the er, solution presales specialist to basically look at all the different Microsoft products, how the stack fitted together, understand them and practically be able to demonstrate them and be able to pull together solutions for customers. So, it was absolutely essential for me to have that kind of grounding. And what it did then, is it also sent me up to Johannesburg a lot because there was no Microsoft presence in Durban at the time.

So, I had to take trips up to Johannesburg to meet my Johannesburg counterparts in in Microsoft to understand how can we work better together, what can we be doing better? And I made a lot of great friends in Microsoft and specifically around that, I meet erm, a guy called Dave Ives. Dave Ives who headed up their solutions... their solutions specialist unit, erm, Dave Ives, s..s.. subsequently went on to er, be a director at Microsoft for 9 years and then after that, moved—bought shares into a company—a small company of about 40 people erm, called ICE Partners that soon became Karabiner. Erm, but essentially—and then I followed through—he came to find me, and I went through to Karabiner.

So, going—going through the whole Dimension Data, structuring my... my changing my focus from coding to more big solution-based erm, going to-- he is still a great mentor of mine, Dave and I are still great friends—a great mentor. That was one of those things in life where you wonder where—how it would have changed differently if it was [unclear sound loss 00:47:35] would have stopped the development in another company.

[00:47:37] *Yeah*.

[00:47:37] It was an absolute turning point in the direction I went.

[00:47:40] What is it like working as a sort of partner with Microsoft?

[00:47:46]

As a partner, it's...it's great. Microsoft has got a really strong chan... er, partner channel. They've got really well—they... they've got great incentives, it's more

structured, they are well—they are well trained. And also, they're a... they're a great bunch of people. Erm, I hesitate—I don't want to use the word "Party Bunch" to take any professionalism away from them, but they're certainly able to have great events, great—you can have a great beer or a glass of wine, a great meal. But also, they work extremely hard and make sure they hit their numbers. And er, so, Microsoft is, er, is... is a... is a really great company and as a partner, they really treated us well.

[00:48:24]

Where you tempted to go and join them?

[00:48:28]

Erm, I was... I was tempted to go and join them but having known other guys within Microsoft and they did offer them a move to—it's the... the money can be a bit better in the partners. The partners do... the partners are able to really call the salary, Microsoft are governed globally. So, if you were able to get a good wicket with a partner and a good salary and be able to do things, it's quite a bit easier to work that way. A lot of people— a lot of the Microsoft guys end up working for partners. And vice-versa—vice... so, it's... they do fall back the other way. But it... it never really piqued my interest to really go and work for them. I felt I was working with them and alongside them the whole way, and I was very happy with the partners then I was working with—er, with the er—the partner basis that I was working.

Erm, right at the very end, when I was looking to see whether I should go to PwC or maybe Microsoft, I had a look-in to see if they were looking for any senior account executives at the time, and they... they weren't. So, that was the only time I actually had an active look-in to see, erm, and I'm very glad that I went with PwC.

[00:49:38] And you went to, SIS Global?

[00:49:41] Yes.

[00:49:42]

[00:49:45]

So, SIS Global, I went to from Dimension Data. Erm, that...that was also taking the whole idea of holding different technology components into a solution and that basically moved me to an area of, erm, enterprise resource planning software. So, that is basically looking at—we're not going to go in and look at how we can make your—sure your HR works with your mail, works with your print mixes, works with your whatever it is. It's going in and saying, you've got a manufacturing business, er, it's process, it's manufacturing, we've got poor outputs, we're not too sure where the bottlenecks are, we can't keep track of orders coming in, we can't keep track of raw materials. Erm, how do we put something together that is going to fit this solution—you know... the... the this... fit this problem? Erm, so, it was very much around industry experience, honing down on certain verticals, like education is one of the areas I liked to focus in. Er, ports and shipping, there has been lots of focus on ports and shipping, and then, so, you're using—it's one of those cases of—as you spend a lot more time on business, you start to know a lot more about a lot less.

[00:50:55] *Right*.

[00:50:56]

It's quite important to know that a lot more about a lot less, and so, it was really honing the skills down to a very specific area. So, it was really—it was very business-focused, which was great and then putting a technical and the, er, application experience behind that.

[00:51:12]

Erm, you moved on to Karabiner, Dave Ives there, is that right?

[00:51:19]

Yes, he was a director there and he approached me and asked me if I wanted to join.

