Charles Hughes

Interviewed by

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It's the afternoon of Wednesday December 3rd 2017 here in London, England. I am Alan Cane, formerly of the Financial Times, and today I'm talking to Charles Hughes, one of the best known and highly regarded managers in the UK information technology business, with a career stretching back to 1967, much of it spent in ICL, the UK's one-time computer flagship. He has also been a Government adviser, at critical times in the development of the UK IT industry.

[00:37]
So Charles, could we start by you giving us a few, a few of the things you've learnt from your time in the industry.

This is my fiftieth exciting year in the IT industry, and during that time I have championed professionalism and collaborative working, both of which I believe to be fundamental to success and development. I've taken a leadership role in the development of what I generically think of as the infrastructure of the IT industry, meaning all the organisations and institutions that go to make up the support structures, the development structures, the philanthropic structures for the industry, ranging from the Real Time Club, the Parliamentary IT Committee, CSSA, as it was, UKtech as it is now, through to the Chartered Institute for IT, and the Worshipful Company for Information Technologists. One message I learnt earlier on is that there is no such thing as an IT project. All projects are business projects, or ought to be business projects, which are facilitated by information and communication technologies. And the moment that people try to implement a pure IT project, then, without exception they end up with results which do not meet the business need.

[02:22]
Charles, can you tell me something about your background? You were born in 1946 I believe, at the, before the modern computer industry started.

In Manchester, and I regard Manchester as my home city, for various reasons which we will probably touch on. I was very fortunate in that my parents sent me to Stockport Grammar School, a direct grant school at the time, and they managed to pull together the fees to send me to Stockport Grammar School from 1952 to 1964. Little did I realise at the time that, although Stockport Grammar School is one of the

oldest schools in the country, it was founded and has got close connections still with the livery movement, and as far as I can determine it is the oldest school in the country with connections with the livery moment.

Oh really.

With Sir Edmund Shaa, who was Prime Warden of the Goldsmiths' Company, and Lord Mayor of the City of London. At the time that meant very little to me. It meant much more in my later years.

[03:34]
Your father was a British Railways clerk, I believe.

He was.

Yes. What kind of a man was he? I mean did he, and your mother, did they have a belief in education and, they had sent you to a direct grant school?

Very strong belief. And, I'm very fortunate to have had two parents who took such a keen interest. And, I ended up being the first member of our family, the first member of our broad family, to go to university. And, I went to Manchester University, not knowing what I wanted to do ultimately. I had been good at maths at school. So, I applied to universities to do a maths degree, and got into Manchester, which of course was at the time the leading university in the world for computing, with, just next to the maths building, the Atlas mark 2 computer. And you couldn't do maths without getting involved in the computing. So I learnt Atlas Autocode, and was then aiming at the end of my university career… I, I, all the way through I had been more than a year ahead of where I should have been, a year younger, and, that, that was fine at school. I think sometimes that I would have been better off at university if I had been the same age as my contemporaries, but that was not to be, and the finance wasn't available to sustain that.

No.

So I was looking to do two years of Voluntary Service Overseas at the end of my university degree, which of course would have enabled me to put off the decision as to what I had to do. And, I applied to VSO, and found them at the time a very difficult organisation. They were unable to tell me where I'd be going. They could not tell me what I would be doing. They could tell me that my two years would start in January. And of course, all the companies I was interested in joining started their graduate training progrmmes in the August/September/October span. So, rather than ending up two years behind, this would have added three years on. And, I do like things to be clear, and I like to know what I'm doing, and so, I decided to get a job. I applied to a number of IT companies, computer companies in those days, because I thought, it's been interesting and exciting, and I applied to ICL. I didn't. I applied to ICT, English Electric, IBM, and UNIVAC. Got offers from all of them, graduate trainee in every case, and, on the basis of the best defined, and as far as I could see richest training programme, for two years, I chose ICT, and started with ICT on the grand sum of £1,050 a year.

