

David Mann

Interviewed by

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Welcome to the Archives of Information Technology. It's the 25th of September 2017, and we're in the Livery Hall of the Worshipful Company of Information Technologists, within the City of London. I'm Jonathan Sinfield, an IT professional, and an interviewer for Archives of IT. Today I'll be talking to David Mann, a former Master of the Worshipful Company, a past President of the British Computer Society, and the fourth employee of Logica, where he went on to become its Managing Director and Deputy Chairman. From 1995 David has held non-exec roles in the capacity of chairman or director for a number of diverse organisations operating worldwide. Welcome David.

Thank you.

[00:50]

David, perhaps we can start at the very beginning. So, perhaps you can tell our listeners today where you were, where you were born and when you were born.

Was born in Suffolk, in a little village called Trimley St Mary in 1944. And, we lived in a little cottage opposite the local village school.

And, so, is that somewhere near Felixstowe, is that...?

Yes.

Yup.

Between Ipswich and Felixstowe. Nearer Felixstowe.

Yes. So... Yeah, OK. And... And just a little bit about you as a background following that up, the occupations of your parents, what they were involved with at that time. I appreciate it was the tail end of the war years then.

Yes, well both my parents came from sort of agricultural backgrounds. My mother's family, you know, had always worked on farms in the middle of Suffolk, an area

called Bedfield, they'd been there for generations. My father's family, you know, also had sort of agricultural background. My father was manager of a fairly large nursery in Felixstowe. So from that I've, I've always inherited a, a love of gardens and, and the outdoor. And, still like to spend a lot of time in my garden I think as a result.

[02:18]

Oh right, yes. And your education. Did you go to school locally, in, in the village that you grew up?

Yes, I went just across the road, to the little primary school there. The headmistress there was the wife of the local vicar, and it was almost inevitable therefore that one also became involved in singing in the, the local choir.

Mhm.

Have that as part of one's activities. And also we used to have to dance at local fetes, so, I think I, I indicated, I developed a love of maypole dancing, particularly leading our little group doing the maypole, where I took particular pride in getting all the ribbons lined up properly down the pole.

Right. An eye for detail at an early age it seems.

Yes.

[03:17]

And, at Felixstowe County Grammar School I believe where you did your O and your A Levels. And perhaps you can tell us about the subjects that you took at A Level and your reason for choice of those subjects.

Well, through the school, certainly, you know, developed a, a love of mathematics and the sciences, and did very well in those at O Level, and therefore they seemed the obvious choice for A Levels. So I took maths, pure maths, applied maths, physics,

chemistry, two of those at scholarship level. And, it was the results of those examinations that gave me a place at Cambridge.

[04:05]

Right, And, you, was it a state scholarship that you earned to get into the grammar school, was that...?

No, the state scholarship was what I was awarded because of my A and S Levels.

Ah right.

So it was right at the end of the school, on the basis of having, you know, got Distinctions in all the subjects, I was given a state scholarship. So it was a government grant then to go to university, rather than a local authority grant.

Right. OK, so, so very, I'm sure very useful, and, am I right in saying the school actually got a day's holiday as a result of your academic achievements?

Yes, because it was, you know, very rare for someone from the school to get a state scholarship. Only happened, you know, I think, once before. So the headmaster gave the school a holiday.

And, whilst you were at school, beyond your academic studies, my understanding is, you were head boy as well.

Yes, I was head boy in the second year of the sixth form.

Right. OK.

And during that time we had quite an active social life as well, particularly with the Young Liberals, who were quite strong locally.

Right, OK.

That's where I became more involved with my wife, who was also at the school. And, she was also a member of the Young Liberals.

Right. OK. So you had a, a leadership role early, early on in your career, if I may say that, and, and got involved in politics at, before, before university.

Yes. Although to what extent it was really an interest in politics rather than the social life, I'm not sure.

Ah, right. OK.

It was probably one of those young political organisations.

[05:51]

Yes. And, you mentioned the scholarship was to, for university. Of course, you went to Jesus College at Cambridge, in 1963 I believe.

Yes.

And perhaps you could say what you were studying there.

Well what happened is that after I got the state scholarship I was awarded a place at Cambridge, Jesus College, without any requirement for further examinations. So I then stayed on at school, you know, for one term in the third year of the sixth form, and then went out to do some part-time employment, earn some money. And so I finished up working with Fisons, who had a big research laboratory in Levington. I took some holiday before going up to Cambridge, where I started off with maths, did Part I in Mathematics. And by the time I got to the end of that year, they had started a new degree in Theoretical Physics as part of the Part II of Natural Sciences. So I moved on to that for the second and third year. And I was awarded an Exhibition when I was at the college rather than when I first went up. So at the end of the first year I was made an Exhibitioner.

Which is a term that's unique to Oxford and Cambridge.

Seems to be, yes.

Certainly a term that, I have to confess I had to look up [both laugh], before I met you today. But, it's a... And that was awarded to you, effectively it's awarded for high academic achievement, and, and this was in your first year.

The end of the first year, yes.

At the end of the first year.

Yes. So if you're really good, you become a Scholar. [laughs]

Right. Yes.

And if you're not quite so good, you're given an Exhibition.

But you can still wear the same gown, is that right? [both laugh] So I'm told. Or, or certainly in some universities you can.

Yes.

[07:48]

And so you, you graduate, you graduated from Cambridge. And, I suppose... What particular events would you say shaped your, your education, if we take from secondary school into, into university life?

What events you mean, or...?

Yes, events. Yeah, is there anything specific that you can recall that direct you into a given course? Perhaps your original love of mathematics or something.

I think I just followed my nose with the study of mathematics. I was fortunate at school in that we had one or two people who were really good at maths, but, it wasn't

until I went up to Cambridge that I realised how, how much better people could be, and therefore I was lucky to have some supervisors who were, you know, not only extremely good at mathematics and science, but very good at explaining it. And quite demanding. So often I would, you know, do my work, and go and take it along, and, I can remember the supervisor saying, 'Oh yes, you know, that's very good. But there is a better way of doing it. There's a shorter way of doing it, there's a more elegant way of doing it.'

Mhm.

And I think, you know, that sort of demanding approach was very informative, and, I probably as a result of that became quite demanding myself in, in some of the areas of work.

[09:20]

Yes. Yes, I was wondering how important your, you feel that your educational achievements were to your career.

Oh, I think very. I don't think it occurred to me to go in a direction for employment that wouldn't involve some sort of use of my academic knowledge.

Mhm.

And that's why I finished up, you know, with CEIR. I knew I was going to do scientific programming.

Mhm.

One of the things I did there was, you know, work on rocket trajectories for example. What later came as a surprise is that I, I found I became increasingly interested in the management side, and dealing with people, and getting involved in sales. And so, you know, over the first few years of my career the technical work started to recede more into the background. But I think I've always retained an interest in it. If you look at the companies I've been involved in, I think I am attracted to companies that do

interesting things, had intellectual challenges, as well as, you know, business and commercial challenges.

Mathematics runs through the, through your choice of career, I'd say.

I, I think it does, and, you know, it probably runs through our, our family, and, since my, my elder son, you know, read physics, and my younger son is a neuroscientist, you know, we, we're very much sort of, a mathematical and scientific family.

[10:52]

Mhm. You've touched on one area. But, what key lessons would you say you learnt from education that would attribute to your later success?

[pause] I, I think hard work. I've always been a hard worker. You know, at Cambridge I did work hard to try and achieve good results. But also then, the reward of working with people who are so good in so many other dimensions, and the stimulus that they can give you. So, there's nothing like being part of a team where you've got, you know, really good and inspiring people around you. Again, I, I think over the years, that's the kind of climate I've always liked, where you've got colleagues that you have a great deal of respect for, for their abilities.

[11:50]

Yes. You also mention that, your first job, when was it, 1966, was with an organisation called CEIR, the Corporation for Economic and Industrial Research.

Congratulations, you've been looking it up. [laughs]

I had to look... Yes, dare I say, I had... [laughs] Yes. Yes, well, I'm sure you'll come on, because, on to that, they also changed their name subsequently. But... So, how did that job come about? And that was your, would you say that was your first move effectively into information technology as a career?