[00:51:22]

[00:51:26]

So, my role there was as... as a... an account manager or account executive. So, my role there was to go into companies erm, understand the business, understand some of their pains and look... look at ways that we could... we could improve... we could improve things with them. Erm, that was very much focused around—it was around erm, the—there was a lot of customer relationship management and data management and that area. But one of the key areas was around analytics and that was extremely exciting, that was something that I absolutely, yeah, got stuck into. Erm, imagine going into a company and you get to ask them questions that you don't... you don't know the answer to, but you don't need to because it's your first time there. They walk you around and they show you everything they're doing and then they're asking you to be able to help them visualise it with data, as to what—where the problems are, where the bottlenecks are. And so, you identify various ways of doing that and then you bring a team in, they gather the information, they pull it together and they effectively are able to show you kind of what you already knew—your gut feeling, but you've got no evidence and you've got nothing there to say—

[00:52:31] *Right*.

[00:52:32]

Yip, that's exactly the mark. And what is nice about that is there are a lot shorter projects that help your project go on for years [laughs] They can take years to sell. Erm, these could be little pinpoint projects, simple things like going into er, say, er, a steel supplier and you know, they...they... they're trying to find ways to put some money back into working capital. They're convinced that they've like—have got a plan around, but they don't know where, they've got you know, locations all around South Africa, so, it's in the system somewhere, they just can't find it. So, what we do is we come on top of that, take all the information, stack it all up, all the data model and we give them this information, we sit with the CEO in the boardroom and go, right, so, we've identified—how much aged-stock do you think is sitting out there? Now, if it's apples, aged-stock doesn't help you, it's throwaway, with steel, you can

very quickly just repurpose that, sell it, flog it off and get money into—onto working capital. And he had said there is probably about 10 million Rands-worth that he thinks is lying around and he wants to find it and we say to him actually, it's 50 million Rands-worth.

[00:53:40]

[Laughs]

[00:53:42]

And he said, never—impossible. And we were like—there's the data, click the button—where is the largest one? There is 5 million just in one place—no, never. Well, there's the salesperson who ordered it, that's when it was ordered, that's how long it's been here for—but it...it's all the inflation is there. He picks up the phone and suddenly you can hear the sales guy—"Oh, yeah, but that...that was for a good customer, I know it's there, it's under the tarpaulins at the—" and he's like—"Are you kidding me... are you kid—?" Anyway, so, this process, within 3 months they had taken 40 million Rand of that and just sold it off and put that back into working capital. They couldn't have done that without our solution and that end-to-end was about a 4-month process. Th...those kinds of things were what we were doing there which was extremely exciting.

[00:54:26]

Why didn't you stay?

[00:54:30]

Well, okay, I—well, I was there for—we grew extremely fast erm, it was—things were going extremely well, erm, it got to a point whereas a salesperson, when you're doing extremely well, you end up with a lot of ongoing commission that starts to come through and your earnings get... get higher and higher. And then, you find there could be a mismatch with what is due and what is agreed to be due, and things change. So, I'm aware of... [unclear

00:55:06] confidential to me in this [unclear 00:55:08] and attached to it. Let's just say that I ended up disagreeing with some of the management decisions and decided that it was time for me to move on. Erm, I don't like to be in a place and start

complaining to my colleagues about the place. If you don't like where you are, fix it or move on, don't taint it for everyone else that is actually quite happy with it all. So, I followed that and that is where I decided I was going to be moving on.

[00:55:35]

That's a very erm, Springbok and Aussie and Kiwi approach to life, isn't it?

[00:55:41] [Laughs]

[00:55:42] We would stick there and moan.

[00:55:46]

[Laughs], no moan, you're only damaging yourself and your colleagues. So, yeah, so, er-

[00:55:55] Then you moved to PwC?

[00:55:58] Yes.

[00:55:59] Year, erm, were you poached, or did you seek them out?

[00:56:04]

So, it was—I...I ... I sought them out, erm, but I had been working very closely with PwC, we had a massive Microsoft capability, so, we used to work on a lot of customers together. I had also worked with some of the guys at PwC many, many times before in other companies—we knew each other very well. So, when all this came up, I approached one of the erm, er, senior managers there and I just said look, you know, "Are you guys looking to extend—expand your division, you know what I can do and I'm looking to move." So, they immediately set up a meeting with the

partner that was in charge of that area, erm, and I went through all various hoops and you had to jump through PwC, the tests, and some of the things that scare the death out of you because you don't know what you—you don't know what the right or wrong answer is, but you're being tracked on the screen. And er, yeah, I got through all of that, and I then joined PwC. So, that was my path through it. So, no, I wasn't head-hunted but, erm I had quite a smooth path.

