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Dr Richard Sykes

Interviewed by

Jonathan Sinfield

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Welcome to the Archives of Information Technology. It's Friday 1st of June 2018, and we're in the Worshipful Company of Information Technologists Hall in London. I am Jonathan Sinfield, an interviewer for Archives of IT. And today I'll be talking to Dr Richard Sykes.

Richard is a former scholar, and Senior Scholar at Clare College, Cambridge, and completed his MPhil and PhD in biosynthetic chemistry at Yale. Further to two years working for environmentalist and political activist Ralph Nader in the US, Richard returned to the UK and joined ICI in 1973. Richard worked worldwide for ICI for a period of 27 years, and between 1993 and 1999 was their Group Vice-President IT. Since that time Richard has worked for a number of organisations, as an independent strategic analyst, adviser, an assurer, in information technology and business process management and sourcing. These are organisations operating in a number of fields, including pharmaceuticals, biotechnology, nuclear, outsourcing, health and the arts. In recent years Richard has taken active interest in the development of the Cloud, and new capabilities such as artificial intelligence. Good afternoon Richard.

Good afternoon. Thank you for inviting me.

[01:39]

Thank you Richard. I would like to take you back. Perhaps you can tell our listeners when you were born and a little about your, a bit of background about your family.

I was born in 1946. My paternal grandfather was a military man who had made his career, main part of his career, in what is called Iran nowadays, in Persia in those days, and, was really part of the British imperium, keeping an eye on British interests there I suppose. And my father, who went to Oxford and was trained as a chartered accountant, then went in his father's footsteps working in construction companies in what he called Persia, what you call Iran today. Was in wartime intelligence, where he met my mother. They were married at the end of the war, went out to settle in Persia, where I was conceived I'm pretty certain, but she came back to England to bear me and then carried me out as a four-month-old to Persia where I then lived until the early 1950s, where my father, having by then added a daughter to the family, my sister Julia, decided that for the longer term he wanted to move the family out of

Persia, and we moved to England. At that time I then got to know my maternal grandparents, also military by background. Neville[ph] had been in, went from the Army to be a rubber plantation supervisor in Malaya, and then, late in life went into the Church and became a Church of England vicar up in Norfolk. Both my maternal grandmother and paternal grandmother were very classic ladies of their time, devoted mothers raising families, on my paternal grandfather's side, six offspring including my father, and my maternal side, three offspring. But... And therefore there's no ladies' careers there, they, they were very committed to raising the families, and doing everything. A family story of when my maternal grandmother learnt that she was going to have to become a Church of England vicar's wife, she, she threw a big hissy fit initially, but then became a very good one.

[04:17]

So, I was brought back to the UK in the early Fifties, after a period living in France we settled in England. Went to a boarding school called Woodcote House in the depths of the Surrey countryside. That served to get me through the Eleven Plus. Essex, where we were living at the time, was short of grammar school places, so a deal was done with my father in which I was put into a boarding called Felsted in the depths of the Essex countryside, where my father had part of the fees paid for by Essex, since they couldn't provide the grammar school place. And, there my involvement in the sciences developed further. I was, through, I think, we had a lot of the teachers at Felsted were Cambridge men by background, so although my father had been an Oxford man and was doing his best to get me to Oxford, the local influence controlled the future, and Clare College at Cambridge asked me to join them. I sat for their scholarship exams and got a scholarship. And then, two years later at Clare, became a Senior Scholar.

[05:38]

Cambridge, just was really a, a growing experience. Very good at laboratory work, and already at home had private chem labs, had done a lot of chem lab work at home. So I was kind of, very scientifically-oriented. Not sporting-oriented. Felsted, when I got into the sixth form, allowed me to avoid doing cross-country running, and instead of which I was allowed to get on my bicycle and go round the Essex churches and, play the organ...

Oh right.

... as my form of exercise. [both laugh] Which is a very good form of exercise.

[06:21] So perhaps we can come back a bit.

Yah.

When you were in Persia, or, as you say modern-day, it's called, modern-day, Iran today, were you based in Tehran, or you were...?

We were based in Tehran. My mother had initially been brought up in Isfahan. They were generations of very tough and determined women I think. My paternal grandfather when he was out there was looked after by his sister, when he was unmarried, called Ella Sykes, who wrote a lovely book, *Side-saddle Across Persia*.

Oh right.

And you imagine these, [laughs] as you read the book and you realise, you know, crinoline, riding the back of a horse through the tribal areas of Iran. Tough, determined woman. Sir Percy, my grandfather, then married a woman out of a, who was a, being raised with two sisters, they were, what do you call it when you've lost your parents?

Orphans, yes.

Orphans. They were orphans. She had never been outside the UK. They were married one summer and the following autumn she was carried pregnant off the boat in Bandar Abbas, landing in Persia. She had never been outside the UK in her life. And the medical orderly, who was sent to look after her confinement, took fright and disappeared. So she had to go up to Isfahan and negotiate with the local ladies her confinement all by herself. But they were tough. And I suppose, some of that then works through the family. But no, I have memories of life in Persia. And I suppose it began contributing to my sensing a broader type of world than purely growing up in corners of the UK.

[08:13]

And so when you started at prep school, you were round about, was that seven or eight or something?

I was about, seven or eight years old.

So that's when you came back to the UK from Persia.

We had been back in the UK for about a year.

Right, OK.

And I was of the age to go in, so they got me into there.

Yes.

Again, nothing particularly exceptional, except that I took an interest in the arts side, and I was noted for getting away with knitting while watching the cricket matches, which was regarded as slightly unusual for a boy. But I rather enjoyed knitting.

Right.

And I found watching cricket rather boring. [laughs]

Oh right, well, yes, well I don't think you're probably alone in that regard. I hope we don't annoy too many listeners with that comment.

Anyway, as I say, that, that Felsted – sorry, Woodcote House, served, was a very school, and served to get me through the Eleven Plus. And we had settled in Essex by then, so, that was then the history of getting me into, into Felsted.

[09:17]

And, at Felsted, your, probably O Levels then was it, or GCSEs, or... Well they would have been O Levels at...

Yes. Now what I owe you is a list of those, and I need to find somewhere in my files, but they were basically, a, a range of the classic things you did at O Level, including sciences and maths and French and Latin, and Greek.

Three languages then.

Yes. My O Levels were not particularly impressive. Boarding, there were a series of boarding houses, and I was at a boarding house called Elwyn's, and my father, after my O Levels, went to consult with the master, Bunny Alston, and opened the conversation by saying, 'And, you know, we must begin thinking about university,' and Bunny Alston apparently fell apart laughing and said, 'Your son, university? Stop thinking about it.'

Mhm.

And my father read me the riot act. [laughs]

Right, OK.

And said, you know, 'Get down to it young man.' And, the result was that two years later I got a very strong set of A Levels and S Levels, which I'll send you the details about.

And what subjects were they in?

They were, at AS Levels, they were, were maths and physics and chemistry...

Mhm, so science.

... and biology. They were science-oriented.

Yes, yeah.

But while I was at Felsted, Felsted had a, an old Bury House, an old big private house, which was the centre of activities for the arts, which was, there was music and visual arts and everything like that. And, I became secretary of the Bury. And, therefore helped manage the societies and things for there. And when Felsted celebrated its 400th anniversary, once I had actually finished there, but I was asked to stay on, help it, I had the privilege of taking the Queen Mother round the Bury House.

Oh right.

So we have in the archives this photograph of myself in the academic gown the school prefects wore, looking very serious, [laughs] with this very lively lady alongside me, who was very used to asking all sorts of interesting questions of young men. Because that's how she made her life, visiting institutions.

Yes.

So I did, I clearly had a strong tendency towards the arts there, although all the studies I did were, were science.

[11:59]

But you did mention that you played the organ at this stage.

And I played the organ. As I said, when... I studied the piano, went to organ, we had a very fine organ in the Felsted church, chapel. And, when I was in the sixth form I was excused doing cross-country running and allowed to get on a bicycle and go and explore the organs of the churches of Essex.

Right, OK.

As a form of exercise.

Mhm.

I had to bicycle to them, and play them for an hour or two, and, persuade the vicar or someone to sign an affidavit that I had really bee there and played the organ.

Played the organ. Yes.

And then I'd bicycle back to school. And that was good exercise. So, I enjoyed that very much.

Mm.

And I promised myself that when I retire, one of these days, I will go back to playing the organ.

[12:48]

Mhm. And, despite the master's comments, you were obviously highly successful at your, at your A Levels, and got into Clare College at Cambridge.

I did. It was curious. It was those times when the formal processes were very flexible, and, I had got very good A Level, S Level results, and my father sat down with me and said, 'Right,' you know, 'how do we set about getting you into Oxford?' And as he spoke, a letter arrived from Eric Ashby, the Master of Clare College, which said, 'We would be delighted if your son would join us.'

Right.

No application made.

No application.

Clearly some of the teachers at Felsted, who, who were known to the Master of Clare, had said, well if you want to get one or two bright kids in, why don't you try this young man.

Mhm.

So I made no application to Cambridge; I was asked by Clare College to join.

Right, OK.

And it was as simple as that.

[13:52]

Did you ever ascertain, I say, why... Clearly a connection between Felsted and Cambridge that you've already mentioned, but, was it the, the academic side on the science side or, or, or perhaps a combination with your musical abilities?

I think it was the combination of, of the broader range, and the fact that, that although I was not sporty, and the masters at Felsted tended to be a sporty lot, they saw a, a tendency to a breadth that they thought would fit very well with, with Clare, and obviously wrote to Sir Eric and said, you know, 'Why don't you invite him?'

[14:30]

Mm. And thinking of your school days, is there one person that you can, that influenced you in that time, or ...?

Yes, there is, and his name is David Waddell. And, he got me reading a fascinating book called *The Rise of the Meritocracy*, which has been back... It was, I'm trying to remember the name, but it's a man who got very well known for his broad observation on sociological change, social change. And this particular book, *The Rise of the Meritocracy*, was, was very sharp reading, and David gave it to me and said, 'Read it,' and it opened up my thinking a lot.

And so, so David was a teacher at...?

He was, he was one of the teachers, one of my teachers there.

One of the teachers at Felsted. Yes.

So...

[15:23]

And, you had chosen natural sciences, chemistry, biochemistry, maths and physics at, to read at Clare, yes?

Yes. It seemed the obvious combination, given my Os and A Levels.

And how did you, how did you find your experience at Cambridge?

Well, I think the first thing to say was, I was having to do a lot of growing up, and it was a very good experience for growing up.

Mhm.

You suddenly find yourself in this very broad community. And, my first year I was in Memorial Court, which is just outside the University Library; second year I was, was up Castle Hill in a, in a modern dormitory type building; and then the third year, because I had got a Senior Scholarship, I was in the Old Court. So, the community of the college and the type of people you were with, and the kind of roles you had to play in the college, since I was a Scholar and Senior Scholar I had to, I had to do the rota of reading the grace at the start of supper.

Mhm. Reading, not reciting?

Reading. No, I was reciting it from memory. In Latin.

In Latin, yes, I was going to say. [laughs]

In Latin.

In Latin.

And the scholarship exam I sat, I had to take it in Latin and Greek, as well as, as in other fields. So I obviously kept that going long enough to get to that level of my education. The Greek was not particularly good, but the Latin was strong.