[07:08]
What sort of career did you have in mind at that time? After all the industry was still very new. Whet could you foresee happening?

Oh I, I knew for sure I was only going to be with ICT for two years, just to do the training programme, and then I would work out what sort of career I wanted. As it turned out, I was with ICL for thirty-two years, and, during that time rarely had a dull moment.

[07:37]
Between '67 and 1969 you were a graduate trainee. Now what did that involve?

We started off at the training establishment that ICT had in Cookham, Moor Hall, which is now the headquarters of the Institute of Marketing I believe. And, we started with six months at Moor Hall, and that was everything from basic programming, systems analysis, sales, and a bit of financial understanding. So the aim was to translate these graduates, bright, bushy-tailed, bright-eyed, into business people. And then at the end of six months one was let loose into a sales region, and that's when I

discovered that, having believed I knew pretty much everything, that I was starting from scratch. And then we alternated over the next, the whole of the two years, between Moor Hall, other training establishments, and I was based in National Research region in High Holborn, 88 High Holborn. Started there, and started making contact with a whole range of customers and research associations.

[09:02]
Mm. Was it the business side of the computer industry that attracted you at that time, rather than the technological side? I mean you were a mathematician, you had learnt programming. What was keeping you interested in the industry?

My initial training as a graduate trainee, as with everybody, was to become a systems engineer. And, very quickly during that two-year period I was asked if I would mind transferring to become an assistant sales engineer. And so I moved rapidly into the sales stream, and found that I really enjoyed that. And from then on, over the next few years moved really quite rapidly through the assistant sales engineer, sales engineer, account manager, all the way through to account director. And…

Yes, good. From '69 to '75 you were a sales executive, and you were selling to, to Government and research establishments. Now, how, how easy was that? You're selling British computers to British Establishment. Was it an easy sale, or was the competition fierce?

I was very fortunate that, some of the customers I, I had, were already committed ICL users. So the big issue was, when they chose to change their main computer system. And certainly research associations and others would look on a broad base. There were, as you are implying, a number of organisations who believed that it was right and proper for them to buy British, and of course by this time ITT and English Electric Leo Marconi had merged, and we were ICL, and we were the only substantial UK company. So, I found particularly in regional health authorities that there was a significant propensity to lean toward ICL, which was good. But we also had parallel runs with central government, trying as best we could to maintain the preference for ICL systems. That of course did not apply to all of the customers, and shortly after the merger with English Electric, I was asked to get myself up to speed on the System

4 range, and, I undertook a number of training programmes and secondments over a short period of time to become aux fait with System 4. So as well as PLAN, I could at one time program in user code. And of course it was by this time that I had recognised that Atlas and its Autocode at Manchester was so far ahead of anything else that anybody had, and pretty much everybody else was retrospective in where, where they were. And that was when I was asked to take under my wing the United Kingdom Atomic Energy Authority and British Nuclear Fuels.

This was in the 1976-1978 time window.

This… Yes. Just a, a bit before that.

[12:45]
Ah, OK. Mhm. Who was managing director of ICL at that time? I wonder, was it Arthur Humphreys?

It would have been. It was certainly Arthur in the early days. Had it changed by now to Geoff Cross? I don't… I'll have to check the timescale.

That's a point we can check. But, this was at a point where the 1900 series became the, the main product in the ICL range?

1900 was for the whole of this time the main product.

Ah.

And then in… Well and System 4 of course, because the company was selling both systems. And I had the unpleasant job at one stage of telling a whole pile of customers in the academic sphere that their beloved operating system, MultiJob, was going to be scrapped. We had a New Range announced in 1974, and, the UKAEA and BNFL had decided that they wished to upgrade and replace their computer systems, which were IBM and System 4, spread across the country, headquartered at Risley. And we had various different bids, and, they then were appraised confidentially of the New Range, which of course became the 2900 series. And we

started a campaign against IBM with New Range, and I, as account director, managed that campaign for a couple of years, and we won the contract for a large 2980 system to go into Risley, a 2960 system to go into Winfrith, a significant link to systems at Dounreay, Springfields, and some of the other outlying sites, and they became a communications network processing system.