[00:57:05]

How long were you there?

[00:57:09]

So, sadly, I was only there for about 9 months that er, it was about April time—April, May time to... to the end of the... pretty much the end of the year. Erm, er, really that's a point—PwC was great, I'll say—if anyone who graduates that can come out and start at PwC and have some of those values, type of processes, structures installed in you from an early age and...and... and it stands you in great stead. I mean, some of the things I...I... I observed-and you know, one of the things, just like, for instance around risk you know, and always looking at the big prize, always looking at everything else and the partner would go—I don't care about your opportunity, have you thought about the risk, have you thought about my risk, so, I know that you look at the reward? And that would make me go, no, I haven't but look how big the reward is and I have to go back re-assess and it really helps if you just dig a bit deeper, take a bit more time, and look at the risk before you go for rewards. So, it was just a little lesson on that -- the most minimalist of lessons there. Erm, but essentially what happened is through that time, I had been in Johannesburg now with the family for about 7 years. Erm, and were just looking at moving back to...to Durban, Durban was the place that we just wanted to go back to -- we wanted to get back to the lifestyle, you know, it's not so fast-paced, it's just-well, we found it to-it would be better for the kids. And I was—one of the options was looking at speaking to PwC and... and moving to the Durban branch. Erm, but what I did was I thought you know what, we—I've got my UK ancestry because my grandfather is Scottish, I've got UK ancestry, but I can't pass that down to my kids or give them British citizenship the moment they turn 18. So, if we go to Durban, we're not moving again and they just basically have South African passports with no other option after that other than to try

and get sponsored or...or whatever path may be. So, I thought, this is a great opportunity going in the UK, let's rather take that, go over, and get our...our citizenship so our children can have British citizenship.

And that was when I phoned Max Smith who I had met at Linx Technology in London, the time before, we remain good friends. Erm, he had come out on the British/Irish Lions tour in 2009, and we caught again then, he got me tickets for the game—a game that we lost, unfortunately, but he got me tickets to the final test. And erm, yeah, I said to Max, "What are you doing right now?" we were always talking about doing something, "Are you up for something?" and he had... still had-he started his own company SysMicro and he had sold it off about 2 years before that. And he just said, "Do you know what, perfect timing, I've been semi-retired for 2 years now, I need to back into the game. I'm driving my wife mad, I'm driving myself mad, why don't you come over here and we'll see what business we want to get into?" And that was a few—or three weeks later, I...I got my visa, 3 weeks later, we sat down, we looked at 2 businesses, one was to replicate the business he had done before, which seemed like the obvious thing, and the other one was, there was some software called MediViewer that a contractor had, and he just didn't know how to take it to market. And what we decided to do was open a company called IMMJ and sell MediViewer [laughs].

[01:00:19]

At last, then you listened to your father.

[01:00:24]

Yes, at last, I listened to my father, and I went into my own business [laughs].

[01:00:30] So, tell me about the product?

[01:00:33]

Right, so, yeah, the...the... MediView itself, what it does it's quite a... when I say quite a simple technology, it's simple because we made it simple. So, it took us a hell of a long time to make it simple. What it does is it effectively takes all the

digitalised patient records, so, a big Xerox that comes through and scans all those physical patient records in the records library. We ingest all of those...those images. And then we, we basically do optical character re...recognition, so, we harvest all the information we can off the page, and we then smart index it, which is basically a way of understanding it and then we store it, so, it sits in a... it archives it. And then, what a clinician does, is instead of having a...a paper record that had to be packed, that they'll carry around with them, now they have our software on a tablet, and essentially, they can see the patient record on their tablet, now it's in digital format but they can almost move through it as if they were holding a piece of paper in their hand. Erm, if they are a bit more experienced and know how to use it and they're not scared of technology, there are so many other things they can do with it. They can just find anything they want; they can start typing names, they could type jaundice and it reduces the whole of let's say 200 pages just down to the 3 pages that have got that word and they are highlighted. So, they have got all the information they can, so, it truly is a great step erm, in technology.