[17:04]

So backtracking on the, the terms Scholar and Senior Scholar, I know at Oxford and Cambridge they can sometimes mean slightly different things.

Right.

But, my understanding is that it effectively means you've done very well in their own exams. Is that correct?

Yes. It was the college set the exams. It was financially not massive, it was, I think, the scholarship was £600 a year and the senior scholarship was £800 a year. But it carried a certain status, that you were seen as one of the, the heavyweights in your undergraduate community. And, I got active in the Union, but I didn't follow the course of, trying to become President of the Union; I got instead active with the Student European Society.

Right, yeah.

In my first summer with two friends, we drove all over Europe by car, which was great fun. And then, in the, in the start of my third year, I had been going to, the Student European Society was linked to an international pan-European body, and I had been to events that they had done on the Continent, and, with a group of friends, we decided we'd do the equivalent thing in Cambridge. So we got sponsorship from a magazine called, it'll come to mind in a moment, and, we were able to bring 150 students from East and West Europe. And this was before the opening up of Eastern Europe, so it was very unusual. We had students from Poland and Czechoslovakia and Hungary, all communist governments, as well as from Germany and France and Italy and Spain, for a week-long series of debates and lectures, very good heavyweight speakers and things, based in one of the Cambridge colleges. And, I still

have a big thick photographic album of the photographs that were taken at the time. And, that was, that was seen as a great success.

Mhm. And that just, just remind our listeners here. You were at Cambridge 1964 to '67.

So this was Easter '67.

And this was Easter '67, yes.

Easter '67.

Yes.

It was very close to my finals.

Right.

The general view was that... I didn't get a First Class degree. I got a 2:1.

Mhm.

Probably because of all the effort I had put into this conference.

Mhm.

And one of the family stories is of my mother going, at graduation time, going up to Sir Eric, then Lord Ashby, and metaphorically weeping on his shoulder, 'My son didn't get his First.' [laughs] And he turned to her, and he said, [laughs] 'You stupid woman. To do that conference, *and* to get a 2:1. What more do you want of him?' And, the fact he was just saying, direct to her, 'Stupid woman.'

Oh yes.

Went down, swelled my emotions and it went down in the family annals. Very strongly so. Well, it was very positive.

Yeah. Yeah.

So no, nothing negative about it. It was just, a point of life where you manage to achieve two major things in a reasonable balance.

Yes.

I was very happy with the 2:1.

Yes.

Did what I wanted to do. And, I suppose I was then ready to, to break into the wider world.

Yes.

And they gave me, which is the college gift, they gave me the Clare Mellon Fellowship.

Which is an honour, a huge...

Which is an honour itself.

A huge honour in itself isn't it.

There's a, the track record of the people who, who have been on that is very high.

Yes.

And that combined with a travel fellowship, got me to the States for two years and supported me for two years at Yale, and got me plugged into the Yale community.

[21:21]

Mhm. Before we leave Cambridge behind, or, for a moment here. I mean, Cambridge, I mean, had been associated with computing and information technology for...

Right.

...many years. As a student, in those three years, '64 to '67, any experience of IT at that stage?

Very interesting. Looking back on it, as part of the work in, in physics and in chemistry, we got early exposure to it. We learnt some basic programming. It was programming using cards, and, punch cards and things like that.

Mhm.

But it was clearly not seen as anything at all central to what we were learning and doing. When we get to Yale and my doctoral work, I was a heavy user of computing there of Fourier transform signal enhancement, and that was the first time that I used computing in a heavy way, for my doctoral work. But at Cambridge at that time, which was '64-'67, if you had sat me down as I was leaving Cambridge and asked me about computing, it would not really have registered very much.

[22:45]

No. OK. And, you, you were awarded this Yale Mellon Fellowship, which effectively meant you, you received some funding to attend Yale University in Connecticut. And, and there you studied for a PhD in biosynthetic chemistry. Perhaps you could briefly explain to listeners what biosynthetic chemistry is. I have to say, I have looked it up, but, I think, your explanation is better than Wikipedia I'm sure. [laughs]

Well I think the first thing to say is, is that, the nature of the Clare-Mellon Fellowship was that Yale, in receiving me, basically said, 'What would you like to study?' So at

that point, if I decided, if I had decided I wanted to go into Yale Law School, or Yale Medical School, each of them would have given me instant, instant entrance.

Wow. Mm.

The whole deal of the fellowship was, you were regarded as bright enough that you could go.

Mhm.

And I weighed the idea of going into the Law School, but then finally decided to stick to the sciences.

Mhm.

Biosynthetic chemistry is the area where applied chemistry and how living cells do their chemistry come together.

Mhm.

And, my particular focus, I had a very good time at Yale at the Department of Chemistry under a man called Harry Wasserman, sadly now late, and he had in his portfolio of work a, a bacteria, what's known as a saprophytic bacteria, it loved damp carbohydrate environments, called *Serratia marcescens*, and *Serratia marcescens*, when it grows, grows in little blood red colonies, because of a particular pigment it has called prodigiosin. And it's generally reckoned, when you get reports of miraculous appearance of blood on bread in churches, that it is *Serratia marcescens*, because it likes damp carbohydrate stuff, and churches are damp.

Right, OK.

So you suddenly get the appearance of these drops of blood and, ah! religious hysteria, but it's actually little old *Serratia marcescens* saying, this is my natural environment [laughs], they come in peace to multiply. The classic way of doing

biosynthetic chemistry up until then had been that you learnt how to purify the chemical out of the living cell, and you then fed the living cell radioactive tracers, and you purified the chemical you were looking at, and you used chemical means to take it apart, and see where the radioactivity was, and from that you worked out how the cell was assembling it chemically to make this complex living molecule. People had tried that and failed. And, I came in at a time when there was an emerging technology called nuclear magnetic resonance spectroscopy, which you use very high magnetic fields to be able to establish resonance in radio frequency of the molecules, and while that is normally used with hydrogen, which has a natural spin, for, in hospitals, you get a brain scan, an MRI brain scan, you can also do it with a carbon, naturally occurring isotope of carbon called carbon-13, which, one per cent of which is carbon, and that has a natural spin.

Right.

So, if you set about with your NMR care, you can actually develop a spectrum of the bacterial protein prodigiosin, this particular blood red pigment, had 21 carbon atoms, and, two years I spent establishing unambiguously the 21 peaks, which peak was which carbon atom in this complex molecule. That was the hard part. And then in the final three months we fed carbon-13, very expensive, enriched precursors to the bug, purified the chemical prodigiosin from it, and saw which peaks grew up, because that's where it was incorporated. And the whole picture of how the bug was pulling together this complex molecule fell out in three months' work because we had done that hard work for two years.

Mm.

[27:25]

So, at the end of the day, I had a very satisfactory doctoral, piece of doctoral work, which had a beginning and a middle and an end, and was an exposure to computing seriously, because, the NMR technology was at its early stages, you need very powerful mathematical processing of the signal, to get the signal out of the noise, technology called, computer technology called Fourier transform, or a mathematical technology on computers. So I went over to the Yale Medical School, which had an NMR machine connected to a big IBM computer, and we used that to develop the, the signals out of the noise, and be able to complete the work.

So that was your first real exposure would you say...?

Exposure to the power of computing and to the working of computing and having a major thing. The other thing that I mentioned, that I would bring up, was that, I, my first two years at Yale, I was resident in one of their residential colleges called Saybrook. So I got... And the whole idea was that I would get to know the undergraduates well. And I discovered that the Department of Computing, which was doing a lot of work on computers called PDP-10s and PDP-11s, had developed an early version of word processing, and the brightest of the young undergraduates had suddenly realised, because they were allowed to go into the Department of Computing and use the kit out of hours, that when they were making their 50 applications to Law School or to Medical School, instead of having to sit down at a typewriter, an electronic typewriter, and type endless letters, they could set up a standard one on the computer, and...

Make a template.

A template, and then rapidly reproduce it. And I was impressed by that, so I actually typed the whole of my doctoral thesis on the PDP-11, and have it still on computer tape.

Mhm.

But, I then, was finishing off... I had already moved out of Yale down to Washington DC, and we'll come to that separately. I could not find a secretary in Yale who was used to doing doctoral theses and how you laid them out and did them, who was willing to go into the Department of Computing and learn how to do her typing on a PDP-11. So I ended up in something, desperation, having to come back up to Yale, take the computer tape, dump the whole of my typing, all my text which I had written, on to a computer printout. Hand the computer printout to a classic secretary, who was used to typing theses, and she then typed it on an electric typewriter, from the

computer printout, and gave me my big bound volumes of my doctoral thesis. So it was a very early example of technology beginning to be very useful. The younger generation taking to it like a duck to water.

Yes.

And the old experienced folk really saying, 'That's a bit too much for me. Please, let me do it my way.'

Resisting change at that stage.

Resisting change at that stage. So that was a, that was a good two... Those were my two big exposures to computing at Yale.

Mhm.

Yale Department of Computing was clearly a powerful vehicle well going at that time, but, we did not learn very much computing in the department per se.

[31:00]

Mhm. And then, you went to work for Ralph Nader.

Yes. My doc... Harry Wasserman, my doctoral supervisor, had me all lined up to go and do two years' postdoctoral work at Harvard, with a man called Robert Burns Woodward. And Robert Burns Woodward was noted for doing very sophisticated chemical synthesis, chemical means to build big natural products. And, I went up to Harvard to take a look-see, and it was clear that what I was going to do for two years, he had a game plan to, to create a chemical synthesis of a particular natural product, polyporphyrin, and I was going to arrive when step number 34 of his grand scheme had been developed, working with minute quantities of chemicals. I was going to spend my first six months learning from my predecessor how to do step 34. I was then going to spend a year and a half pioneering step 35, and at the end of that, if I was successful, I was going to spend six months teaching my successor how to do step 35. And at the end of it I was going to depart, enriched with the knowledge of how to do micro chemical synthesis without going out of your mind.

Mhm.

And, [laughs] I didn't like the look of that. It, it warned me that I was not really going to be a good academic. I loved the teaching. I did, I taught pre-med chemistry at Yale for undergraduates who were going to med school, and I taught pre-med. But I could see that I was not going to be a good detail researcher. And a friend of mine said, 'Ralph is looking for a scientist,' because all his staff up until then were lawyers. So I went down to DC and met Mr Nader. And Ralph said, 'Oh well, come along and join me.' And he paid me the princely sum of \$5,000 a year, and I moved down, finished Yale, left things as well as I could, get my doctorate signed off, and went and lived on \$5,000 a year in Washington DC, working with his team.

Mhm.

And that was fascinating, because, I was working primarily on, he was particularly interested in the safety of cosmetics, regulation of cosmetics, ingredients in cosmetics.

Yes, yeah.

That's what he wanted the scientists for. Things such as, for example, a lot of talcum powders actually having a lot of asbestos fibre in them.

Mhm.

A, a product called Mennen E, which was a, antiperspirant, based on vitamin E, and Mennen made much of the fact that this was a natural product, first natural product antiperspirant, but in fact they were using a synthetic vitamin E. And in the process of synthesising it, there was a particular by-product in the synthesising of Mennen E that caused a very very severe allergic reaction for about one in 100,000 people. So, it went through the standard clearance for a new product, and they tested it to the level of, you know, was there anything that was going to upset one in 1,000, and they put it on the market with big advertising. And because there were one in 100,000 cases, very severe reaction, and because they had called it, this is an all-natural product, but in fact it was a synthetic product, they, they got into real trouble. And we really held them up against it. It was the time of the thalidomide disaster. It was a very good, interesting time.