Yes, I think at the time, information technology didn't really feature in my thinking, those words.

When I was in my final year at university, I initially thought about, probably going on to do, into academic roles, or into research establishments. But the term 'operations research' had become fashionable, and so I finished up applying to two or three organisations who were involved in operational research. And that's how CEIR came to my attention. They were, they seemed to be a company that, you know, was, was tackling business problems, and scientific problems, using computers, but also requiring people who had a, a real interest in, in mathematics, and in science.

[13:20]

Mhm. I... Did you... I know that at CEIR you worked for Professor Martin Beale, who is known for his, his work in mathematical programming, and particularly linear programming as well. Did you know Professor Beale before you joined CEIR, or...?

No. I met him there. When I first joined there was, I had to go on some courses and he gave some of the courses on linear programming. But like any consultancy, when you were there, you finished up working on a, you know, a variety of projects, and I got involved in one with him, which was to develop multi-progression analysis programs then, particularly looking for a way in which you could achieve the optimum, you know, with that analysis. That was partly him. There was also a man there called Maurice Kendall, and they were both distinguished in that field, and we, we finished up writing a paper together on that. I think it's the last paper [laughs], or the only paper probably, I've written.

Oh right. OK.

With different people I got involved in working on, you know, rocket trajectories, and, Pat Coen, who subsequently finished up in Logica, you know, working on simulation programs. So, when I was at CEIR, all my time was really spent in designing and developing, you know, scientific and mathematical programs.

Right.

A lot of technical work.

[14:52]

Mm. I know you were with CEIR for what, three years, but in that time they actually changed their name to...

Scientific Control Systems. Scicon. Yes.

Yes, Scicon, yes. Yes. So... Which some of the listeners may be familiar with. So you were there three years. And then you joined, or, were indeed the fourth employee, of a company called Logica.

Mm.

Who were, I mean it's of course well-known to, I'm sure, most listeners. Perhaps you can tell us a bit about that, that move or why you chose to make that move at that juncture in time.

It was announced, you know, to, to people in CEIR that, particularly Len Taylor and Philip Hughes were leaving to set up Logica. Later became clear that other people, three other people were going with them. Len Taylor, you know, was someone I had always worked for, was my manager, and I thought, if this was going to happen, that, it would be interesting to see if I could go and join them. So I approached him, and then, finished up, as you say, as the fourth employee in Logica, working from Philip Hughes' home initially in Camden Town.

Oh right. Well, that's... And this was in 1969.

Yes.

And, your first role at Logica was, how would you describe that, what was the position and...?

It was, you know, a continuation of what I had been doing at CEIR initially. Doing work, developing programs, for, typically scientific type applications. And then, during the course of the early years, you know, spending more time managing some of that work with other people working on it. And finding, as I indicated, that, I really liked the management aspects.

Mhm. Right, OK. And you were involved in acquiring Logica's first defence client as well.

Yes. That was an organisation called RARDE, r-a-r-d-e. Had been a client of ours at CEIR, or Scicon, on their war gaming. And, so, I think right from the beginning in Logica we targeted them as a prospective client. And after a respectable interval of time [laughs], we were successful in achieving that, and working with them on, design a new war gaming system.

[17:26]

Mhm. So after three years, you were promoted to the role of a, a manager in the Advanced Systems Division. In that time there was a, am I right in saying, a specific involvement with effectively bringing in of the Internet to the UK?

Yes. I mean, prior to that, one of the things that Logica was focused on was data communications, and, and so during my early work I had also started to learn a lot about data communications, even started to give courses on it, did particularly some work with Charles Read at IBRO [Inter-Bank Research Organisation] on looking at tariffs for future networks. So it was very much part of my Advanced Systems Division to focus on communications projects as well as scientific ones. And we were, we were particularly lucky I think in focusing on, you know, packet switch networks, which were becoming of really serious interest at that time. We managed to get a study from the DTI to go and look at the ARPA Network in the States, and then, on the back of that expertise we, we bid for the implementation of the European informatics Network, and were fortunate to win that, that contract.

Mhm. And that included linking up CERN, or actually, was it, at that stage, or ...?

I, I seem to recall, yes, they were one of the participants in...

Yes. Yeah.

The interesting thing about that implementation is, it required a, a European cooperation, and we had formed a partnership with SESA, one of the leading French software companies. So I was very much involved in making that work, not only on the communications projects like EIN, but also on our work in the European Space Agency, for example on Meteosat contracts. And we had quite a big involvement in the launch of the first meteorological satellite in Europe, doing, on both ground control and satellite-based systems.

[19:38]

Right. David, I mean, very conscious Logica has been involved in many different sectors. I wonder, perhaps you could talk about some of those sectors, for the benefit of our listeners today.

OK. Thank you. Well, I think in the context, from my career, it's probably important to appreciate that, from 1972-ish onwards I had responsibility for profit and loss for the different areas of Logica's business, growing areas of Logica's business. And so my involvement in technical work, you know, receded. Obviously I was responsible for the technical work, but I spent less time doing it myself, and spent more time on management. One of the things I found I really enjoyed was, getting involved sales. I used to love going along and doing the presentations to get new contracts. I also found after a period of time that, when you were faced with doing business plans for the subsequent year, clients were often willing to be very helpful if you got to know them well and they trusted you. So I spent more and more time, you know, dealing with clients, getting to know them, finding out what directions there were in their businesses, what sort of things were done in the past that might be good references for them, and key things that we might work with them on that would also be of more, of wider appeal. And that recipe I think applied across, in many different industry sectors. Well you can look at the development of Logica's business over many many years, see it growing, and you've got these key projects and key relationships along the way.

[21:25]

And, if we look at achievements in those early years of Logica, what ones... I mean Logica were involved in so many different areas, and, so many successes, and had a reputation for their intellectual knowledge and development skills. What particular achievements would you highlight from that period?

Well, maybe we should start with the finance sector, because that became a very important sector for Logica, not just in the UK but internationally. And, there's no doubt in my mind that the, probably the most important contract we got early on was to work on the preliminary design studies for SWIFT, you know, working in many international banks. That really put Logica's name on the map, and moved us from being a, you know, a small unknown company to one which was very well known internationally. We continued to do a variety of work in the SWIFT community over many many years, internationally, including sort of, interfaces to the SWIFT system. The other one that's probably just as important is CHAPS, the same-day clearing system, which one felt very responsible for, that system replacing the normal time clearing in the City of London. And we did work on two generations of CHAPS. And again, that got us, you know, very well known, you know, with the banking community, not just in the UK but again internationally where we also did similar systems for, for banks elsewhere in the world.

[23:20]

Mhm. And, would you say there is any, I say, key events that set you on the, on the road to success for that period of time?

Well as I say, I think CHAPS... I have to refresh my memory. I mean CHAPS went live... CHAPS went live in... I'm going to look it up.

'*84*.

Mm. I had a note of that time.

Right. So you think it was... Well, the CHAPS implementation was in 1984.

It certainly went, I think, live in 1983/84. And that was really regarded as a very successful project, and did wonders for Logica's reputation, not, I say, not just in the UK but around the world.

Mhm.

And then led on to us doing, you know, other projects for, major banks. So I, I look at the 1989 timescale, we were involved with the National Westminster Bank in, doing the redevelopment of a lot of their core systems. ANZ in Australia. So these were big contracts in their own right, and not as known internationally as CHAPS.

[24:48]

And so, putting this in perspective and going a little bit back in time. By 1979 you've become MD of Logica Limited. So very much responsible for the UK operations, and the bottom line of the company at that juncture in time.

Yes.

And in '83 Logica were involved, were floated. Perhaps you would like to talk about, a little about that, the objects and, and the experience of that.

Right. Let me just also touch on the first one, first, then we come to the, the float.

Yes.