[15:07]
IBM would have been the main competition at this time?

They were. And we, we beat, we got IBM locked out.

How did you beat IBM?

By having the best computer system on paper. Because we had a brand new, sparkling New Range system, 2900s, and, the operating system VME, VME/B as it was at the time.

VME/B?

Yeah.

Mm.

Which without any doubt, and I still believe this, was conceptually the best operating system for mainframe systems for decades. The problem was that, 2900s didn't exist in reality in terms of being fully operational. We were at a situation in the early days, [laughs] I recollect, when, when doing demonstrations or trial runs, then the machine was crashing very 30 or 40 minutes, and it took upwards of 20, 25 minutes to reload. [laughs] It was, intriguing times. And so we entered into a significant contract with the UKAEA and BNFL, which at the time was the largest contract ICL had taken, it was about £5 million. And I also believe that the 2980 that we sold them was the largest computer that ICL had ever sold.

So was that essentially a development contract, to, to prove the machines, to improve them, to, bring them up to full specification?

It turned into that. You know, clearly, the AEA wanted a fully operational computer system as soon as possible. So, we ended up in a situation where we did a significant amount of off-site testing. We eventually got a building on site at Risley, a brand new building, and they built the computer hall, vast computer hall, first, and then around that, progressively built the office blocks and the office buildings. And that computer room, into that we put a big 2980 system. So the project team was spread across the site, and we were in the unusual situation of, every time we wanted to go across to the computer hall we had to wear wellington boots and hard hats, and it was really muddy, specially over the winters, to get to a, a sort of air-lock room where we changed into special boots, white jackets, white coats, to get into the computer hall. It turned into a development project, because we ended up with a whole series of things which were not being tackled on site elsewhere. There were other systems. There was one at Bureau West, which was doing a lot of commercial work on COBOL. We of course were heavily into FORTRAN, we were taking programs from the IBM system and running them. We were finding differences in the results between our system and IBM. So the FORTRAN compiler was under detailed inspection. The scientific processing unit, which we also had, was unique – not unique, it was the first one.

Mm.

And then a series of communications network processors and a whole networking system, particularly of course linking each of the remote sites, and especially the 2960 to the 2980.

[19:02]
Mm. I think Geoff Cross must have been Managing Director at this time. Would that be right?

I believe so.

I think with the 2980 certainly. And, his, his cohorts, Brian O'Heron and Ed Mack, would have been there. Did you meet them?

Yes. Yes, yes I did. Yes. Yes, I, I remember…

How did you get on with them?

With Ed Mack, pretty well. He was a very bright guy. Vivid recollections of giving presentations to Ed Mack, and you had to produce the slides with at least double-size characters, and even so, he sat within a few feet of the screen to be able to see it. Very bright guy. Cross also I found OK. O'Heron, wasn't that keen on.

He was a bit abrasive, if I remember rightly.

Yes. Yes. But I think, unnecessarily so. You know, it's… In my view, it's, it's fine to be abrasive if that is going to have an impact, and, and you're making a sensible point. But, I… So I didn't see a great deal of him, I am pleased to say. But, you know, people like Mike Forrest and so on, the development teams being at Warrington, just outside Warrington, then of course we were very close to West Gorton where the 2900s were being built. And we had intimate contact with people like Tom Hinchliffe and stuff who were running those outfits.

Mm.

And, I put in place a project team, on-site project team, of 60. We ran 24 hours a day, seven days a week, to get all the trials, tests and development done. And, by amending progressively to suit the authority and ICL the terms and conditions and what would be best for both of us, we ended up delivering the whole of the contract on time, within budget, and, to the customer's satisfaction, and they stayed with the 2900, Series 39, for a long time.