[35:01]

And, then, towards the end of my second year with Ralph, he, for the elections in '72, he decided to do a very detailed thing called the Congress Project. And he asked us all to contribute by doing detailed studies of, of particular members of the Senate and Congress who were running for re-election. And I agreed to do Senator Gaylord Nelson in Wisconsin. So I did a very detailed, 32-page report on Senator Gaylord Nelson. Basically, he was the man who founded Earth Day. He was one of, the only member of the Senate against the Vietnam War. So he was very highly regarded. But behind the scenes he was regarded by his staff as pretty bloody lazy. He was just a man who had brilliant thoughts and, great upfront, didn't do the work to follow through.

Right, yes.

And... So I wrote a very detailed critical analysis on him. That, the Wisconsin press said, was really the best thing they had seen on this important senator, really had impact, someone had really got to understand him. So it was a, it was a good example again of my interest in taking a breadth of things. And, Ralph was very pleased with it when he launched the project, that was one of the things he particularly picked out to talk to the press about, the strength of the exercise.

[36:30]

So, it was two very interesting years. But my visa said after two years, you must leave and go back home. So I went back home.

[36:41]

So, so our listeners can catch up, some of them perhaps will not be that familiar with Ralph Nader as an individual, I mean, he's a renowned political activist...

Right.

... for his involvement in consumer protection, which, you've just mentioned one of the areas, but he's been involved in so many different areas.

His roots originally...

GM and...

His roots originally were, in the late Sixties, he had come across, and got access as a lawyer to a whole lot of material showing that General Motors had the in-house documentation to know that these cars had significant safety problems. And he wrote a book called *Unsafe at any Speed*, which was an attack on General Motors. And he was summoned to give evidence to a Senate committee, and, General Motors, because he was a single man, put detectives on his trail in an attempt to oppugn his character.

Indeed, yes.

And, the chief executive of General Motors was summoned to the Senate committee, and basically they said, 'You're trying to nobble our chief witness.' And Ralph sued General Motors and got a multi-multi-multi-million-dollar settlement.

Yes.

Which he used to establish the first public interest law firm down in Washington DC.

Mhm.

And he typically would get \$50,000 a time for his speaking engagements. He was a heavyweight.

Yes.

And he paid us 5,000. And on that leverage he was able to build quite a substantial team of lawyers, plus the occasional oddity like myself.

Mhm.

And he brought... And then letter on, he ran for President.

Yes.

And was controversial, because while he only got a few percentage of the votes, the view was that he had probably pulled those percentages of the votes off the Democratic candidate and let the Republican candidate in.

Mhm.

Very, very interesting man to work with, very intense, very focused on his work. And he's living up, in retirement now up in Connecticut, and has started a small museum. He's 80 years old, started a small museum where he lives.

[38:44]

Mhm. And you had day-to-day dealings with him, or regular dealings?

I had regular dealings with him. I'd see him every week.

OK.

Because he was in the same offices.

And as a man, you, I say, can you say you respected him, or, or ...?

Oh no, I respected him very much.

Yes.

And found him a very interesting man to work with.

Mhm.

And, looking back on it, he was undoubtedly exactly the right choice to have made at the time. I don't, I think it would have been fairly disastrous if I had gone into the, the postdoctoral work that Harry Wasserman wanted me to.

Mhm. You mention Gaylord Anton Nelson, who was also an environmentalist.

That's right.

And... But the, the object of the congressional review, if that's the right terminology, that you were going... wasn't to target him; it was...

No.

You were looking at all members of Congress.

All members who were running for re-election to provide, in all of the states where they were running for re-election, to provide an independent assessment of them. It was then published and, and thrown at the voters.

Yes.

And covered by the press and reported.

[39:45]

A fascinating insight. And, you briefly said and then I came back to the UK. But, you came back to join ICI. Were ICI aware of you before you came back?

ICI had identified me as a potential ICI employee I suppose you would put it at Cambridge. They had come and done what was I think called the milk round. And, at the, those interviews, I had said to them, 'Look, I'm interested in ICI, but I've now got his fellowship to go to the States.' So they said, 'Well we'll keep in touch.' And all through my time at Yale, one or two ICI folk would come, doing the rounds of the States, and they'd phone up and say, 'Come and have supper with us.' And they'd appear at Yale, and we'd go out and have supper together. So they kept in touch. And then, as I was getting to the end of my time at Yale they said, 'Well, you know...' And I said, 'Well actually, I'm going to go down to work with Ralph Nader.' They said, 'Don't worry. Don't keep in touch.' [both laugh] And when I was down in Washington DC they rolled up very year and took me out to supper.

Uh-huh.

And then, when my visa was clearly running out, I said to them, 'Well, I think probably now is the time.' So they said, 'Fine. Come and join us in Runcorn.' ICI had a, an established research facility there that was at the centre of the whole company. And they had in it a small exercise called the Business Group, which were the people who worked with the scientists to see whether what they were developing had commercial potential.

Right, OK.

So it was, I think it served, three purposes I suppose in my life at that point. The first one was, it got me settled back into the UK at a crucial time. It was at Runcorn, and I settled into a small apartment in Chester. And introduced me to a whole new circle of friends. The lab was a very lively place for scientists, creating all sorts of new stuff. But the commercial people were the people who then worked very closely with the scientists to try and work out what, the commercial potential of what they were doing.

Right, OK.

[42:07]

Now, what I learnt from that goes back a bit to that experience of the computing at Yale, was that, innovating in a vacuum, and then hoping someone's going to do something with it, is a bit of a mug's game. So, if time allows, a little story. One of the projects I worked on there was that the, there's a, there's a product called polyurethanes, which are a form of plastic, and you make them by reacting two very

active molecules together. And one of those two active molecules is made using carbon monoxide, and carbon monoxide is not nice stuff.

Mhm.

So, the, the Board of Polyurethanes had come to the corporate lab and said, 'We would like a phosgene-free route to this key intermediate for polyurethanes. And the research group worked on it very hard, and successfully innovated a new way to polyurethanes that didn't use carbon monoxide, and created the materials, made polyurethanes. Created and worked out the manufacturing process and evaluated it and showed, you know, what the capital requirements were and how it worked. So, with a sense of real triumph, we went off to the head office of polyurethanes in Blackley, north of Manchester, and they said, 'Mm, very impressed. Go over and talk, the other side of the centre there, at Huddersfield, to our manufacturing folk.' The manufacturing folk went through it and said, '[intake of breath] We're very impressed. Go and talk to the people at Blackley.' And the people at Blackley said... And after we had been two or three times to and fro, as leader of the team I smelt a rat. And we wrote a note and said, 'You want it and you have got.' And two weeks later the Board of Polyurethanes came back and said, 'We asked the wrong question You have given us a phosgene-free process, which is what we asked for, but you've given us a new polyurethane with different properties, new set of raw materials and new manufacturing process. There's just so much innovation and risk. What we really should have said to you is, we want for you to tell us how to make the existing raw materials to the existing polyurethanes, via a phosgene-free process that's simple to use. And you've given us too much innovation. So, we asked the wrong question. We apologise. We're very impressed with what you've done, and we're going to put it on the shelf in case disaster strikes.' And they put it on the shelf and disaster never struck.

Right.

But it was a very good example of the fact that if you are really going to innovate, the way to innovate is to innovate very close to the market and to the users, and understand really what the innovation needs to be.

Mm. Were they a subsidiary of ICI?

Yes, they were one of ICI's...

Same group, yes.

Same group. ICI had many different oprations, businesses, polyurethanes, paints, pharmaceutics, the lot.

Yes.

[45:17]

So I, I got to know, and after three years there, I had, I was being pursued by two bits of ICI. One was the pharmaceutical arm. When I came in, it was actually... To take a step back. When I arrived at Runcorn to join ICI, there was a, an industry newssheet for the pharmaceutical and cosmetics industry that had interviewed me as I was leaving Washington, because they were fascinated with an Englishman working for Ralph Nader. And I had, I thought, quite innocently said, I'd had a fascinating two years learning to bring change to the industry from the outside, so I was now going to join the great inside of ICI and learn how to bring change from the inside. And I arrived at Runcorn, and my new boss fell about laughing, and he said, 'Oh, I've had this letter from the deputy chairman of Pharmaceuticals Division. "You have hired the most dangerous radical you can imagine. He is forbidden to come within ten miles of our campus."" [laughs]

Oh right.

And Tony Jubb, my boss then, said, 'Well my first challenge to you, Richard, is that within six months you must be working for him.' And within the six months I was working for his deputy chairman [laughs], who set me various tasks to help explore the future of pharmaceuticals. And the intention was that I was going go and work with them.

Mhm.

And I went up also to the petrochemicals arm on Teesside, and was interviewed by a very interesting young entrepreneurial young man there. And his version of that was that I put my feet up on the desk and said, 'So why should I come and work with you?' I, I was so confident I was going to pharmaceuticals.

Mhm.

And pharmaceuticals then hit a very bad performance period, and they said to me, 'Well, we'll stand by the offer, but if you've got a better offer elsewhere, you really might do better to go.' So I went up to petrochemicals.

Right, OK.

And, and did a different entry to ICI.

[47:22]

We should explain also for the, for listeners, I mean ICI were one of the largest manufacturers in, in Britain, weren't they.

They were. They were a global company. They had grown... They were formed in 1926 by three independent chemical companies coming together to form a single entity that could face up to German competition. And, they were, they were regarded as one of the bellwethers of British industry.

Yes.

They employed about 180,000 people worldwide. And they were in pharmaceuticals, paints, this, that and the other. So, it was a very good environment to work within. And, the corporate lab I suppose allowed me to grow up. Again, interestingly enough, not very much computing. The services that computing provided were there, but there was no real strong introduction to it. But when I was, when I had done my three years

there, it had started to move on, and, where I moved on to was to Petrochemicals Division up in the north-east of England.

[48:38]

And again, you were there, what, as Marketing Manager, yes?

Yes. The, the basis of ICI's career development was that, it put... Once they had got you in and adjusted, which, the corporate lab served its purpose, was that you then did three jobs in a row, each of about three years, one in marketing, one in selling, and one in purchasing.

Mhm.

The idea was to, to develop a breadth.

Yes.

So, my first role was, marketing ethylene glycol, which is the raw material for polyester and for antifreeze.

Mhm.

So, I spent a lot of time developing, supporting the antifreeze market, developing ICI's involvement in that. Off to nice places like Finland, with good winters, and Iran, I went back to Iran.

Oh right.

I had a, had a bazaari there who kept on wanting to get me to give him very low prices so he could corner the antifreeze market in Iran, because they have very severe winters there. And that really developed my understanding of how a global business would work, and the interfaces with ICI Fibres Division for our sales of petrochemicals and plastics manufacturing plant there, Teesside.

Mhm.

[49:57]

And then my next role was, based in the same division, petrochemicals, and I was made Export Manager for North and South America for petrochemicals. So there I was in a selling role, particularly in South America. And, I was on the road, a month at a time, five times a year for three years.