Erm, but...so...so... in that MediViewer, if you think about it, it's providing a digital point of... er...er... a digital patient record at the point of care when the patient presents with the clinician. Er, we're not the first people to have done this—this has been done before, but it's been done with other solutions that will work in just one filing in electronic document management in engineering, financial services, er, hospitality, all those places where you've vastly structured forms that have been basically—a...a bank loan, you can only use one form. You're not going to be able to write it...er, write it yourself as a bank manager or decide no, you've got Word on your computer, you're going to write a better form than what you've been given. So, you can start pretty structured and then from there your unstructured information is quite easy to use. Whereas the patient records, the clinicians do what they want to do, they write what they want to write, they throw things that they want to throw in and it just creates this story that builds up. So, we came and approached it directly for patient records whereas others approached it as every other industry, and they've been struggling ever since to get it right because you just can't treat it like any other industry.

[01:03:09]

How are sales?

[01:03:11] Sorry?

[01:03:10] *How are sales?*

[01:03:13] How... how many have failed?

[01:03:15] How are sales—how many have you sold?

[01:03:21]

Oh, sorry, how are sales—sorry, I'm still on the failed [laughs]. Sales are—er, and that was er, a...a long journey erm, from February 2015 starting the company, the first sale was in August 2016, it's a long time to believe. Erm, and...it...it...also, when you look at it, people aren't out there saying, we maybe lose a bit of money if we put this in without reference sites if it's the first time and it doesn't work. They say as they said to us, "If we put it in and doesn't work, we're going to kill people."

[01:03:48] *Mm-hmm*.

[01:03:50]

These people are going to say, "You killed people, where was it working before?" and I have to say, "It wasn't working anywhere before" it doesn't look good.

[01:03:56] *No*.

[01:03:57]

So, it took some time to get ourselves in the... erm, we started out with 2 deals in 2019 and then from there on we've just jumped, we've got 15 sites now. So, we've got 15 erm, er, deals under our belt.

[01:04:12]

And you know, of course, that you are stepping into an absolute swamp of IT ineptitude? Health service computers waste 8 billion pounds with their patient record system. And you are on the ... on the edges of that process, aren't you?

[01:04:33]

I guess we are.

[01:04:33]

What do you think of the capabilities of the people you are dealing with in the NHS?

[01:04:40]

So, the capabilities are absolutely there when you have the right team in front and the right training. What we found sometimes is that the...the... trust is stretched, and they will put the wrong people in front for the wrong task, which is not fair on the people. The...the people in the NHS are equally just as capable as everyone else in the [unclear sound loss 01:05:00] trying to sell them. It's just that we work for a job, we've got a job description and that is what we do. In a trust, you can get moved quickly, you put into a demo to learn some kind of system, and actually, you've never used the system before. So, that...that is one of the areas that is lacking.

Secondly, I was always—I was a bit blown away by how far behind the—you know, the private sector, n...n...non-health industries that the NHS is. And you know, things that we were doing 15, 20 years ago around BI and analytics, they're not even close to yet. And not too much the NHS, I think it's really healthcare, you know, the NHS healthcare. And I guess what I've come to appreciate is what I said earlier, it's all very well to go and change things at half pace and make mistakes, in you know, private sector, other industries. But you can't do that at pace in a healthcare setting and risk people's lives, you can't do that, it has to move slowly. And if someone says they only died because of something you changed because it worked for 100 or so years on papers, then you know, you've got to really adapt it. So, this whole piece that has gone on now, it's absolutely accelerated everything because the alternative was death. So, people had to move very, very fast and that is why there has been almost—I'd say 5 years gain in the last year and a half, er, it's been absolutely tremendous.

[01:06:26]

I know someone who works erm, in the NHS on the IT side, across the UK—across England. Erm, and they say, they're dealing with databases and they're fixing people's databases. And they say, this is to perk up your first point—often the person who has been told to build a database, is just an administrator, they know nothing about databases at all. And so, there are all of these different cranky databases across the country trying to do one... one thing, which is very difficult, very difficult to coordinate. Why do you think the public sector in the UK has such a bad track record of snafus, of screwups?