The group that I had run in Logica had been very successful, and, on the back of that I had become responsible for more and more of the operations, you know, as you say, across a whole variety of sectors. And one of the things I most enjoyed at that time, you know, was working from clients in, for clients in all kinds of different industries, water authorities, oil companies, banks, space. It was just lovely to go along and meet these clients, to learn more about their businesses. So, I, I regret in a way that people often don't have that luxury today. People finish off working in particular sectors, and OK, becoming specialists there, but it was a real joy to go along and, and learn so

much about all these different business areas. So yes, by the time it got to flotation, I, I had also moved on to be, you know, Deputy Managing Director of the holding company for Logica, Chairman of the UK operations, but increasingly involved with the international operations as well. So I spent quite some time, you know, going and working with clients overseas, BART in San Francisco, United Stock Exchange in Hong Kong, Rafidain Bank in Iraq, and so on. I spent a lot of time on aircraft at that time.

Uh-huh.

[26:58]

The flotation, to take a different subject, was very exciting for all of us, because, it was very early days of software companies coming to the market, and we weren't the first but it was still very much pioneering. And, none of us had been involved in doing prospectus for that before, and it's quite a demanding exercise; I've been involved in several since then. So it was a real learning curve for, for the board of Logica, and as Deputy Managing Director at that time obviously was heavily involved in that, making sure that, the situation, all the projects we were involved in, was correctly reported.

[27:43]

And as someone responsible for the, as you say, the bottom line, post-flotation, did you, heard other entrepreneurs and other commentators talk about additional pressures of going public? Is that something that you, you felt, leading the organisation at that juncture in time, public scrutiny that comes with flotation and...?

I think you become, you know, very aware that all investors like to have methodical advance of the business, you know, each year shows an increase in revenues and increase in profits. Even though Logica was, had become quite a substantial company by that time, we did have our ups and downs, and so it was, it was quite a challenge to deal with some of those. And the biggest upset we had at that time is that we had gone into office automation with the National Enterprise Board in a different part of the company, I wasn't personally heavily involved in that. But that, you know, was obviously a situation which caused us to have some disappointing results, and then

have to sort of recover from that. But you do have these ups and downs, and that can be quite a challenge, to hold investors' interests and confidence through those times.

[29:09]

Mhm. If you think about your, your time at Logica, what... would you be able to say what were the key decisions, positive and negative, that you made, and what difference did they make? I appreciate you were there for 25 years, so, probably, a fair, well, many decisions, but, if you could pick out one or two that you felt, well this really changed direction.

Well I think I would say that the areas that I liked best and, and probably therefore contributed best on, were the management of, of the relationships with some key clients. We moved up and up the league in terms of the scale of some of those contracts. When they, almost inevitably, had problems from time to time, I was, you know, often the one who had to go along and talk to the clients about those projects, try to, you know, retain their confidence in Logica, and get through to the next stage. The, the areas that I probably enjoyed less were, acquisitions and mergers. When you become a publicly quoted company, obviously there's a, a natural encouragement to use your quoted shares to grow more rapidly by acquisitions and mergers.

Yes. Mm.

I always found the acquisition of people in what was essentially a professional services business, you know, really quite difficult, because you were just, buying a number of people; most of the assets were tied up in those people, and their skills and capabilities. If you're buying a product company, it was rather different. So, if you buy a product company, you've got the rights in that, and, and then work around that in terms of its continuing R&D and support. So I was probably never an enthusiast about acquisitions in the professional services field. And they did give me some problems. I spent quite a lot of time trying to resolve those problems, but...

[31:24]

Mhm. And, presumably, we're talking acquisitions, both acquisitions in the UK and overseas as well, which is adding additional challenges.

Yes. Yes, the overseas areas I think gave us the biggest problems, because, as we were chatting beforehand, I mean, you have many markets, you do need that local knowledge, if you want to grow, and particularly in, say, America, you need to have a lot of people who understand the way that business is done in America, have those skills.

Yes.

But retaining and managing those people is quite a different matter, you know, from doing similar things in the UK.

[32:03]

Yes. And, I mean, Logica, with its technological reputation, was, sought of. And so, am I right in saying you had to, there was also a hostile bid for the organisation during this time that you, you had to deal with, if that's the right word?

Well yes, you... We were very proud I think of Logica in the way it ran, so, someone coming along and trying to make a hostile bid was never, never very welcome. [laughs]

No. And, I mean, a matter of public record, it was, Ross Perot's EDS was making the bid. But I, I did know that, yeah, I don't know if there's a certain amount of irony, that, although his bid was unsuccessful, he did manage to buy your previous employer at some stage [laughs], at some stage after that.

Yes.

[33:10]

But... Yes. Looking at your time at Logica, what would be, shall we say, the proudest achievement you would say there?

I, I think it was, you know, the relationships that I mentioned earlier.

And if you take, say, the water industry, I worked closely with the part of Logica that was doing the development of systems for Anglian Water, Yorkshire Water, really large, complex projects. And I used to, you know, really enjoy going along, meeting with people at, at their top board level. And we, we did build a lot of confidence, a lot of good references there, so we were able to just strengthen that business quite considerably over the years.

Mhm.

I would say the same in the gas industry. We developed systems for the control of the natural gas network in the UK. I think, again, I was able to develop a relationship with the senior level there that, you know, enabled us to have quite sensible discussions about some of the challenges on that project, without anybody getting too excited. And celebrate at the end, when everything worked well. Fixed price projects of that magnitude very rarely go completely smoothly. [laughs]

[34:38]

Ah, yes. A real challenge. Yes. If you could look, if looking back at that time, if you had this luxury, what would you do differently, and why?

Well I... I think that one of the things that I have been accused of, and it's probably true, is that I probably gave people too long, too many chances to perform better. [laughs] And, I probably should have been tougher, you know, with some people in getting them to perform differently, or changing them. But I think Logica was a community, you know, where we, we knew each other incredibly well, and it worked well in many ways because of that.

[35:27]

Mhm. Yes. And you've touched on that in your answer, but, how would you describe the way you work with your colleagues, and, and develop them within your organisation?

Well there's the professional side of, you know, systems engineering, and I think it's hard to remember that, if you go back to the early days of Logica, there weren't really any standard approaches for systems engineering. You quite often just started on a project, and, if someone asked you to estimate how long it would take to, to finish it, you would almost have to say, 'Wait and see.' So, we increasingly got into a situation where people expected fixed prices for some projects. And so we had to work very hard to develop standards and methodologies for an engineering approach in software. We put a lot of effort into that. And, it was an area of course of recognising great commonality of interest with the British Computer Society.

Mhm.

So, you know, developed the relationship there, which led on to my becoming, you know, Vice-President, you know, there. Trying to get people in Logica to, to develop their careers through these standards. I can't say it was always successful. The membership of the BCS was never as great as I would have liked to see it. But equally I think people would say that, of course with the rapidly changing industry, it was incredibly difficult for the BCS or any other body to come up with a set of standards and approaches to career development that would be generally applicable, you know, across the industry. It was a very important area to continue to work on.

Yes. Yeah, you were at the cutting edge of the development of the standards, because they didn't simply exist at that...

Didn't exist. So you had to work on it. And, one of the things I did was, when we set up a central unit in Logica, to, to run a project called Sesame, develops systems engineering standards for ourselves. We, we put, had to put quite a lot of effort into that. And not all of my colleagues agreed that it was a good area to invest in. Some people I think felt it was better just to do everything on an ad hoc basis. But, I think it, it was quite important in us, in winning some contracts. If we didn't have those standards, we'd probably have found it difficult, in areas like defence and government. And equally I think, if you didn't have those, it would be very difficult for people to know how to implement these contracts successfully.

And, you talked earlier about the financial impact. Just to give our listeners an idea of, of the size of the company, a company formed in 1969, at the time of the, at the time of the float in '83, what, goes up to about 42 million, and at the time where you, you retired as Deputy Chairman in 1994, what was the size of the organisation at that stage? I think it might be useful for our, our listeners to understand how big the company had grown by that stage.