Mhm.

So I'd be on the road for a month, mainly in South America. Back in the UK for a month, you know, reporting back, putting a deal into place and things. Then I'd be back in the aeroplane, and I travelled all over, particularly South America. I got to know it very well. Did a lot of business. Grew the business in petrochemical products there. And that I suppose then broadened my understanding of the whole international dimension of the business. Not much IT again, except there were early versions of emails and stuff for communicating with.

[50:58]

Mhm. Had you used your languages at this stage? I mean...

I, I could... I went... I was put through a fairly intensive programme before I set off, provided by, one of the university campuses in London, to get me the beginnings of Spanish.

Right, OK.

And I got to the point in my Spanish, and it's still there but it's rusty, where I could talk to sales conferences and talk to clients in Spanish, to a good level. And, Penny, my wife-to-be, and I travelled at this state, at the start, we travelled on the west coast of, through Ecuador, Peru and Bolivia together. Which gave me a further chance to polish up the language. And then, many years later we went back and travelled round other parts of Latin America. So I feel I know Latin America very well, we've got

some good friends around the place. Fell in love with Buenos Aires in particular. So...

It's either the football or the dancing there isn't it? [both laugh]

[52:08]

So that was, that was that. And then, they moved me to the role of procuring ICI's energy, which meant natural gas, fuel oils and coal.

Mhm.

And, Petrochemicals Division, had then become Petrochemicals and Plastics, we had merged, did that for all of ICI's European interests. And that was then the first time I had a job where it was both short-term and long-term. So, for the immediate term, we had contracts for ICI, burnt a lot of fuel oil in its plants. And we had contracts with the big fuel oil suppliers, like Shell and BP and, so, and they were pricing a contract, basically said, you will meet very three months and agree a price fix for three months. No more.

Mhm.

So, it became an issue in intellectual negotiation in which, did you understand better than the man from BP or Shell how the market was working, or did they understand better than you? And you would negotiate and negotiate, and then, with the deadline looming, you generally met for breakfast somewhere off Victoria Street, and you would finally do a deal.

Mhm.

But then, it also then had a strong strategic element to it, because, ICI, for example, up in the Northwich area, had big soda ash plants, very energy-intensive, but which were not strategically important to the company, the main board had written them off. And they were coming under strong competitive pressure from natural soda ash mined in the States importing, and the business desperately wanted to convert their plants to, from fuel oil to coal, because it would be a cheaper energy source. And they couldn't get the capital. And I got to know the commercial director of the Coal Board, Malcolm Edwards, well, and he and I having dinner one evening suddenly realised that, the way I held him to account price-wise was the international price of coal imported. Because I could bring that in. So he had to price below that.

Yeah.

On the other hand, if he had surplus coal, the way he got rid of it was to move it out to the international market and he would get the international price less freight. And those two, the two levels of freight, importing and exporting, times half a million tons of coal, represented the capital that was necessary to convert the power stations to coal burning.

Mhm.

So I went into the City, and I said, 'Can we have the capital?' And we did a deal with NatWest, who provided the capital for conversion, in which they bought, nominally, half a million tons of coal and dumped it in mid-Cheshire, at the international price of coal less, and then sold it to us at, and gave us the capital to do the conversion. So that was totally off ICI balance sheet.

Mhm.

So the business got what it wanted, very strategic thinking, delighted the Coal Board. And then the final twist on that was that the deal with the Coal Board, that guaranteed limits to the price of coal, didn't operate if the price of oil went below \$15 a barrel.

Right.

And when I went down to get the final sign-off from a member of the ICI main board, 'Young man, what happens if the price of oil goes below fifteen? Give me an answer. I'm not going to sign this unless you can get an answer to that.' So I then went off to the Lloyd's contingency market, and we had put in place an insurance deal with the contingency market that said, for a payment of a sum of money, there was about, an extra ten per cent on the capital project which we could absorb, if the price of oil had gone below \$15 a barrel in a certain period, they would pay off the cost of the capital.

So this was in the Lloyd's insurance market?

This was Lloyd's insurance market.

Yes. Lloyd's of London, yes.

Yes. So it was an insurance scheme. So I went back to the members of the main board and said, you know, 'So, this is it.' 'Well done young man.' Signed, 'Get on with it.' [both laugh] But it was, that was the kind of environment, strategic, negotiating the price of crude, of fuel oil. Sorry, that was, you know, every three months, strategic, doing a big coal deal. It was a fascinating three years. [57:00]

And then, the time was right to move off into, into one of the ICI businesses. But again, computing, not really very apparent. Except, what had come over the horizon was that ICI, in growing its use of computings, had become into two houses, a DEC house, which was the, the technology manufacturing, research environment, and IBM, which was the commercial and accounting. And, it had created a, a document transfer system, EDS, electronic document... EDT, electronic document transfer, which actually bridged DEC and IBM.

Right. Yes.

So you would have a single address, and you could do documents, and you could get the address of someone else in ICI and move the document to them, whether they were on DEC or whether they were on IBM. So, without understanding the background to it at that stage, I found myself beginning to use technology for communications a lot.

[58:01] And then you moved on to ICI Films. And then I went into ICI Films.

Which was Melinex. So ...

Which, the product was called Melinex. It's polyester film. ICI had developed it, DuPont had developed it, post-war, in competition with each other. It's, it's, polyester fibre, polyester clothes and things like that.

Mhm.

Polyester for polyester bottles and things like that. And polyester film. Polyester film had been developed, and had grown up, and we had manufacturing facilities at Dumfries in Scotland and in, in Holland, at Rozenburg, and in Wilmington, Delaware. And, ourselves and DuPont and Teijin and Toray, we, we had licensed Teijin, DuPont had licensed Toray, dominated the world.

Mhm.

And, I was the commercial manager in Europe, and, helping develop the sales and things like that. But one of the things that did was to take me regularly to Japan for developing our sales in Japan. And, I made the case that, once the limitations of our deals with Teijin had run out and we were allowed to go into Japan, that, the view was that ICI was trying to expand in Japan, that we should probably put a manufacturing plant in Japan. And, and that was what then led me to be sent out to Japan. We had made the investment case for a 55 million manufacturing plant, and I was sent out to, to implement that.

[59:53]

So we're talking about the 1989-1992 period when you were in Japan.

That's right.

So, I mean how... I mean, you've mentioned, and, we know that ICI is a huge, was a huge organisation. When you were Commercial Manager at ICI Films, the company was run by Sir John Harvey-Jones.

That's right.

Yes. Did you have any dealings with him at that juncture in time?

Met him a few times.

Right. OK.

He, he was very strong in bringing marketing in, and put a very strong emphasis on marketing.

Right.

So, we had a, a team based at Welwyn Garden City where I was, who, at that point, who, who led on the marketing. So, and I suppose I was on the commercial marketing, so, I got very much exposure there. And, I'll come to it slightly later. I think what he, what he did was to, he, he restructured the company very strongly to make it very much more commercial, but probably in the process of that, it, it also lost its very strong innovative roots, in a world that was really becoming very very competitive in terms of innovation. So I'll tell you a story from the time in Japan in a moment.

Mhm.

But no, he was, he was the great heavyweight. He went on from ICI to make himself a lot of money. And there's no doubt about it, he, he overhauled and modernised ICI on the commercial side. But he set the scene for ICI then ultimately, still not performing strongly enough, and beginning to be broken up.

Mhm.

So towards the time, end of my time in Japan, for example, the ground was prepared to do an IPO of the pharmaceutical business, and steadily over the next decade ICI was, was broken up, which is why people aren't aware of ICI nowadays, because the various ICI businesses went off to new homes.

So on. Yeah. I mean, so, I mean to, to give a perspective. In '84, ICI became the first UK company to achieve one billion annual pre-tax profits.

It did.

But

But that was about it.

That, that was a high point, and, and the chief profits of what say 1.5 billion in '89. So...

Yah.

But the important thing I think for our listeners is, it was the first company to achieve that.

Yes.

That shows where it was in terms of the world

It was a very, it was a very big and very major company.

Yes.

[1:02:53]

But, just to take a little step forward. Once I had set... I'll come back to the Japan thing. But when I was in Japan, getting going, we brought onto the ICI Japan board...

Because alongside the plant I went out to build, ICI invested, out in the Ibaraki prefecture, an equivalent of the corporate lab, in other words it was going to be a laboratory where ICI's very best science and innovation could be done in Japan.

Mhm.

And we brought in to run it a very experienced Japanese had who had run one of the big Japanese government labs, and, he set about going around the ICI world, to pick up all the stuff he was going to bring to Japan.

Mhm.

And, I got to know him very well. And, each time he went on an overseas trip, when he came back he and I would sit down and have a working dinner so that he could debrief me.

Mhm.

And he got more and more depressed. He said, 'Sykes-san, there is nothing worth bringing to Japan.' And it was true. The, the thrust of innovation in the company had been lost. And, we had... And the, this lab innovation centre closed within a year, having invested a lot of money in it.

Mhm.

[1:04:27]

And another story I tell was that at the time we were making the case for the investment in Japan, we had on the, the board of ICI Japan, a Japanese man who was the chief executive and chairman of Toshiba. And, he wanted to see the technology we were going to put into Japan in orations. So I flew with him in a private jet up to Dumfries, and I had a chance to talk to him.

Mhm.

So I said, Shoichi Saba-san, I said, 'sensei, you sit on the ICI board, you sit on the Toshiba board. Are you willing to tell me something about the difference?' And he fell about laughing. And he said, 'Toshiba is a company rooted in technology. Every board meeting we have, we spend half the board meeting on technology issues. At regular intervals the whole board goes away and we take an issue in-depth. On the ICI board,' he said, 'I've been there two years, we talk about the City and the share price, and the share price and the City. ICI is a technology company; we've never once talked about technology on the ICI board.'

Mhm.

[1:05:35]

And I remembered that story later on when it was clear that we just didn't have very much to bring to Japan. I began to, from my position in Japan, I got to know what was going on in Korea. There was a... We had all refused to license the technology to Korea. So the Koreans closed the border and gave sole rights to the technology, to develop the technology, to Sung Kyung Chemical. And, it was clear to me, because I had visited Sung Kyung quite regularly, that they were powering ahead. And, when we had the annual review, when we all came together back to Welwyn Garden City, Jim Park, the boss... I had a set of slides done. It was the time shortly after the Olympics, and, Sung Kyung had this symbol of, of a tiger.

Mhm.

And, I had created the image for this set of slides of a tiger in the grass. And, Jim Park in his presentation, he had been to the main board, the business had had its objectives in the budget for that year to hit 20 per cent return on assets, and he only got eighteen per cent. And he got a rough time from the main board.

Mhm.

And I then stood up, and pretended that I was the chief executive of Sung Kyung, who had got befuddled and had ended up talking, he thought, to a Sung Kyung audience, but he was talking to an ICI audience, with this slide set. And I went through what we were doing to tackle ICI Toshiba and Teijin. And I said, 'I went and talked to my main board last week, and reported that we had actually hit a half per cent return on net assets, and I was praised for such an achievement.'

Mhm.

And Jim Park... So, the message was that there were new players, innovating, changing, taking the market. Sung Kyung is now world number one. ICI has sold the business to DuPont. DuPont put it in joint venture globally with Teijin. And the plant that I built, after 20 years, because, in Japan it was Teijin, had big operations, just this one plant, in an isolated site, closed it down.