[01:07:12]

I...I...I know, I know that from the MPFIT Programme, erm, where they tried to select at a national level what software should be used, what system should be used, and they tried to push that down into every trust. Erm, I get why that failed, you know, trusts operate at different times, in different... in different ways, er, they have different needs. And because something worked in one area doesn't mean it is necessarily going to work in another area. I...I...I get that, I understand why they failed. Erm, I also know that it's a tough balance between what...what we're doing we're busy writing our software-- we cannot write our software without the input and the time from the hospital staff, you know. And that's right from nurses, from clinicians erm, from everybody across the floor. Now, if they don't give us the time that we need we are going to—we're p...p...probably implement a sub-optimal solution that is probably poorly configured because we can only use the information given and we can only try it and test it and transform what we're doing with time from them.

Now, on their side, they fully want all this to work, they fully want this to be 100%. But they've also got people to see, sick people, they have patients waiting and waiting and waiting, they've got to take—have empathy for each and every patient individually. There is a huge amount of energy and they've got to make priority calls sometimes not to turn up to training, not to give maybe all the time they needed to help with the spec because they just don't have the time to get there, they actually could make a call. And do you know what-- the call every time can and should be the patient. So, unfortunately, I don't see an easy answer to that, because that is always going to be there, but I can see that is a lot of the reason I believe technology fails a lot it's because it doesn't give--- it...it's not given the time it's due during the rollout and implementation.

Now, one of the things that we have tried to address because our team has come from the NHS, they were working at a hospital, they've run projects like that, you know, like the MediView project before, I got... er, different technology. They have said the biggest problem is that the people don't understand the inner workings of a hospital. They don't understand the relationships between the nurse, the clinician, and the hospital staff, and the admission staff. They don't understand how it works and how to get things done. They come in fresh from the outside with maybe a year's experience in healthcare and it doesn't work. And also, they come and put it in and then they just walk away and expect it to work, which doesn't help. Now, they've successfully got a project working at Basildon and this was before we started our company, and they've come on board to, you know, to... And from the very beginning, we have hired out of the NHS and some of the key people involved in that programme, they are both on our...both... one is our chief projects officer, Phil Burke and the other one is our chief operations officer, Lisa Harris, who is also on our board. They ran the transformation and the programme management of that project in the NHS. So, the moment they joined us in er, in 2015, we know what it's going to take to make sure this technology works in the NHS. So, we're going to build out the right ways, the approach to people and we get just-- our people that go on-site, we are going to look at some of the top people in the NHS who they have dealt with and worked with—we're going to hire them, they're going to go back into the hospitals. So, they walk into a hospital having had 10, 15, sometimes 20 years' experience, working in the NHS from multiple capacities, even...even as nurses, some of them, you know—a registered nurse, one of them—to go in and then to do the same thing but understanding the demand. So, we've looked at being-at approaching it from

that direction of working better with each other to get the information and having the patients be able to glean what we need.

[01:10:59] Are you in—are in St George's in Tooting?

[01:11:03] No, we're not.

[01:11:04] *Oh, dear, what a*—

[01:11:05] We're not, no we're not [laughs]

[01:11:07]

That's my favourite hospital because I have to spend some time there. Now, is it— I've got another couple of questions if you've got the time—yeah? [01:11:17] It's...please, please, yes, carry on, I've got—

[01:11:20] Okay, is this core technology software moveable to other ap... other areas outside healthcare?

[01:11:29] Yeah, it absolutely is, erm--

[01:11:31] And will you do that?

[01:11:33]

Er, yes, okay—we will do that, we...we will definitely do that. We have already been asked by a number of...of trusts to please, can we use, erm, our core technology to

also handle all the human, er, resource records, deal with the HR department. Can we also help them look after the corporate records, so, in the corporate environment? What we've been hesitant to do, is make considerable changes to what we're doing right now until we have fully embedded ourselves and we're fully happy with the enhancements that we have with MediViewer rather than to go and...and break it. We...we did actually have a project on the go from about a year ago, to build something separately that would actually be generic enough to work in every...any industry. Erm, but obviously, with Covid coming through, with all the challenges we're seeing, we just had to look and make sure that we didn't... we didn't try and do too many things at once and let's make the...the decision to focus on people, focus on money, focus everything on MediViewer to make sure that we were doing the right thing for the NHS and for healthcare, and then later on. But it absolutely transferable and that is something that was—as you can see by that project, is something that we actually did start, and we've just put on ice for now.