Yes. So by 1994 we had grown to have a turnover of about 220 million, and employ three and a half thousand staff. And we had handled projects over 50 different countries, offices in UK, Belgium, Italy, Germany, the Netherlands, Sweden, United States, Australia, Hong Kong, Singapore and Malaysia and Saudi Arabia. So you can see why I spent quite a lot of time on aircraft.

Aeroplane. Yeah.

The interesting part of the staff growth is that, I had always been heavily involved in the graduate recruitment, which we did right from the early days. In the early days it was a questions of recruiting a few graduates each year, but as time went on, you know, our graduate recruitment programme became an enormous scale. So we were recruiting over 200 graduates a year. And they contributed a great deal to the growth, the success of the company.

[40:00]

Well thank you for that David. You mentioned standards and mentioned your involvement with the British Computer Society, or, now known as BCS. What were your first dealings with the BCS? At what time are we talking about approximately?

Well I, I first became a member in 1981, and then a Fellow in 1982. And in the first few years after that, to be honest I don't think I was a very active member. But then, as we've discussed, it became evident to me that, Logica was getting involved in some really serious systems engineering projects, and we needed standards, we needed approaches to career development, for people to apply themselves to this.

And so I started to take much more interest, much more interest in what the BCS was doing in this area, to try and encourage stronger links between Logica and the BCS.

Right. And of course, an organisation that you subsequently became President of in 1994. I'm conscious that presidents often have themes. And so I'd be interested in learning more about your theme for, or your themes, for your, your tenure in office as President.

Well I was perhaps greedy, I had four themes that I was talking about at the, the dinner at the beginning of the year and in the report. And they were, electronic communication: the society was in the process of launching a thing called BCS net; secondly, continuous professional development, which I've just touched on; thirdly, strengthening links with the industry; and then, getting ready for a revised grade structure, and a chartered title. We've just gone to the membership to start that process. So those were the themes. And, I suppose the one that I felt most attached to myself was the one about strengthening relationships with the industry. Because I had previously been, you know, Vice-President of External Relations, and it did seem to me that, you know, one of the weaknesses of BCS, it just didn't have as strong relationships with the big players in the industry as it might have done. So I had worked on that when I was Vice-President of External Relations, and during my year as President, that's probably where I spent a lot of my, my time.

Mhm. And... And how successful do you believe you were in delivering those objectives during your time?

Well I think we had some, you know, good, high profile events. For example, the BCS Awards day, which the society had every year, I got Clive Hollick, Lord Hollick, to come along and do the presentations there, so we got so me quite good coverage from that, having a high profile speaker. The awards evening, later we got Kate Bellingham, a well-known presenter, to come and do that. We had the RSA lecture. I'd been involved in getting those going as Vice-President, External Relations. And we had John Taylor of Hewlett-Packard doing that. The Duke of Kent came along to do the launch of the BCS net. So we were generally trying to get more attention,

more newsworthy events just outside the profession. I was involved in giving a couple of distinguished fellowships, one of which was to Bill Gates.

Ah, right. Yes. [both laugh] Oh.

So. So, you know, getting, just getting a bit more news, newsworthy things around. There was a big conference with the NCC down in Bournemouth. The NCC had obviously tended to represent users, and we tried to get the BCS closer to them. The BCS Hay Management Awards, I don't know if you remember, you may...

Right. Yes, yeah.

Just generally trying to get the activities of the BCS more noticed by, you know, wider management within the organisation.

[44:11]

Mhm. So, it seems, I mean, as you say, very high profile events, and...

That's what we were trying hard to do.

Sure, yeah. And, and then... So, raising awareness of the BCS. And, presumably that led to the buy-in of, and attraction, of subsequent members basically.

Oh yes, it did. But equally, as I have indicated, I, I think the, you know, the, the take-up of the professional development programmes and so on, and, you know, has not been as great, it wasn't as great in the industry then as one would have liked. Probably, you know, most people would say that's still the case, and I, I think it's just a, a real difficulty over our industry, because of the, the breadth of it, and the variety of it, to come up with these standards that, you know, people will regard as generally applicable and useful.

Mhm. Do you have an involvement with the BCS today?

Not much now, no. I think when I moved into more non-exec roles, I just felt that my, you know, my activities on a day-to-day basis gave me, you know, less ability to contribute to other things that were going on there.

[45:23]

Yes. And, looking at, moving on to your non-exec roles, perhaps you can talk to us about those roles. I appreciate you work for a number of companies, again, in a period expanding twenty or so years after you left Logica. Perhaps you can tell us, talk us through some of those organisations that you were a member of, your role, your challenges, and achievements during that period of time.

OK. But can I just add one other thing on the BCS...

Yes.

...which I think is important. The BCS had gone through a difficult time before I became President. I'm trying to remember the... I think, they introduced tight financial controls after an operating loss in 1991.

Mm.

So I was, you know, very fortunate that the President before me was John Leighfield.

Right, OK, yeah.

And he and I were able to work together on a program that could be implemented over a number of years, rather than just, you know, taking one year at a time.

Yes.

And I think that proved really helpful.

Right. OK. Good.

And I'll come on to the non-execs.

Good. Yes.

I'll get my list, to refresh my memory.

[46:50]

Right. So... Thanks for your comments on the BCS, very interesting. So, after Logica, Charteris Plc, 1996 I believe. Perhaps you can tell us a little bit more about your involvement there.

Yes. This is, this is rather different from the non-executive appointments I had with other companies, because in, in Charteris I, I was involved in setting up the company, and had a major shareholding in it. And, we just saw an opportunity for having a, a business that, if you like, probably went back to the heart of Logica. It was a business that employed a high standard of professionals, you know, really top level project managers, systems designers, who could work as management consultants with organisations in helping them to plan, you know, their overall IT strategies, helping to organise big projects and so on. So we did manage to recruit into Charteris some of the people I had the greatest respect for in the industry from my time at Logica. And, we, we had a wonderful time growing that business, up to and beyond the, its flotation on AIM.

Mhm.

But it was a very simple consultancy to start with, working only on tying materials with contracts.

Right, OK.

But at a very high level, and, including doing work as expert witnesses.

Oh right. So, I mean, you set the company up in 1996, and then in 2000 you floated on AIM. So, a relatively short period of time, would you say?

Yes. Seems short to me. And then after the flotation, the company was growing, developing. And eventually, sold to, to the Sword Group.

Yes. It had a sort of, a slightly complicated history on the way in that, a bit like we were talking about public companies earlier, there's... Having gone public, and, there was interest obviously from both investors and from managers in the company of finding a way of growing the company more rapidly. So, it diversified into having a more technical business stream, which wasn't just dependent on recruiting senior professionals in, at management level. We did that with a relationship with Microsoft. And that, you know, was growing quite well at the time of flotation, and afterwards. But then, the company really suffered from the downturn in the, in the finance sector, and, it took us a while to sort of, start growing again after the recovery from that. I handed over to one of my colleagues, and, continued to be a non-exec, you know, more, at that stage. But, not really involved in the detail of the company.

Mhm. I think about, eighteen years you were with Charteris, leaving in 2014, after the sale. What would you say was your proudest achievement in that time in Charteris?

I think again, it would be developing, you know, relationships with particular organisations. If you have a start-up company, you know, it's, it's never easy, you know, to get yourself going, and, with the kind of business you would like to have. And I think we were lucky that a number of the, you could say it was part of the planning, that the people we had in the organisation, you know, had those relationships that they inherited from the past, and, those clients were willing to, to give us the business on the basis of the reputation of the individuals.

[51:00]

Mhm. And, in the Nineties, certainly the, from the mid- to late-Nineties, you were undertaking a number of other non-exec roles. Perhaps move on to, to those as well.

Perhaps start with the, AVEVA Group. I'll spell that, in case it gets confused with the insurance company.

Yes.

a-v-e-v-a Group. Am I pronouncing that correctly, or ...?

You were, yes.

Yeah, I am correct, yes. But, not to be confused with the insurance company. Now that's a, am I right in saying, that's a company that was based out of Cambridge. Yes?

Yes, and it's one of the oldest software companies in the UK. It started as a CADcentre, coming out of Cambridge University. And, it had already been going quite a number of years by the time, you know, I joined it. So... It had been floated in 1996.