[1:08:08]

Mm. I'm pressing, we're missing a little bit here.

Right.

From a, from a... I know that ICI's slide, if that's the right word, was starting in the early Nineties, or had started then, when, attacks from Lord Hanson et cetera, but the... There was sufficient financial, well, there was substantial financial, money still in the company.

Yes.

I'm curious why innovations halted. You've talked about the concentration on the City.

Concentration on the City. The concentration, Sir John Harvey-Jones brought on marketing.

Yes.

I think the individual businesses, because they were in a period of good returns and good profits, using what they historically had done, didn't fully understand the degree

to which the market was moving forward faster than they were. And therefore they weren't putting enough investment into innovation, or enough describing the new ways the market was going. So, the focus instead then became a feeling that, it was better to begin to let the individual business units go more naturally to their market. So the pharmaceutical business was IPO'd, and became Astra, and then AstraZeneca. The paints business was sold off to AkzoNobel of Holland. Bit by bit the various parts... There was an attempt under one of Sir John Harvey-Jones's successor to go into specialty chemicals, and they bought a whole chunk of specialty chemicals business from Unilever. But it was actually misplaced, they were not as strong businesses as was believed.

Mhm.

And therefore they were moved out. So, I think, while there was a very strong balance sheet, the marketing side became very much stronger through intervention. The thing that was lost was the sheer intensiveness of innovation in the world that was going on, and, the businesses slowly lost their way in those areas.

Perhaps as your slide suggested, they failed to see the tiger in the grass. That's what...

They failed to see the tiger in the grass. That's why I used that image of the tiger in the grass.

Yeah, exactly. Yeah.

And it was a powerful little image that resonated round.

[1:10:26]

And you mentioned the absence of concentration of IT, yet, in '93 you returned to London I understand.

Yes. The, the plant in Japan was up and running, and doing well. I was anxious to... In fact, I should explain that, back in the Seventies, after I had joined ICI, I met a young New Zealand lady who was working with ICI in the head office at the time, and I suppose the classic thing is that we fell in love with each other. She left ICI shortly thereafter and joined the body called the International Wool Secretariat, who were behind the wool mark Pure New Wool. And her career there flourished, and she ultimately became Corporate Planning, Director of Planning. And undoubtedly did far better there than ICI would have allowed her. ICI was not very oriented towards women at that time.

Mhm.

But, for various reasons, she was very strongly London-based, ICI never got any, London based. So we had a very strong relationship, and we had, we bought property together in London and ultimately in, in Camden Town, and we spent as much time as we could together. But, for tax reasons apart from anything else in those early stages, there was no sense in actually getting married.

Mhm.

So we stayed unmarried. When I went to Japan, she couldn't come with me because of her work with the Wool Secretariat. ICI was... But it's a measure of the sense of money there was within ICI, that when I was asked to go to Japan, the then president of ICI Japan said to me, 'We know you aren't married. We know this is the lady love of your life. We know she can't come with you to Japan. But we're going to treat you as if you are married and we're going to give you all the allowances in Japan as if you were a married living in Japan.'

Mhm.

So, you know, we did not want for money. And we went off and had good holidays together to keep in touch and things like that.

Mhm.

[1:12:37]

It was ICI that was, was very good, but, financially very strong. The... While... When I was coming to the end of my time in Japan though, I said, 'I really would like to ensure now that Penny and I can settle in London.' And they said, 'Fine. What we'd like you to do is to come to head office and take over the IT function.'

Mhm.

And the history there was that, the use of IT had grown up in the individual parts of ICI through the Seventies, partly with IBM and partly with DEC. Under Sir John Harvey-Jones it was recognised that, the result was becoming a bit of a mess, because each of the individual businesses were doing their thing. So under Sir John Harvey-Jones a corporate function was developed that was given monopoly powers for computing and telecoms. Now computing was mainframe in those days.

Mhm.

And therefore, what that central function did, through the Eighties, was actually very value-adding. It, it rationalised all the data centres to one really big data centre up at Runcorn, with proper backup and failure. It got the telecoms network rationalised to a single global telecoms network based on telecom deals with people like BT and other people round the world, and our own switches and everything. And because my predecessors controlled the telecoms network, they were able to set the pricing at levels that encouraged the businesses to close their data centres and consolidate to this one big centre at Runcorn.

Mhm.

[1:14:27]

There was also then an early relationship with SAP, because, when three Deutsch IBMers left Deutsch IBM to set up SAP, their very first client was Deutsch ICI. So there had been a, thing. So my predecessor, who became the global head of IT, inherited this very big structure working very well, and the very strong relationship with SAP, and, he made the case and got the investment for another big modern data centre in the north-east of England. And it was built and it was opened to a flurry of trumpets. And it closed after six months because it didn't have anything to do. In other words, it was the creation of the technical folk, rather than understanding business requirements.

Something you've seen earlier in your career as well.

Something I had seen earlier in my career. [laughs]

Yes.

[1:15:29]

So... And, my predecessor also was moving with determination to basically bring SAP wall-to-wall across ICI. His vision was that, SAP was the answer, you know. And, I think why I was approached when I indicated I wanted to come back to London was that, they decided the time was right to have a businessman at the helm. And the basic deal that I was given was, you've really got to get this lot sorted out. And I inherited 1,300 very techie techies, the strong data centre in Runcorn on this global telecoms network. And I understudied my predecessor for about a year. And, the more I settled into the job, the more I was beginning to realise SAP was not the answer. One or two businesses it was, but for a lot of the businesses it was too complex. And he didn't like the fact that I potentially was going to depart from that policy. And, at one point he and I had a real row, and he said, 'I'm going to ensure you don't succeed me.' But I had developed very good links with several good players in Oxford, at a place that preceded the Saïd Business School, I'm trying to remember his name, it was a kind of a, a centre in Oxford for technology and industry.

Right, yes.

And, the man there said, 'I'll tell you what I'll do.' And he, he set up a seminar with two leading players, one who was the head in BP of IT, and the other one was Standard Chartered.

Mhm.

And he announced that we were going to do a seminar in Oxford, and invited my predecessor Maurice [Bradley] and myself, and I was asked to do a presentation to these two CIOs, who quizzed me very closely about the way forward. And on the way back to London, in the car, Maurice said, 'I'm retiring. You obviously understand it better than I do.' Because the way they had quizzed me, and said, 'The boy's right, he's on the right track,', Maurice, convinced him that.

[1:17:50]

So, I then inherited this very big structure. The team I inherited was very proud of what they were operating. They took me to see IBM, they took me to see BT, and IBM and BT said, 'You're a lucky man, look at the quality that you're inheriting.' And I went to see the chief executives of the ICI businesses, and all of them one by one said, 'See the wall, we've got machineguns lined up. They have monopoly powers, we have to pay for them, but they don't listen to us and they don't provide us what we need for our businesses. Get rid of them.' It was a, it was as tough as that.

Mhm.

And, the first chance I got to operate that with my new team was that when ICI IPO'd what then became, the pharmaceutical business became Astra, and then AstraZeneca – sorry, became Zeneca and then AstraZeneca, we were faced with the issue, what to do with the telecoms network.

Yes.

Because it now was, there was a part of it was going to be outside ICI. So, what they wanted to do was to, basically position us to be a telecoms supplier. And I looked at that and it was a waste of time. So they said, 'I'll tell you what.' They came to me with a detailed study, and they said, 'For a mere one and a half million we can split the network into two, and we can strain the increase in costs to plus 20 per cent. Can we go ahead?' And I had got to know a man in PA Technology well, and he said, 'Take a look at the beginnings of the telecoms outsourcing market.' So we looked very closely at the telecoms outsourcing market. And, we did an outsourcing exercise, and we were paid three and a half million.

Paid.

Paid, three and a half million for what we handed over. And on the stroke of midnight, they cut the rates 20 per cent because they had got critical mass. [laughs] So I had a little go with my team, I said, 'What were you smoking?' And the answer was, they were in an environment that was their internal environment, they were running the show, they saw it from that light. I saw it, thanks particularly to help from PA, the broader commercial environment. So the telecoms network went off. Everybody was happy. We were far better off. And I had a real establishment with my team that my approach, my ability to see the world differently from them, was actually on the right track.

[1:20:32]

It seems, and I don't want to put words in your mouth, because I obviously don't know your team members or wasn't there, but, it seems as almost they weren't challenging. They were almost accepting what was given to them and...

Yes.

Whereas you came along, fresh pair of eyes.

That's right. And business eyes.

And with business eyes. And with contacts outside the business.

That's right.

You mentioned PA Consulting, and you mentioned Oxford University as well.

That's right. That's right.

Could use your network to ...

That's right. To find work.

...challenge...

That's it.

... internal thinking, and ...

And, it came up then in another way, because, I had had a lot of experience in manufacturing, and I was taken early on to see our lovely data centre up at Runcorn, and the man whose pride it was took me around it, and I said to him, 'What's your asset productivity?' And he said, 'Oh, last year was a particularly good year, we hit 20 per cent.' I said, '20 per cent?' I said, 'You realise that in manufacturing environments I've been up on Teesside and in Japan, we run asset utilisation of 98, 99 per cent. You'd get fired if you went down that low.' 'Oh,' he said, 'Dr Sykes, you don't understand, IT is different. We have these big surges,' et cetera et cetera.

Mm.

So I said, 'The world is beginning to be different. Work at it.' And he didn't survive very long. And of course, then the real pressure for change came when Amazon came along and began learning, and, the origins of the Cloud were the ability to run these data centres at 98, 99 per cent asset utilisation.

[1:22:14]

So we're talking about... I was curious for a moment when you talked, or when he talked about productivity being 20 per cent, what exactly he was measuring.

It was, it was the fact he had got all his capital, and it was the, the percentage at the time that the capital would actually be used productively.

Oh right. OK. So ...

Rather than sitting round waiting for a sudden surge.

For utilisation.

Utilisation rate, you know.

Yeah. Right, OK, that's how he was... Oh right, yeah, 20 per cent...

So, you know, it was a different... I was coming in from a different world. So, we... I outsourced the, the data centre.

Mhm.

Outsourced the telecom network. Outsourced the data centre. We had a, the consequences of the SAP exercise, we had a team of about 100 very good SAP professionals who were professionals at implementing SAP projects.

Mhm.

And, I bundled the data centre with the SAP team, and it went out as a single whole. And people said to me, 'You've got such a quality SAP team. What are you doing?' And I said, 'It's like having a ravenous lion that you've got to feed red meat to. The only thing they're good at is doing SAP projects. And therefore when they've finished one, they want the next one.' And I don't want to be in that position. I want them out in a third party's hands, and if we have a case for doing a SAP project, then I will hire them in to do that project and then move out. And the kind of people you need to run a SAP institution, once you've done the projects, are very different people from the project people.

Yes.

So, we were far better with them gone, and I got paid very good money by Atos to take them off our hands.

Mm.

So by the time I had finished, I went from 1,300 to 30.

Mm. Yes, I mean we should explain that, SAP was considered a specialist skill.

Yes, and it was.

And, and... And, and an expensive skill.

Yes.

for anyone using those services. So what you're saying is, no point in having that permanently on your books if you've got no use.