[01:12:48]

Funders and you yourself will want to know, what is your exit strategy, when do you sell?

[01:12:55]

So, yeah, I...I like to at it as a...as...as...as before it was a case of reselling Image Systems, that's the exit. If Image Systems gets sold, it's like there were 3 of us, we had this thing. Systems Image is much bigger than the 3 of us, Image is much, much bigger, yeah. Image...Image is you know, over 40 employees, with all their families and...and their dreams of what they want to do in the company and their dreams of moving up in the company. It's not our company anymore, we're a shareholder and co-founder, we've got to get rid of that—forget the co-founder. So, personally, for us to exit, it needs to be at the right time and the right time for the company as well. So, it's not just about when is the value and it is sufficient to be worth the 6 years of sacrifice and everything we put in at the beginning, it's also when is it going to be more beneficial for the company at a certain size, to have, let's say, from—from my side, a CEO that is coming from another big company of hundreds of employees, where he's got massive amounts of structure, etc. that may be the right time to be... for me to exit or even exit position. So, it's more than just me and my personal when do I want to exit? It's not our company anymore, it's a company that belongs to the shareholders and you know, there are families involved in this, there are employees involved in this, so, so it has to be in the right place.

[01:14:17]

One of your or some of your investors and stakeholders will be venture capital companies, Forsyth, yeah?

[01:14:25]

Yes.

[01:14:26]

When do they want out?

[01:14:28]

They will... well, they would look at any... any reasonable strong deal that came through, they would... they would look at it, they...they wouldn't be able to force it on us, but they would—I mean, if you look at it from their side, it's about providing you know, shareholder value and return on the investments that come through from...from their side. So, they wouldn't turn down something that was a really good offer. Erm, we would look at the next 3 to 5 years, erm, looking at how we could take Image Systems to the next level and that...that could be an exit to another PE firm, they could choose to go again. Or erm, we could be sucked up into a big...big EPR provider so, such as a...a System C or a Cerner, or one of these other a..a.areas. Erm, it's a... it's far less...it's a far less selfish thing when we've got to the...the shareholding that we are at now, with the number of shareholders that are involved and the size of the company then I think, if you've got 3 people who still own the entire company and you've got a small amount of people that you're going to... you're flogging... you're flogging the...the software, not the company as we have it. So, we...we're very mindful of what we look to do and how... and how we get rid of that.

Erm, you know there is... there is... you know some of the things that we...we've done, I mean, it's... there is something deeply satisfying er, er, about building that company and its...it's... a huge privilege. And we...we know that we aren't only responsible for our employees, but it's 2 to 3 times that it's all their families. So, we have 40 odd employees, that's 120 to 140 people and some of the things that they've really made us proud to date is that we've never missed a salary from start-up in February 2015, until the PE firm got involved, not once did we ever miss a salary, and that is quite a tremendous thing to have. So, exits are not such an easy question as you say. By the way, the co-founders have no salary [laughs], but we don't see ourselves as employees.

[01:16:28]

What are the biggest mistakes you've made in your career and what have you learned from them, Michael?

[01:16:34]

Mmm... I'd say the biggest mistakes have been—I'd say—I'm thinking of one that stands out quite a bit is er, the...is leaving a position or leaving a work because you feel that you have completely been done...done... done wrong, you know, someone has wronged you. And not actually spending a bit more time sticking to it, finding out ways to work it out and actually, getting on with it, even if you feel that you...you... have, even if you feel that, you...you have, even if you feel that something is done...done wrong to you. I'm trying... I'm repeating the same words but what I'm trying to get to is—it's all very easy to take the moral high ground and just stick by your...stick by that and say, that is it. But sometimes, I need to look a bit deeper and say, what is the actual output and impact going to be when I do this? I may have morally stood the high ground and been correct, and you know, it's happened again, so, I told you so that is it. But that is not necessarily the right way to do things because you can base... you literally throw the baby out with the bathwater doing it. So, it's about thinking a bit more before making strong decisions, it's not just about whether you're right or wrong.

[01:17:53]

Thank you very much for your contribution, Michael, erm, and I'm sure, in 20 or 30 years' time, whoever is doing the interviewing, they'll come back and interview you again and say, what an outstanding success you have been. Thank you very much for your time.

[01:18:08]

[laughs] that would be great. Thank you very much for your time, Richard, I really appreciate it.

Interview ends: 01:18:12