Mhm.

I don't know whether you know, it's not a question of you, but, just for the benefit of the tape...

Yes.

I mean, this is a, you know, a company that's, even at that stage it was a world leader in the development and supply of software for the efficient design and operation of complex engineering projects.

Mhm.

So it, we're talking about, not just the CAD, but CAD on a very large scale, very big projects, and systems associated with that, that allow you to, not only to design a system but to go on and operate it successfully. So their biggest sectors were in oil

and gas, power and marine, but also, they had work in, you know, paper and cork and chemical and mining. All very, very big contracts. And they had this flagship product called PDMS.

Mhm.

When I joined them they were porting that into Windows NT. A bit like Logica, one of the things that really appealed to me, they were so successful internationally, so they were working in 49 different countries when I joined them, and just talking about setting up new offices in Perth and Oslo, to the ones that they had already got in France and Germany and Australia. So I, by the time I joined them they had been around for a long time, very successful. Just very different from Logica in the sense of, being very product-oriented, and very much specialists in these particular sectors, is what they were doing, you know, all around the world.

As you say, looking at their, their offices, the four corners of the whole world.

Yes.

[53:53]

And, is there any particular achievement there with your work with them that you would like to tell our listeners about?

Well, you indicated earlier on about one's approach to being a non-exec. I think some of the non-execs I have worked with, you know, have often been non-execs of many different companies, they'd never really got very closely involved with the business. Come along to board meetings, say a few words.

Mhm. Yup.

That was never really my approach. I mean I, I always wanted to get to understand the people in the company, ideally have them, you know, take me along to have some meetings with clients so I could understand, hear more about the relationships they had with those clients. But there's always a danger of course if you do that, that, you

go native. [laughs] You, you build up sort of loyalties to the individuals. And, you know, maybe sometimes you don't stand back enough to get a strategic view. But, it's the only way I know of working really, which is to try and build up the same kind of relationships as I would have done, you know, back in the Logica environment with people involved in the company.

Yes.

I like to think I succeeded in that. I had a great deal of respect for both execs and the non-execs in AVEVA, an amazing team.

Mhm. And of course, in your tenure there from 1999 to 2010, the company turnover grew from eighteen million to 148 million, which is, you know, significant growth.

Absolutely. Yes.

Mm. Yes.

And we talked a bit about acquisitions earlier on.

Yes.

I think, with AVEVA in my mind, you have, you know, a really good example of how an acquisition can work spectacularly well. So, they acquired Tribon in 2004, to add the sort of, marine business to their historical business, and that was a, a really big contributor to the kind of growth that you have indicated.

[56:15]

So, where you have... So, you've seen, if you like, both sides of acquisitions, the challenges of, of certain acquisitions, and, happens for all organisations, and hence we hear stats that, what, 80 per cent of takeovers fail et cetera. Whether that be a correct stat or not, it's, it's a significant amount of takeovers, at least are extremely challenging. So, here we have AVEVA with very successful acquisitions. Is there anything in particular that sticks out in your mind that we can learn from, why you

believe that one in particular was successful, perhaps against other less successful acquisitions?

Well, I think in terms of why it's successful, I would again go to the root of the nature of the business. It was also a very, you know, product-oriented business. There were, it was clear that the company was going to be acquiring, you know, a set of products that would go alongside the existing products in a very sort of parallel way. So strategically, I think it's more likely to be successful than professional services that we mentioned earlier when we were acquiring a set of people without that sort of, unifying product to go through all their activities.

Yes.

So I think starts off with a better bet. But, I also think the company was good at putting a lot of effort in to planning, not only for the acquisition, but how it was going to be handled subsequently, the roles of the people within the company going forward.

Mhm.

Mm. They put a lot of effort into that. And it paid off.

[58:00]

I must say... Yes, that's very interesting lessons for us all there I'm sure. In 1995 you became involved with the Flomerics Group...

Mhm.

...as Non-Exec Chairman. Perhaps you would tell us a little bit about this group, and your involvement there.

Yes. I, I became involved in this company when it was planning to come onto AIM, and they were looking for a non-exec chairman.

Mhm.

And, they, they conducted some beauty parades. [laughs] Talked to a number of people. And I, I think I probably, you know, finished up being liked by them on the basis that, they were, they had a lot of scientists within the organisation, and so, recognised me as someone with a physics background they might get on with. The nature of their business in some ways is perhaps a bit like you're in. It's very very specialised, very international. When I joined them they were involved in, in trying to model fluid flow and heat transfer in specific industrial areas. So, they had real expertise in computational fluid dynamics. And, they had developed their two products, FloTHERM, that's modelling, heat flow in electronics; and FloVENT, which is to do with heat in buildings. And so, they had already got offices in Austin, San Jose, Stuttgart and Paris, you know, when their turnover was only a few million. But if you wanted to be operating in that niche as a world leader, then, you had to be international. So they developed Samsung as a distributor in Korea, and K2 in Tokyo. So they were a very interesting little niche company to join. And then try to work with them, to see how you could take advantage of being on AIM to help, you know, grow the company.

[1:00:14]

Mhm. And, yes, I mean... Yes, so your knowledge from, well, Charteris, with AIM, and the flotation, public flotation with Logica, all coming, building on this all the time.

Yes. Well I say, this was, this really starts from a different position from AVEVA though, because AVEVA were already, you know, well-established as a, you know, a public company.

Mhm.

In this case, one had to start by helping people to understand the, the fundamentals of being on the public market, getting ready to make half-yearly and yearly announcements, et cetera et cetera. So initially one's contribution was at the more, more basic level, in terms of running, running the business.

[1:01:00]

Mhm. And also, looking, working with AIM companies, you were involved with Velti Plc as well.

Yes. And that was a very different matter, but, yeah, perhaps again, just answering the spirt of your question, the frustration with Flomerics was always trying to find a way where it could grow more rapidly.

Right, OK.

And... Yeah. A very different growth trajectory from AVEVA, as you've probably seen.

Yes, yeah, mm.

Very steady growth. And, eventually we did get to a situation where we recognised we needed to bring in some new management, so we brought in a man called Gary Carter to come in as chief. But that was quite a number of years later. And then we started to be acquisitive, and, and more aggressive internationally. But, by that stage also there were a few issues with the business, but, they were a really nice team to work with, and the...

Right. OK.

But not as commercially ambitious as the team in AVEVA.

Mm. Are you referring to, almost like the stages of growth of these companies and how they're, how...

Yes.

Their different stages of growth and, and what I, saying, at different times you need different, different individuals with different skillsets to, to steer the ship as it were. Is that...?

Well I, I think so. Because, if you go onto a market like AIM, then, there is a sort of, implication or expectation that you're going to grow quite rapidly, that's why you're coming onto the public market.

Mhm.

AIM brought on some really quite early-stage companies, who I don't think had the maturity to immediately do that. And so this company was still in some ways I would say a bit of a lifestyle company. They had a lot of people who worked together for a long time, very good in their field, but then getting them used to operating as a public company and planning to make acquisitions and mergers, takes a while.

And requires a different level of governance.

Yes.

And which, I think, presumably, well, a lot of small companies find quite a challenge I imagine.

And also if you're a company like this, they are in product development, so, you have R&D coming along in phases. It's quite often difficult to phase that in a way which will give you nice smooth results on the public market. Talking about quite small turnovers, you can easily have, you know, P&L going up and down while you're working through these product companies. So, it took a while I think to get investors used to investing in some of these small companies, but equally, quite a bit of time to get these companies used to being a public quoted business.

Mhm. And presumably, it's also a challenge in getting the investors' commitment to the R&D, all the levels of the R&D. Was that a challenge in terms of, funding or...?

Yes. Well, yes, I mean you know, quite often the investors wouldn't necessarily be familiar with investing in small companies, and they wouldn't even perhaps want to

know about the details of the R&D. They were just, would be looking for some nice smooth results each year.

Yes. Or, or quick returns in...

Quick returns.

...which... Yes, and R&D doesn't necessarily bring that in the short term.