Well, and, and it was a time when SAP was in the great growth. One of the three original men who set up SAP was a man called Henning Kagermann, and I got to know him quite well. And, he phoned me, after I had been in place for about three years, because, it was a big irritation to SAP that we weren't going SP wall to wall. [with accent] 'Dr Sykes, do you know that the market valuation of SAP is now bigger than the market valuation of ICI?' They had grown like that. And I said, 'I do. And I'm delighted for you. [laughs] But it doesn't mean to say that you're the answer to a maiden's prayer for everything in ICI, but congratulations.'

Yes.

[1:24:59]

So, it was that, I think what I had been able to do because I had had that very much broader business background, was to bring about those big changes.

Mhm.

So we steadily outsourced and established a different way. The other thing that was vital then also was, at that period in the 1990s, that ICI was doing a lot of acquisition and divestment. It was finding itself, trying to reshape itself. And if I had had that

1,300 people on our book, each time we cut a bit of ICI off, the question would have been, where the IT people went.

Mhm.

By having moved them all outside ICI, that issue didn't arise.

Yes.

And, I got invited by a group of them at Atos a couple of years on, they wanted to kind, reminisce a bit about the ICI days. Because they had been very unhappy at ceasing to be ICI people. And two years on, a group of them and I met up, and they said, 'The best thing you did.' [laughs]

Mhm.

Because they suddenly realised how much better their life had been. And ICI restructured endlessly. They were in a big company that was in the business of IT, and they were secure, and the fact that the ownership of this bit of ICI changed, didn't affect them.

[1:26:15]

So, so you've talked about effectively taking a team of 1300 down to 30, primarily by outsourcing.

Yes. Downsizing a bit, outsourcing, and moving some back into the businesses.

Uh-huh. Your title at that stage was Group Vice-President IT.

That's...

Was that, was that a main board position, or board?

No. It sat below main board. I had my set of offices very close to the board. But it was not regarded as a main board position. But I had put...

[1:26:45]

The other story that is worth telling from that time, because, it was a, showed how I like to do things differently, was that we got a new chief executive came in, and, he said to me, 'I'd really like to understand the board, like to understand more what we ought to be doing with IT.'

Mhm.

And, I had had a good link with a man called Peter O'Sullivan, who was with KPMG, and I chewed the fat with him. And what we did there, I think was actually for its time very innovative. We created a project, and, we invited a range of, late twenties, early thirties, ICI managers from across the businesses, not in IT at all, they were manufacturing, whatever. And we created something called the Agenda Network. And we asked them, and we gave them access, to really explore how contemporary IT was beginning to potentially influence the businesses and the roles they were in.

Mhm.

And then, on the day we were due to report back to the chief executive, rather than give him a big thick report, he found on his desk, because this was in, 1966? 1966, he found on his desk a mock copy of the *Financial Times*, three years later, announcing the ICI results. And the *Financial Times* praised all the innovative stuff that ICI had been doing with IT. And he went down to the board room, and he found that the board room had been stripped of all its furniture, and these youngsters from across ICI were there with flipcharts, and they roll acted.

Mhm. Right.

'I am the manufacturing plant operating in Teesside. This is what I'm doing with IT.' 'I'm a customer of yours in Germany. This is what ICI is doing for me with IT.'

Mhm.

And, as he went around the room, he just got this whole spread of the younger generation, telling them, what to do, and how it would work.

Mm.

And he really, really bought it. And we then repeated the exercise for, for the whole board, two months later.

Right, mhm.

Exactly the same thing. Role acting, discussing, debating. And then there was this well-placed network, as I, we changed the function, that was able to, carry this forward into place. So that was the Agenda Network. And I still have some quite good friends who will show you still the business cards that they had, the Agenda business card.

Can I just clarify. You mentioned '66 there. Did you man ...?

I meant '96.

'96.

Yes, that was '96. So I had been, I had been in place since '93. This was '96. We had a new chief executive who had been in for about a year, Charles Miller Smith.

[1:30:08]

Mhm. One of the things that I think our listeners might be interested to hear, that, a company the size of ICI, are you saying there was no IT professional on the board? I think that's what you were saying.

There was no IT professional on the board.

So you were the highest...

I was the highest.

The highest ranking if you like IT professional within the organisation.

Yes.

And yet, even in a, a company such as, a public company, international public company, one of the largest in the world, IT, in the late Nineties, wasn't represented in the boardroom.

No.

And I think that's important for our listeners to ...

Well, it, it is actually interesting that, if we fast-forward, we'll come to it later on, one of the roles I've done for the last few years is to be a judge of an exercise called CIO 100

Yes. Yes.

And, that has given me, with my fellow judges, a lot of insight how the CIO role is changing.

Mhm.

And classically, for a long time the CIO reported into the CFO.

Yes.

Generally was under financial.

Yes.

Last year for the first time over half the CIOs in the CIO 100 reported directly to the chief executive. Big change. They no longer come in through the financial stream. They report directly, and in a lot of cases they sit on board. And that's, that's coming forwards ten, fifteen, twenty years.

Mm.

All change.

As a fellow IT professional myself, I think it's a good thing to see of course. And it's up to the IT profession to, to live up to it. And I think, when I, I sense something, and I don't know if you agree with, it used to be that what was the finance director or the CFO you might call today, they didn't use to sit on the board either.

No. No.

And I think IT was one step behind them, and now they are, they have progressed to the, their importance and their ability to add value, hopefully is being recognised by more, more...

Well it is, but at the same time, therefore, the nature of the role of CIO, and we might come to that later, changed, and quite a bit of my work now is to do with the fact CIO changes anyway.

Mm.

The one other thing that might be amusing from my time in ICI was that, when I had been in the job a couple of years, *Computer Weekly* decided to come and interview this phenomenon.

Right, OK.

So I'm showing you the, the cover that was on it, of myself in my pinstripe, boating the ICI canoe down the FM River.

Yes Well hopefully you'll let us take a copy of that and we can put it up on the website for you..

Yes, absolutely.

So I'll just read you the... So this is an extract from Computer Weekly, October 5th 1995. 'Wanderer returns to shoot the FM Rapids. Julia Vowler talks to ICI's Richard Sykes and discovers he's a man with a mission when it comes to outsourcing the IT department.' As I say, Richard has kindly agreed that we can put a copy of that article up on the, on the website, if you ever... And what a fantastic picture to have as well.

Isn't it. It's fun.

Yes.

It's a nice record from that time.

Canoe. You're were up a river with a canoe, which is good to see. [both laugh]

[1:33:39]

So you were with ICI for 27 years. Would you... Even covering your university years to ICI, who were the, could you name one or two people who you would say influenced you, or you thought were your, would consider mentors during that period? They could date from your university years, or they could, or could be from ICI or, third parties at that juncture in time.

Well, in the, when I came from the corporate lab, into the plastics business, into the Melinex business, my boss there was a man called Jim Park, and Jim was a very good leader of the Melinex business, full plastics films business, and a very good, and I have remained in good touch with him, he was a very good teacher, a very good mentor.

Mhm.

And, certainly someone who, who I held in respect and learnt a lot from. And, I suppose then in Japan, it was Hiko Miyashita, who was a long-establish member of the ICI Japan board, and obviously very Japanese. And he was a very very good guide and teacher in growing my capability to operate effectively in Japan. So I would put, put those two particularly very high on my respect list. And, I suppose the other person, saying background's the wrong thing, is, is, is, the lady who is now my wife, Penny, who, pursuing her career, and then the, the wool price when I, as I came back from Japan, the wool price collapsed, and ultimately her job disappeared. And she had to reinvent her career, do another master's and go into a new field. She has been a, a very firm hand in helping me see the world in a, in a broader light at the time.

Mhm. Oh that's good to hear.

And through her interest in the arts, has drawn us a lot into the arts, but that has helped keep a broader view of the world the whole time. Which is no bad thing.

[1:36:05]

And what would your proudest moment be do you think over your career at ...?

Proudest moment?

Mhm.

[pause] Mm.

Perhaps in terms of achievements. Where you feel you had the most influence.

Well I suppose, it would be those, the two things in those final years... Well there are three things I suppose. That deal I did to get the mid-Cheshire soda ash plants into coal burning off ICI's balance sheet, in the way that no one had thought through or seen was possible. And that really broke ground in some very new ways. The building of the plant in Japan, and getting it to successfully operate, and so that it did last 20 years, we were strategically, ICI had ultimately got it strategically wrong for its broader positioning, which is why the plant is no more. We got the plant built, we got it built on time, to budget. It was the first and only manufacturing plant that ICI did in Japan. Up until then it had all been in joint ventures, and a Japanese partner had done the plant work. This was the first time that it was ICI resource on the ground. And then I suppose thirdly, it was the pretty substantial transformation of ICI's IT, so that we ended up, by the time ICI was broken up and ended, it had IT capabilities in the various parts that were highly aligned to what they needed, and it was very much easier to break ICI apart accordingly. So I think it would be those, those ones. And then outside of the IT arena, the turning round of the De La Warr Pavilion.

Mhm.

Where, we had, the group of us, which I chaired, this, this lovely building from the mid-1930s, owned by the local council, run by the local Council. The local Council in nineteen, in 2002, had a budget of about ten million, for 90,000 people. And it was spending one and a half million on this one building. And it was desperate to get rid of it. And it was not a happy place to be. And, we created a capability, with backing from National Lottery, and National Heritage and Arts Heritage, Arts Lottery, that, relaunched it as a not-for-profit social enterprise, ensured that its dependence on the local Council was reduced to half a million, which it was happy to back. But when I had finished my time as chair there, and there was an evaluation done of its value to the local economy, and at that point, in 2008, that was valued at £16 million a year, because of all the things that it brought in. And it's a flourishing not-for-profit social enterprise now, very happy staff, growing and developing the whole time. And, steadily reduced its, its dependence on support, because it's increasingly successful with its commerce and things like that. So, I think outside what I did in, in ICI and things like that, that's something I'm proudest of.

[1:39:44]

And we should say that that's the, the De La Warr Pavilion Charitable Trust. You were chair...

I chaired that from...

...from 2002 to 2008.

That's right.

And it's situated in Bexley on Sea.

Bexhill-on-Sea.

Sorry, Bexhill-on-Sea. And, thriving today, and ...

It is.

Yeah, well worth a look at their website, one, to look at the build... Well, want to look at their building, and also, to...

Go down and visit it.

...to see what's on...

Yes, lovely things on there.

...and who's playing there.

Yes.

As well as the exhibitions.

And I'm, I'm pleased to say that I am now an Honorary Patron, along with Eddie Izzard.

Oh right, well if you can get me tickets to Dionne Warwick, let me know. It's...

[both laugh] Right.

[1:40:27] But, taking you back to ICI for a brief moment now.

Right.

If you could have your time again, I say, 27 years, a very long time at one organisation...

Right.

If you could have your time again, is there one thing that you may have done differently that we the listener can learn from do you think?

That's... That's a difficult thing, because, one, one grows and grows and grows the whole time, and then five years on, in ten years' time, you look back. It's... I couldn't have forecast, I couldn't have planned the 27 years with any degree of detail from early on.

Mhm.

It happened step by step. I was very lucky to be in a company that, oh well, ultimately it didn't survive and had to be broken up, internally had very good people develop the processes in a very good way, and very good diversity of businesses. So, it was an opportunity to just grow steadily, and develop one's experience, see the world, and step by step, and then opportunities like, come and sort out the IT function. So no, I think, looking back on it, it's very difficult to see something that could have been done very differently.

Mhm.

The post period, post-'99, we'll come to next.

Yes.

But no, I think, at the point that I left ICI, I felt that I had had a very good run. I was not main board capability. I was sitting on the layer below main board.

Mhm.

The final thing that ICI did, which I, because they're very good, they were very good on people, was that when it was clear I was going to need to move on, they spent money on having me, given consultancy on how I might go forward, because I going to be 52, 53.

Yes.

And, a lot of psychometric profile advice. And, the message that came out of that exercise was, don't go and become a chief executive of anything. Don't become a programme or a project director of anything. It's a bit like the decision back at, doing my doctorate, when I was going up to do that.

Mm.

Go and become non-executive chairman, strategic advice, strategic guide. Where your strengths really are, is chairing a leading and a non-executive role, and being a strategian of what's going on.

Mhm.

And that was very powerful advice that meant that when I then set off from ICI, I set off down the right track.

Mhm.

And didn't waste my time. Because, inevitably, the headhunters come at you, and you know, because you've been doing this, they assume you want to do more of the

same. And so they say, 'Why don't you go and do this, and why don't you go and do that?' And one of the bits of advice that I give when I'm, quite often my advice is sought, is that alongside your CV, you should always have a one-pager which is a kind of prospective view of where you think you really want to go and why. And that's really what the headhunters should go on, not what you've been doing, but your best judgement of where you should be going next.

Where you want to go too. Yes.

Because I found, when I was finishing ICI, purchasing ICI's energy, I was inundated with requests to go and become chief executive of small energy companies. Headhunters thought, 'Ah!', you know, look what he's done. So it was always looking back, more of the same.

Mhm.

The ICI exercise helped me position myself right for where I wanted to go next.

[1:44:33]

Mhm. Well thank you for sharing that with us. We'll come on now to post-1999, your final year at ICI. And just to round the circle on ICI itself, they were taken over, well, the final part of ICI that was left, because they were selling off parts, was taken over by AkzoNobel in two thousand and...

Akzo took the paints. The heavy end of ICI, in Runcorn and places like that, became part of Ineos. If you go up to Tesside, where I worked and got, bought the energy for the big power station in the centre, big integrated chemical site, that is now a whole mass of small businesses, each of whom have their plants and operations on an integrated industrial site.

Yes.

And the big building that was purpose-built to be the headquarters for ICI Petrochemicals is now a centrally-serviced office space for all these diversity of businesses [laughs], which all have their offices there, for their plants they've got on the site.

Which city is that in?

That's Wilton.

Wilton. OK.

Wilton on Teesside.

OK.

So, that, you know, the whole, the whole structure has changed. So ICI steadily over the next decade, and from 2008 onward, the one remaining bit of ICI that exists, that has a lot of money in it, and carries the ICI name, is the ICI pension fund.

[laughs] I thought you might say that.

[laughs]

Thank you.

[1:46:14] Richard, so, in '99, it was time for you to leave ICI.

It was time to leave. ICI had very kindly given me a, an opportunity to really understand the direction I should go, and that that direction said, non-exec chair things, and be a strategian.

Mhm.

And, I suppose over the first half of the next decade, I ended up chairing a number of different ventures. Solcom was a young start-up down in the Isle of White, which had

a particular area of expertise helping very technically intensive manufacturing environments. Morgan Chambers, who approached me because of my outsourcing interests, was a bunch of outsourcing consultants that Robert Morgan had set up and grown, and needed a, he had reached the size where he needed a chairman to help guide the development of the way forward. Site Confidence was a very interesting business model that said, as more and more outsourcing was done, there were actually situations where it would be useful for a company to have its own team in a country like India. So rather than going to a third party outsourcing who did it for you, you had your own small resource that was your resource, which, you then needed someone on the ground to help give the financial context to it and get the legals and things right.

Mhm.

So that was the Site Confidence model. And... So, working with those companies, and then, Quickstart Global, I had basically found myself absorbed in learning how to be a good chairman, helping the development of the board. Solcom flourishes to this day, and I'm an investor in it. It has developed a new line of business in the healthcare area, which is doing very well. So my share price in it should improve in time.

Mhm.

Morgan Chambers, ultimately got sold on, after I had finished my time as Chairman, and ended up, the remains of it, in KPMG. And, Quickstart Global is, is still going strong, I'm a shareholder in that as well, and it's being restructured at the moment into a bigger, into a bigger group one of the original founders has been developing. So if you like, that was a, a period of my time in which I used my business experience from ICI, learnt a lot more about how IT was being used in different ways, and quietly learnt how to play a good role as a non-executive chairman of the board.

[1:49:00]

Mhm. You mentioned a series of companies. Some of those names are well-known, trading today, Solcom as you say, trading today, in some very specialised areas. And Morgan Chambers was a household name in outsourcing as well...

That's right.

... before it was swallowed by...

Equaterra.

...Equaterra, which has subsequently been part of KPMG. But, could you, perhaps, perhaps identify one of the things that you did at one of those organisations that sticks in your mind that you felt, I really made a, made a difference here, and ...?

Well I think I, I'd point to two particular key ones. One was the question of being around at the time when a business is absolutely crucial. Solcom had been founded by two young entrepreneurs, who had experience of having set up a business originally. They had successfully sold it on, but they had made the fatal mistake of selling it on for shares in the venture that took them over. And those shares proved worthless, because the venture that took them over collapsed. So this was their second exercise, and, the whole basis of the Site Confidence model was that, you helped businesses very dependent on websites to have confidence in their operation.

Mhm.

And, the original model was that, big companies could look after themselves, therefore the natural market was going to be on small companies.

Mhm.

And as the business got growing, it was clear that that model was wrong; the real model was in small companies that wanted a lot of help. And, we very nearly ran out of money, and I had to lead the process from the chair of getting investors to, and the

people we owed money to, to agree to a one-year moratorium or to take up the share while we restructured the business.

Right. OK.

And then it went forward. And at the crucial time it was then firing on all cylinders. One of the two founders, who suffered a bit from asthma, and turned out to have a weak heart, had a very bad asthma attack early one Friday morning, and it killed him.

Oh dear. Mm.

And we woke up on the Friday morning to find the business in the hands of that. And, the remaining founder looked as if he had gone to pieces under the sheer strain of it. And I phoned up a key player in my network, described the situation, and she said, 'Just wait. Monday morning he'll be fine.'

Right.

So I fixed that on Monday afternoon we'd have the next key board meeting, and by Monday afternoon he had come around, and, he was able to come back and see the business through. So I had a couple of times when I understood the role of the chair in helping hold the thing together and help it go forward.

[1:52:09]

So... So that was, that was the Site Confidence. Which, which was the other one that I would take as, as an example? [pause] I think at Morgan Chambers, the key issue there was that, Robert had built the consultancy with a very good bunch of consultants that he had immense frustrations with, because they were not good at getting business.

Mhm.

And a classic consultant goes and gets the business and does it. And as I went round the clients, they all said, superb work they do. And Robert was getting increasingly frustrated with them. And, drawing on my ICI experience, I got Robert to agree that everybody would be psychometrically profiled.

Right.

And the man who did the psychometric profiling of us all came in and sat down with Robert and myself and said, you know, 'These consultants of yours,' and Robert said, '[growling sound.' And the man said, 'None of them are consultants. To a T they are project managers. You have been recruiting project managers and not consultants, and that's why they're so bloody good at doing what you set them to do, but they will never be good at getting business, because they don't have the profile that a consultant has who gets business.' And, that was the start of helping Robert understand he had to shift his recruitment process.

Mhm. Sorry, and Robert's surname, can you remind me?

Robert Morgan.

Robert Morgan. Yes. Yes.

So I think I, I'd point out those two.

Uh-huh.

As you say, Solcom has, has grown and developed into new areas and is, is doing well there.

Right, yes.

Morgan Chambers exists no more. Quickstart Global has been restructured, and is doing well now. But I'm a shareholder in Quickstart, because I'm a shareholder in Solcom. Site Confidence got sold off to NCC Group, and flourishes as part of NCC Group.

[1:54:14]

Mhm. And, towards the end of, well, of the 2000s, 2008, you got involved with a trade association.

Association. I got, through my work at Morgan Chambers, I got drawn into the trade association for the IT telecoms industry called Intellect. I became Chair of their outsourcing and offshoring group. And, did several reports for them on, on how to do that effectively in the modern world. And ended up being elected to their main board for a three-year term. Which was very unusual, because I was by far the smallest person, i.e. just me, on the main board there, with all the big boys. But also, from the experience that I had been doing that, I published a book called *Global Services* Moving To a Level Playing Field, together with a good friend of mine, Mark Kobayashi-Hillary. And that was very much an analysis of how the whole technology services market was becoming a, a global phenomenon, and what a strong player ICI was in it. And one of the statistics that I used regularly when I then talked about this was, I would say to an audience, you know, 'If you offshore things, you are importing services, and you obviously export a lot of services. Where do you think the UK balance of payments is?' And to a T audiences would say, well we must be, you know, very bad. But in matter of fact, the truth is that we had a very strong balance of trade and services, we were earning far more from our exports than the imports we were paying for by offshoring. And that was not well understood, and part of the purpose of the book was to show just how strong the UK was as a player in this field, going forward.

And that was a publication in 2007.

That was a publication in 2007, courtesy of the BCS.

Published, yeah, under the BCS, so formerly the British Computer Society, yup.

And, it's now badly out of date. It still sells a few copies each year. But it, it served its purpose at the time, and what was, then probably led me also to begin, was asked to begin writing columns for IDT *CIO* magazine. [1:56:37] So if you like, this next phase was, serving on the board of, of Intellect, writing columns, writing the book, and, on, one of the key roles from my time with Intellect was, I also then served on a small working group that set up the whole structure for G-Cloud.

Right, OK.

Because, the Government wanted – under the Labour government, wanted to put its arms round this new phenomenon called the Cloud and things and how it was going to do it. And we had a working group between Intellect and the Cabinet Office, and I served on the commercial arm of that, and helped develop the G-Cloud thinking.

[1:57:18]

Mhm. And probably, some of our listeners won't be familiar with the term G-Cloud either.

No. OK. G-Cloud, Government Cloud, is the whole commercial structure that got taken up seriously by the Tories when they came into power, which has encouraged the ability of the Government to buy from bright young new companies, rather than being over-dominated by the big boys, like an IBM or a CSC or people like that.

Yes.

Now, at the same time, I also then during this time developed quite a relationship with the Leading Edge Forum of CSC, wrote a number of reports for them, and went with them each autumn for their tour of the US west coast.

Mhm.

[1:58:03]

So, if you like, stage one post-ICI was building my skills and experience, chairing those companies; stage two was then working more broadly across the industry, writing, writing books, writing reports with CSC. And I really ought to put those reports for CSC I suppose somewhere in that, because I wasn't chairing anything, I

was just working under contract to do those studies. And, those experiences then came together to evolve into what I've then been doing since the middle part of, the early part of this decade, which is to become Chairman of the Cloud Industry Forum, because the Cloud industry was beginning to be a real powerful force. Working with a group of analysts called Bloor, because they increasingly valued, they're very detailed technical analysts, and they valued having a broad strategist who could articulate what they were doing. And, continuing to write. I wrote my column for *CIO* magazine until a couple of years ago when IDG changed ownership and got into difficulties, so I now write the column for the former chief editor of *CIO* magazine called Mark Chillingworth, who now has his own operation called Icon Business Media. Yup.