And if you're a small business like this, just setting up sales offices in different countries, getting support organisation in place, you know, it's quite an expensive activity.

Mhm.

Which is why then you want to broaden the base, and, we eventually did manage to broaden it into electromagnetic field, and also into, you know, lower cost areas of the products that they were involved in by acquiring a company in Hungary.

[1:05:00]

Mhm. Thank you for that. So, David, you were involved with Velti Plc from 2006 to 2014 as Non-Exec Chairman first. This company interests me, certainly very much involved in the advertising space. Perhaps you can tell us about your time and experiences with, with Velti.

Yes. Well I got involved with Velti because they were being brought onto the AIM market by the same brokers who, you know, I had worked with for some time in Flomerics. The people who set up Velti were a Greek team, and they were going round interviewing various people in London to be their non-exec chairman when they came onto AIM. And selected me. They were a very interesting company, founded in 2000 by Greek people who had, not only spent quite a bit of time in Greece but had also been to universities in America, and a very international outlook, incredibly ambitious in their outlook. So by the time they came onto AIM they were already, you know, growing, you know, very fast. We had this listing and placing in

2006. Their business, you talk about mobile advertising, just in terms of, maybe different choice of language, but their real business was, not so much in advertising as running marketing campaigns. So, what they would aim to do is to enable organisations to, once they were aware of someone being in contact with them, to plan the overall approach to that, you know, potential customer.

Mhm.

Run campaigns, come up with things that are of interest that you could on the mobile. And that obviously was right in a hotspot at the time. And they were able to grow very rapidly.

[1:07:07]

And, as... You're with the company a period eight years. And during that time there was one rapid growth and some significant challenges with the organisation during your tenure would you say?

[hesitates] Yes. Perhaps put it in context. When I joined them, I think their turnover in the year was about, ten million euros.

Mhm.

And I said, they were already on a rapid growth path, so, they went up to, maybe go to 2008, 52 million; 2010, \$116 million; 2012, \$270 million. Enormous growth path.

Right.

A very, very ambitious team. And, having come onto the AIM market in 2006, then, by 2008 they had already got a presence in 35 countries, 450 employees, and... But one of the key things that, and perhaps, you know, source of some of their problems downstream, is that they, they had tried to grow by taking part shareholdings in companies, they had got a 35 per cent shareholding in a company in India, a joint venture with Interpublic Group, and a 33 per cent shareholding in a Chinese company. So they hadn't, they hadn't been able to buy these companies outright; they had

bought part shareholding, with an earn-out, which is potentially an interesting way of keeping people motivated.

Yes.

But then downstream you've got the commitment to, you know, buy in the rest of the shareholding on some performance curve. So that had been part of their model. It was the most exciting ride I've had in my life. [laughs] Because we, having come onto AIM in 2006, with, you know, Velti Plc as a UK company, with all this tremendous international expansion, we then changed in 2009 to having a, a Jersey-based holding company with tax residence in Ireland. And then, floated on Nasdaq in 2010. And had a secondary offering in Nasdaq in 2011. Yes, we did have some issues, but the point I make is that from 2006 through to 2012 this company was going like a train.

That sounds like it. Yes.

Never, never sat in a boardroom where, you know, people were planning such ambitious growth, and obviously encouraged by the markets that they were in.

Yeah.

But what it meant was that the, you know, the balance sheet was almost always stretched. The management team was stretched. And then you got these acquisitions, which, you know, there was commitment downstream, you know, to, to buy out the remaining shareholdings.

Mhm.

So inevitably, quite a lot of pressure there. But, the founders I think never keen to go to the market to raise more capital, because, if you delayed a bit, and the company was bigger, it would be at a higher share price, and you could always do it on better terms. So. And so it was very exciting. [laughs] And then in...

Yes.

And then in, the horrible year was 2013, where it emerged that, there were a number of issues, and, you know, in particular, you know, the company still had quite a lot of assets in Greece, where the auditors who had been brought in by the bank and so on were saying, you just really have to write these down quite significantly. And, you know, with the Greek scene, one would assume.

Yes.

And that, if you put that into the context then with a lot of other things going on, you can see the kind of pressures that come go on to the company.

Yes. Yes. Yeah, so... Because we're talking about the period of the Greek debt crisis.

Which, you know, led to people taking a much dimmer view on how you could value these assets.

Yes.

I mean, the company had always had customers in Greece that took by, even by UK standards, an awful long time to pay, and by American standards, a, a ridiculous time to pay. [laughs]

Yes.

But somehow had just always been there, and always the assumption that we'll eventually collect.

Mhm.

But, the American investors I think just, were very nervous about that.

Yes. And so, in 2014 the company was, after significant write-downs, was sold to, to Blackstone, and, presumably that's the time when you...

And this team here, that, you know, basically have gone back to where they started from, buying out the original, you know, Greek business, and starting again. [laughs]

Oh right, OK. [laughs] Right.

But they, they were great. I... Yes, we had some huge issues to deal with, but they, they're a great team.

Mm. But, as you say, spectacular growth, but, not wishing to put words into your mouth, I'm sure you won't allow me to either, but, are you saying perhaps lessons for here is, to do with the gearing of the company in terms of, appropriate capitalisation, or...

Yes.

Making sure you've got the money in the bank to, to support the ongoing operations, so on.

Yes. I think the team could just see, you know, exciting opportunities all around them, keen to take advantage of them, as many as you can, and, then, cautious approach, or, one's got more headroom, is not always welcome in that situation.

No.

With hindsight. The company would have been wiser to have more headroom.

[1:13:00]

Yup. True. Thank you for that. Of course, David, you've been involved with several other organisations since the mid-Nineties. Perhaps you could tell me a little bit about that, would be interesting to, to share some of your experiences with those companies.

OK. Well, maybe I'll start with Druid. It was a bit like AVEVA. Druid was a company which I really thoroughly enjoyed, you know, working with on the board, it's another, you know, publicly quoted company. I was appointed in 1996, prior to its flotation in November that year. And it was chaired by someone called David Tebbs, who I had known in the industry for quite some time. A bit like Velti, it was operating in a very hot space in the market, which was to do with enterprise relationship management and e-business. It specialised in helping people in particular install SAP. Enormous demand for people with skills in that field.

Mm.

And so, Druid was in a wonderful place, and grew very rapidly. So in 1996 its turnover was about twelve million; and in '97, 22 million; '98, 40 million; and 1999 it was 60 million.

Mhm.

The management of this from an HR point of view, recruiting all the people to that, you know, was an enormous challenge, and, just amazing to see them, you know, prized of that incredible world. So, the business performed well. And it reached a very successful outcome in the acquisition of IFI in 2000. The board worked well, and had high standards of corporate governance, and a pleasure to be a member of it.

Yes, so...

And I'll just get a quote, one statistic, in terms of the HR challenge which I mentioned, which was that in 1999 the head count in the company increased by 68 per cent to 691 people.

Mm.

That's a hell of an HR challenge.

Absolutely. Absolutely. And, other companies. You were involved with, you've talked about your experience in a, in the financial sector, particularly in your time at Logica, I see, you were involved with the insurance market I know, or worked in for many years. So, your involvement with ROOM Solutions. Perhaps you could tell us a little bit about that.

Yes, thank you. This is a different scenario from the others in that most of my time as a non-exec has been spent in the boards of publicly quoted companies on AIM and on the full list. In this case, ROOM was a private company, and, I was introduced to it by a man called John Buxton, who was, I, I had known from CEIR days. He subsequently had had a partnership with Sandy Douglas, and, Buxton and Douglas, I had known them for a long time. He said, 'I've got these people I know who have got this private company in the insurance area. Would you like to come and meet them perhaps with a view to joining the board of their company and help them find a way of developing it.' So that's what I did. And I took a small shareholding in the company, and became a non-exec director. And, obviously, the corporate governance things you have in a private company, they're not so relevant here, although, you know, lots of the disciplines in terms of doing business planning and management accounting, just as relevant. It did develop to, in quite an interesting way, where over a period of time I introduced a few other people to help them with different aspects, like developing their project management standards and so on. And also then gradually it came to the situation, well, although I wasn't the chairman of the board, effectively they looked to me to chair, you know, the board meetings, and work very much with the two founders, Marcus Broome and John Doran, in formulating the strategies and finding the way forward. As you will know, the, the business that they were in of serving the, the Lloyd's and company market, was a fascinating one. And I, as always I enjoyed learning an awful lot more about the way Lloyd's syndicates and insurance companies work.

Yes. Well, with its, own dictionary of words and...

Yes. Over a period of a few years I gradually started to learn more about what some of these acronyms meant.

Yes. Yes. Of course ROOM, two founders, sold out to the Indian company NIIT in 2006, at a time when I think actually, they probably had the majority of syndicates under their belt.

Yes, they've done very well.

The dominant player in that, in that market.

It was great, it was very interesting to work with the two founders, who were the major shareholders, and, and the other people in the company, and trying to, you know, formulate a strategy, you know, for what they wanted to do with the future, and, and once they had got agreement, that probably, being acquired was the right way forward to then, you know, help them in planning and executing that.

[1:19:00]

Mhm. And, going back earlier in our discussion today, I remember you talking about, working on certain aspects of the space programme with Logica in early days.

Continuing that theme, Single European Sky programme, I think you had to ... You joined NATS in London in 2010.

Yes, well, NATS were going through an exercise where they were planning for the implementation of this single European Sky programme, which is an absolutely amazing programme going over some 20 year-span, to change the whole way in which air traffic control works across Europe. They wanted to appoint two special advisers to the technical review committee of the board. And, it was very interesting for me to find that at one stage I had been selected; I didn't know who the other one was. And when I, we turned up, I found it was none other than Roger Graham. So, Roger Graham and I had a few years of, you know, commuting down to Swanwick on the train and participating in these discussions there.

Mm.

Yes, it, in a sense, unlike some of the corporate governance roles we've been talking about, this took me right back to my roots in, you know, big systems. Logica had actually been involved in quite a few programmes in the air traffic control field, so I, I knew a certain amount about the application area. But the scale of those systems now, and the scale of the challenge in designing these systems to operate right across Europe in a new way, made my head hurt a bit I think. [laughs]

Mhm.

I realised I'd probably got a bit older in the intervening years.

Mhm. Yes. So, there's more to it, a technical adviser.

Well we... I think, it was the Technical Review Committee of the board.

Right.

So, it was more involved in the board, would be, in reviewing these programmes, but, I wouldn't say it was a, primarily a technically oriented role.

No. No no.

I was more concerned with, have they got the right resources to, to help them take this forward. I think both Roger and I would probably say that, one of the key things we were involved in was, you know, arguing that they should be recruiting a chief systems architect to help with planning the recruitment of that person, which is a very challenging role for NATS.

Yeah, absolutely. Yeah. And, yeah, a crucial one, particularly for, as you say, air traffic control, safety. Very important to, to us all that this works efficiently. And, well thank you very much for that.

[1:21:51]

David, I'm also conscious that, since 1990s and early 2000s you work for, did work for Ansbacher and Cambridge Display Technologies, Ansbacher as a non-exec director, and with Cambridge as their non-exec chairman. Perhaps you could tell me a little bit about your experience with those two organisations.

Well Cambridge Display Technology was a, a fascinating company in that, lightemitting polymers had been discovered in the Cavendish Laboratories in Cambridge, and they had spun out this company to exploit that, with shareholdings from the university and the colleges. So I joined them when they were still, you know, very young, they were looking for a non-exec chairman to help take that forward. And I was introduced by one of the venture capital funds in Cambridge. And I, I really enjoyed almost with them starting again from first principles, a bit like Flomerics, helping them to develop the business plans, making sure they had management accounts in place. None of the wider corporate governance, you know, things, were terribly relevant at that stage. And a great team of people to work with, some interesting shareholders. The one thing I found there is that, I really, increasingly sort of realised that, not having a, a background in the development of these sort of electronic devices, you know, was a weakness for me. I had never been involved in trying to bring hardware of that nature to the market. And I felt that, that it was quite, it's quite clear the company needed to move on to different shareholders who would bring more funds in.

Mhm.

And, you know, I was glad to see that eventually happening. Lord Young, you know, brought in some new investors who would help plan that, with, all relevant backgrounds, and it went on to subsequent changes in shareholding. And it's exactly what the company, you know, needed I think then. It just brought home to me as a non-exec chairman, maybe as a personal approach, I think I perform best when I've got some real feeling, understanding of the business area, and, can help the executives to formulate their strategies and plans.

So, if I'm understanding you correctly, you're saying, you want the technical knowledge to understand the product that you...

To a certain level.

...you're., you're involved with, whether it be selling or making. Am I...?

Yes. I mean, maybe it is just my personal approach, but, no, I think there's a lot that one could do, and we did do, to, you know, get the plans in place, to put proposals to... I mean it was clear, they always had to raise more money to, you know, finance the research. One could help put those plans together, make sure they made sense financially. It's not the same doing that for me, when I don't have a gut feel, really, what's the best way of taking this business forward?

Yes.

Whereas if you take, say, a company like ROOM, you know, I think one would always be there, understanding how projects and the software industry can work, the sort of relationships with clients.

It's that level of understanding, or...

To me it is important.

Yes, important. Whereas, perhaps others would say, they'd have a more generalistic approach and say, this is all about management. You as an individual like to get involved. You've talked about the closeness and building relationships with your senior executives in the organisations you work with, and that's clearly come across as being important to you. And, also, a knowledge of the, of the products or the services that those organisations are, are offering.

Yes. Or in this case, you know... Yes, I mean as someone with a physics background I can understand to a certain extent the technology, but what really mattered was, what does it take to take a technology like that, develop it to a point where you've got satisfactory prototypes? How long have they got to be in the field

before they're proven and you start to get adoption, you know, by the different major players?

Yes.

That's, that's not an industry sector that I had had real experience of. And I, I felt conscious of that. But it was, again, a very interesting company to work with, and again, great people, including some of the shareholdings from the university and colleges.

Yes. Yes, I mean, throughout your career, a lot of the organisations have been involved, came from the Cambridge... So it seems to me, you've got a fair number of Cambridge connections throughout your career.

They're quite, they're quite good at using their grapevines. [laughs] And...

Yes. [laughs] And in 2000... Sorry, I interrupted you.

[1:27:00]

I was going to comment on Ansbacher.

Yes. Yeah.

Ansbacher was very different in that, Ansbacher had been acquired by FirstRand, you know, the South African company. Their business was in trusts, handling trusts in different, particularly offshore trusts, were keen to go more into investment management. FirstRand, you know, had a really good corporate governance approach. So although, they had 100 per cent ownership of Ansbacher, they wanted non-execs to be there in the same way as they would be, you know, with a publicly quoted company. And they did that in an impressive way. And so they, so they had 100 per cent ownership, they would listen to the board discussions, welcome input from people who operated in the UK. So the corporate governance aspects, they handled really well. A very impressive chairman, who, I learnt, I think, a lot from

him. It was also a great pleasure learning more about trusts and investment management. [laughs]

Right.

You can see, I don't... I always quite like trying to learn about new areas, and that was an opportunity to do that.

Indeed. Yes. So you don't consider yourself a frustrated accountant then obviously. [both laugh] I will retract that comment.

Yes, please don.

As an accountant. [laughs] Yes. Right.

And they were acquired, FirstRand just changed their strategy as to which areas they wanted to be involved in, as big companies do from time to time. So, it's that question of, you know, working with them on a sale of the business which eventually went to Qatar National Bank, I think particularly attracted probably some of them, the office they had on the river in London. [laughs]

Indeed, yes. Mm. Right, well thank you very much David for sharing your experience of your, well, fascinating career. Certainly been a pleasure to listen to.