And as you say... And, you write monthly today, so...

And so I write monthly there.

...our, our listeners can catch up with your...

Catch up with that. And we do that...

... your current thinking.

[1:59:40]

Now, along the way there, I steadily then, from the, as I got well settled into the industry, I began developing my own identity as Dr Richard Sykes.

Yes.

And a steady stream of consulting operations there. The... One of the, just to take one of them there, UCAS, who are the body that provides the online services for people to apply to university, had developed very strong online capabilities using all their own computing power up in Cheltenham. But what they found was, was that because they had this intense period in, ach August where there would be one day when all the A Level results came out, that they were increasingly finding their computing got overwhelmed. Because, kids were getting very bright with their own computers and things, and they would wake up in the morning, get their A Level results, and hit button A, which university am I going getting into?

Yes.

And computers at Cheltenham would go flat, on the belly. So, UCAS set about a project, which I called the two stage project. One was getting what I call old wine quickly into new bottles. So they worked with Amazon over a six-month period to just move sufficient of their computing power onto Amazon to be able to handle the surge. And then a longer-term period project to reshape all their computing power onto Amazon and onto Microsoft Azure, the process of what I call putting, creating new wine for new bottles.

Mhm.

But, UCAS is a charity, and the board of trustees of that charity were very nervous about the sheer size of change going through, and I was asked to become their independent assurer. So over two years I regularly went to Cheltenham, talked to people, read the reports, and provided an evaluation to the chief executive and to the board of trustees, about whether they were on track and what problems they were going to hit. And that was, that was valued enough for them that they paid me my full rate for two, three, four days every month, to help keep them on the straight and narrow. Well that was my role as, as a strategian and an assurer, because I could understand the way the world was going. And I think they valued that input through a period of very major change. So my, I increasingly found myself steadily with a small, word of mouth clients who would call me to ask, to help them to do these things. And I did that alongside my writing and alongside my work with, with the industry association. And I still continue to do it today.

[2:02:45]

Did I see you were a trustee of, of... Now you'll have to correct me if I'm mispronouncing this, but, Humidity, hum...

HumanITy. [pronounced as humanity]

HumanITy. Sorry.

Yes. HumanITy, no longer really exists as a charity. It was an operation that was set up to support the work of a totally blind man called Kevin Carey, who had been very active as an undergraduate at Cambridge, fully sighted, President of the Cambridge Union, but shortly after he left Cambridge went totally blind. Recreated his life doing a lot of project work in West Africa, and then, came back to the UK, very happy marriage, with a sighted woman, who was very much involved in the Parole Board, and, rose to become the Chairman of the National Institute of the Blind, the Royal National Institute, RNIB. And, he and I got to know each other through speaking at conferences. He had a very, he has a very strong desire to get technology to be used for the challenged.

Mhm.

And, the whole purpose of the humanITy was, a small group of us ensured that, we got the funding in place to allow Kevin to be able to do his work, write his reports, travel, because he was supported by a small team that we ensured was funded.

Mhm.

So it was very much a supporting Kevin exercise. And he is a truly amazing man, because he, he totally dominated his, his, he totally dominates his blindness. He comes up to London without a stick, he knows the system, he gets met off the train, take him to a taxi. You know, the taxi drivers ensure that he gets into the building. He's very articulate. We used to go to opera at, in Islington with him. And, as a totally blind man, he could tell you more of what was going on on the stage than you would notice. Because his hearing was so acute. And he has become a lay preacher. So humanITy was an exercise, a pro bono exercise to support Kevin's work, and taught me a lot about how technology could, could be used more broadly and effectively.

[2:05:22]

Mhm. Well thank you for sharing that with us. You know, your, your love for the arts has come out, come out in the interview. You mentioned it several times, we've talked about the De La Warr Pavilion Charitable Trust.

After that then, I moved to work with a group of artists called Cubitt, chaired them for six years. I generally do a six-year run.

Yeah, mm.

And they're a fascinating, self-governing community of 32 artists with their studio spaces in Islington, and a gallery that is used every eighteen months, handed to a bright young curator of potential to really prove their worth and grow. And a lot of outreach work into education of the old in Islington. And the fascinating challenge of chairing a group of trustees for a self-governing community, because people say to me, 'I'd really like meet the director of Cubitt,' and there isn't one. The whole thing runs itself. And, after my six months – six years, there, I moved on from that and I now work with a, as a trustee of a, a foundation that supports a summer music school down in the depths of Devon, the Dartington International Summer School. And Dartington is a very big exercise, with lots of ventures in it, but one of which is this summer music school. So, I, I help there as a trustee of that.

[2:06:54]

And one of the things I read that you are involved in there, I wasn't quite sure how it was being used, it also involves another group that you were involved with, the TMMi Foundation. And... But you integrated that, or brought that into Dartington approach did you, or...?

No. The TMMi, there's the... When outsourcing got going with the Indians in particular, there was a methodology that had come out of America called CMMI, Capability Maturity Model Integrated [Integration].

Yes.

Which had been developed for the, at Carnegie Mellon for the US forces.

Oh right.

And CMMI was the device that was used by the Indian companies when they were beginning to develop their outsourcing capabilities, because they would come to the big Western companies and say, we, you know, 'We are very much more costcompetitive.' And the response in the Western companies was, cost-competitive equals, low cost equals low quality.

Mhm.

And the whole CMMI structure puts a tremendous emphasis on the quality of your processes. So the Indian companies climbed up the CMMI ladder, and were able to say, 'No only are we very cost-competitive, but we are higher quality than you are. Where are you on the CMMI level?'

Right, OK. Now...

Now TMMi came out from that as a specific area for test maturity model integrated.

Right, OK. I'm now with you. So thanks for putting me right on that.

And TMMi remains very strong to this day.

[2:08:38]

Thank you. Well Richard, we've covered a lot today, so thank you very much for your time. But a couple, just a couple of questions really to, to finish off. What do you, from an IT perspective, what do you think of the challenges and opportunities you see coming through in the next ten years?

The challenges are the ones that you keep on coming up against again and again, that, the rate of innovation tends to lead to a lot of people who say, you've got something that's very innovative here. How do we sell it?

Mhm.

Rather than trying to understand where the capabilities of the innovation may be begin to really impact. And then understanding where markets, clients, users may actually want to take benefit in certain ways.

Mhm.

And there's a book that I recommend that, I've actually bought about a dozen and a half copies individually and sent them to key people in the industry, by two Dutchmen, called *This Is Service Design Thinking*, which puts a very heavy emphasis on the fact that if you are developing services, you start with a real understanding of the users and the environment and what they're doing. Now, the challenge you now face is that, your markets, whatever your markets are, are themselves beginning to rapidly change and reshape, because of their capabilities.

Mhm.

So, Cloud computing has now become really embedded, so you've got access to a tremendous amount of computing power. But that's feeding a tremendous amount of young innovative companies, thinking all sorts of new ideas and things, that they can get cheap computing power; they don't need big money to go in. And, you've got all these new capabilities, like machine learning, artificial intelligence, Internet of Things, boiling up, and the real challenge is, how do you understand how companies are going to shift and change their business models to make use of that?

Mhm.

Otherwise, you end up finding yourself getting very enthusiastic about something that people, either are not interesting in or can't fathom or can't put their arms around.

Mhm.

So, Cloud industry, Cloud, as we know through the Cloud Industry Forum, is now becoming far more routine. Doing the CIO 100 exercise, the messages coming in from the CIOs in their submissions this year increasingly were, we've got Cloud under control, we're using Cloud. The real issue is the capabilities that it's now beginning to bring to us, like artificial intelligence. And how do we understand them in the context of our business, and how, almost more important, how do we really understand what our customers are going to be doing with it? Because it changes what kind of services we want to offer our customers. So I think that's going to be the real story of the next ten years. Very major changes coming through. How do you understand the value chain that you're part of, a how all of it is going to change, and where you do your changes in a way to keep building a successful business in it?

Mhm.

CIOs, well I know from CIO 100 exercise, therefore, increasingly, reporting to the chief executive, and having a very much broader relationship in the business purely than running IT, because of the broader issues at play. I'm also a judge for the UK Cloud Awards. This year we had over 350 entrants, a tremendous variety of small younger companies providing all sorts of new developments and applications, based on very deep knowledge, deep intimacy with some corner of the marketplace. So, how, if you're a bigger enterprise, do you put your mind round, how do you learn from your customers what they're seeing? How do you work with them, because, supply chains may be into shift and change? So, a very rich environment. And I think perhaps one of the things that now becomes key is, goes back to my column writing, is the art of being a good storyteller, to really be able to tell people, help them understand what's going on by telling stories about what is happening and what could be happening. And I suspect the most powerful people for the next decade are going to be people who are really good storytellers.

Mhm. So good communicators.

Good communicators, good storytellers, good abilities to articulate the reality, not the hype but the reality of what some of these things mean and how they impact.

[2:13:29]

And, for anyone who's either just starting out or contemplating a career in the IT profession today, any words of advice?

[laughs] We, we talked earlier on about the *Computer Weekly* coming to me, and the cartoon that we've got in front of us.

Mhm.

And, towards the end I was asked that same question, what advice do you give? And I said, two things. Read the *Financial Times* cover to cover every day, and read the *Economist* seriously once a week. Because, the sheer coverage you get of a changing world between those two helps you be challenged and think hard about the environment you're in. And I must admit, I'm hard pressed to think of better advice now. There is such a changing world, that you will keep on touch of the technology, but you need to have windows to that broader world. And, and *Financial Times* and the *Economist* are two devices that continually challenge, with news, with what's going on right across the patch. [pause] Barely an issue of *Financial Times* comes out now without reports of IT or blockchain or things like that, and they make you think hard and become critical about what is the news, what does it really mean, what is really happening. So I think that's, that's the main advice I'd give. Keep reading those kind of things that are not industry techie, but broader views of how the world is shifting and what is actually happening.

[2:15:07]

So, often, a well-used phrase is, know your client. What you're saying is, know the world.

Know the world, because your client will be sifting and changing in ways you've got to divert, I think. The old days, go back to this issue of, this is service design thinking, in the old days it always was really, know your client. What you've now got to do is to know the world in which your client is facing up to all sorts of changes, and therefore you begin to know the questions to ask the client when you meet them, as to how *they* are seeing what's changing. They begin to see artificial intelligence. Are they beginning to use it? Are thy beginning to see it affect their markets? Would they like to sit down and do a seminar with you in which you go together to look at how that supply chain that you and they are part of is being shifted?

Mm.

So, it's, you've got to know the broader scene. Not just the client. You've got to understand the broader context that the client is having to work in.

Thank you very much. Thank you for this great insight, one into your, to your career, and, and your experiences and your, and your thoughts on, on not just the IT industry but industry generally. So, on behalf of Archives of IT, may I thank you very much for participating in this interview. Thank you.

Delighted.

[End of Interview]