[1:29:09]

David, outside your career, and throughout your career, you've been involved with various different voluntary organisations. We've talked about your, about your involvement with BCS and your time as President there. I know you were also a member of the Engineering Council as well in the early Nineties. As we're sitting in the Worshipful Company of Information Technologists Hall, it would remiss of me not to ask you about this organisation, your experience with WCIT, your role as Master. Because I'm sure there will be some listeners out there who know little about this 100^{th} livery company in the City of London.

OK. Well I think like several of the other people that you'd be talking to, I got involved in the Information Technologists Company when I was approached by Barney Gibbens and Alan Benjamin in the early Eighties. They told me that they were setting about forming this City company, and they needed 100 people to get together to, to get it going, and would I become one? At the time I must say, I knew virtually nothing about livery companies, other than having used their halls for corporate entertainment, you know, and various Logica events. I knew some of the buildings, but knew very little about the livery companies themselves. I started to learn, rapidly, and thoroughly enjoyed the meetings one got involved in. And, from there, it has really developed to be very much a continuing interest for me, not only the Information Technologists Company itself but the other livery companies, and, and City activities. I, I got hooked in initially to, in the ITC, for, to organising, you know, various events, like, walks, I think we had some sponsored walks. Then, obviously, getting on to the Court at a time when I still had a very busy role in Logica. But as I could see I was retiring from sort of, executive work, it did seem to me that the livery company offered a very interesting vehicle for, as is often, the phrase, thing, putting something back. It's a very well-established structure I think for people to continue having an interest in education and the trade and social activities. I certainly found that in the Nineties I was able to give I think an increasing amount of time, you know, to the Company. I spent a lot of time on the Company obviously when I was going through, and becoming Master.

Mhm. And you were Master, 1997 to 1998.

Yeah. Seems a long time ago now doesn't it. [laughs]

[1:32:24]

Mm. And, very briefly, I mean, the relevance of livery companies today and particularly the, information technologists, how would you summarise that for our listeners?

Well I think the general model of providing a framework for getting involved in things, in your own trade, in education and social side, and, seems to me to work incredibly well, and I suppose it's why the livery companies have been so successful

over so many years. I think there are many people like myself who, you know, maybe have had or continue to have a role within their organisation. It's very nice to have another vehicle where you can have wider links, and do completely different, complementary things. I think it works particularly well when you're in part-retirement, or, continuing retirement, because you've just got more time to spend on these things, and, the livery company is there to provide a natural vehicle for doing that I think.

Yes. Yes.

I think there was a stage where the livery company, possibly became a bit too ambitious in thinking it could influence things in the industry.

Mhm.

I can remember one or two things, I shan't mention them, where I think we just bit off a little bit more than we could chew, because at the end of the day we are very dependent on volunteers, and it's one thing to find volunteers who can start programmes, but you have to find things that volunteers can sustain.

Mhm.

I think we, over the years now we've settled down to recognising the things that we can make useful contributions to, and those that are probably best left to other people, you know, within the industry.

Yes. Mm. I mean the Company itself has originally been involved in the establishment of a school, the Hammersmith Academy.

Well the education side I think has always been very important for the livery companies. It's great to see this organisation now building up those relationships. Again, we started off with The King's School, Grantham. I used to go up and visit, you know, Grantham, and so on, including speaking at their Speech Day. But I think it became clear that that wasn't a natural relationship for us, it was just too far away,

there are no sort of, natural City links there. Whereas the ones we've got now I think fit much more naturally with, with the work of the company.

[1:34:48]

Mhm. Well thank you for sharing that with us. Another organisation that I noted that you are a member of is the, now, correct me if I'm not pronouncing this correctly, but the Athenaeum Club.

Well I always say Athenaeum, but... [laughs]

Yes, well... [laughs] Right. The club. Yes.

The club.

Yes, yes. A Pall Mall club no less. Perhaps you can tell us about your involvement with that particular organisation, and, and indeed about the club itself, which has a very distinguished past, and current membership as well.

Yes. Well I, I was familiar with the Athenaeum going back a number of years, where, through our business, particularly with the Civil Service, I was often invited to have lunch there with politicians and civil servants that were clients of ours.

Mm.

In the late Nineties I expressed an interest in joining, and was fortunate enough to have David Morris as, I don't know, another past Master here, proposed me for membership. I started going along to events. And it's one of those clubs that, the more you turn over the stones, the more you find of interest.

Mhm.

It does have a very interesting membership, 2,000 people, many of whom have achieved quite a lot in their careers. But always a pleasure to sit next to the people there. I don't think I've ever met someone who is not interesting. [laughs] But right

across all these fields. So my background in Logica and working with, you know, all those different sectors, I think was quite helpful in building up an understanding of, you know, people in different sectors of the community. I was then approached to join the Wine Committee, which I, when did I join that? I think... 2010?

Mhm.

So I, I had been an ordinary member for, you know, ten years, going along to an increasing number of events, and then joined the Wine Committee. Each committee works for six years. And, so you're on a, you go onto a committee for six years. The Wine Committee was obviously right at the heart of the club, most members have a very active interest in wine. So that gives you a very good vehicle for understanding the working of the club better, getting to know many more members.

Mhm.

And at the end of that time I, I became Chairman of the Wine Committee, and then, currently, I moved on to the General Committee of the club, and now the Executive Committee. So I, I think I have moved right to the heart of the club. [laughs]

Right.

The Executive Committee is quite a small committee that, effectively runs the club.

Mhm. I should say for our listeners, from my reading, I mean the club boasts, or has certainly in the past had, representatives from every possible Nobel Prize category, members who were awarded Nobel Prizes.

Yes, there's a special book at the top of the stairs inside the club which has all the Nobel Prize winners in it.

Mhm.

Impressive collection.

[1:38:06]

Mhm. Thank you for sharing that with us. Moving back, I mean, from the Nobel Prize, but, to the IT industry per se. What do you think are the biggest challenges and opportunities for the IT industry in the next ten years?

Well, it's [laughs], a pretty sweeping question, that. But I, I suppose I look back to companies I've been involved in in, you know, from early stages, helping them to grow, and thinking about what that challenge will be like today. I, I think the secret is even more, finding, you know, those niches which are, are really in good places in the market, and then finding the right support in helping an organisation to grow rapidly enough to, to benefit from that. Because, often those markets don't stay the same for very long, so if you don't reap the benefits while they're there, then, you maybe will miss the opportunities. But as we've also seen, sometimes you can, you know, run a bit too fast and be a bit like Icarus and go too near the Sun. [laughs] So, it's still finding those hotspots, being very ambitious, but equally trying to make sure you've got the support in place to have a viable business, if it is growing very fast.

[1:39:33]

Mhm. And, if someone was asking you for advice, or what advice would you give to someone entering the IT industry today?

[pause] I'd... I think I would ask people to, first of all what they mean by the IT industry. Because, it's become so large and varied, that there are people with all sorts of roles in it. So I, I think, someone would have to start by saying, well, what particular kind of role are you interested in? And of course often people don't know. They start off in one role and then it goes on to another. Some people I think do mean systems engineering, computing science, and some of the areas that we've been covering.

Right. Yes.

And if you want to do that, I think, you know, a very good approach is to go to a university that does have some of these splendid courses in that field. But of course

that only accounts for a very small proportion of the people out there working in, in that kind of role.

Mhm.

The other end, I think quite often people developing more general management experience can be just as important. There are some of the people I work with who are, with respect, have an accounting background, or a, an MBA type background, can often contribute as much as if not more to the development in IT as some people with detailed technical knowledge.

Mhm.

So I don't think there's a single answer. I think it really depends what kind of role you want to have in this huge and exciting industry we've got still.

[1:41:17]

Well thank you very much David, and, and thank you for spending time with Archives of IT today. There's one quote, when I was doing some research on Logica, that I wanted to read to you. And it described Logica at the time when you were working there. And, and it described Logica as a company 'fizzing with technical brilliance and intellectual spark'. Is that something you would recognise?

I suppose we like to feel that, yes. [laughs]

Yes. I think it's a great credit to you.

It did have that buzz about it.

Mhm. Mm. Right, so thank you very much for your time.

Thank you. Thanks for making it so easy.

Thank you.

[End of Interview]