[21:18]

Mm. At that time, what was the feeling within ICL, what was your feeling, I mean was this going to be a world-beating company, was it going to take on and beat IBM? Or… What was the feeling?

I was quite convinced that we had the staff and the skills to do that. I have still tremendous respect for the people in ICL. And you've just go to look where many of the people in ICL in those days went and what they achieved. I also believed that 2900 and VME was a world beater. We of course, although operating in, oh, 40, 50, 60 countries, by far and away our base was the United Kingdom, and, some of the ex-Commonwealth, South Africa, Australia. So, the fact that we had such a small base, the fact that we could not sensibly penetrate Europe, that we never got anywhere near the United States, just meant that no matter how good the products were, we were not going to compete seriously with IBM.

So this was a matter of market size really.

Yes.

[22:40]
Mm. OK. In 1978 you were seconded to the Managing Director of ICL. I don't quite know who that, would that have been Cross at that time?

That was… That was Dr Chris Wilson.

It was Chris Wilson.

Yes.

Mhm. Right. Now tell me about that. Why, why did that happen?

I… I had been put in the situation of being the account director who sold all the systems to the Atomic Energy Authority, and the company had employed a top flight project manager to project manage the implementation. And he came in, and he was there for three months when the customer asked if he would be replaced. And

specifically, they asked Peter Bonfield – no, Geoff Cross at the time, if I would take over. I had little choice. But I have to say, it's not very fair to give a sales account director the task of implementing the systems that he sold. I did spend three months as both Account Director and Project Manager, and I had lots of arguments with myself. At the end of that, we, as a company, were having issues with Government, central government in particular. They had got to the stage where they were finding that some of the stuff that we were doing was unacceptable, that it was not coherent in terms of being tied together across the whole company, and were applying pressure to Chris Wilson and his team to get it sorted out. So I was asked to work directly for Chris with a team of eight directors spread across the company, to put in place a significant change programme, for our interface and responsiveness to central government to be changed.

Who were you dealing with directly with central government?

Senior civil servants and… [loud car horn] Senior civil servants and ministers. I can't remember their names.

Would it be the CCA, then, the Central Computer…?

Oh and certainly CCA. Yes.

So you might have dealt with Ray Atkinson or…?

Yes. No. Yes, absolutely. Yes.

Yes.

Yes.

So how did that, how did that go?

It went very well. We, we quite quickly worked out what we needed to do. A large amount of the issues had been a divergence between… [background noises] Shall we…

[pause in recording]

[25:30]
Yes. Government relations. Why did government relations have to be improved at that time?

A couple of reasons. The Government were giving preference to ICL. I don't think, I know, that they did not believe that they were getting the level of attention and service that they thought was appropriate, and also, there were a wide range of different divisions from development all through to the different sales divisions involved in the interface with Government, and the coordination between those different divisions was at best poor.

[26:13]
Mm. I see. Mm. I'm interested in the fact that, you seem to have moved through the organisation very, very quickly. You know, you, you joined in '67, and by this point you are seconded to the Managing Director and working on, you know, these sort of very high profile projects.

Mm.

Why was that? Did you have a mentor within the organisation, or…? How do you think you moved so quickly?

I, I don't know. I, I hope because it was because I was being successful and… I, I never applied for a job in ICL. I was always fortunate, and as you've commented, I have had a wide variety of experience.

Mm.

And, enjoyed more or less all of it, and have found it illuminating to see a corporation from many different angles. A number of things came to mind when looking through my various CVs. One was that I ended up really quite quickly in an area where I was working with government or quasi-government organisations. And this was not by choice, but, as it turned out, the rest of my career has been along those sorts of lines. And that's stood me in good stead. The other thing was that, being in sales, I quickly discovered that working with people, collaboration, negotiation skills, and indeed political sensitivity, with a small p of course, were vital, and, I enjoyed all those sorts of things. And I think one reason – two reasons, I got the GRIP programme, because it was out of the blue, completely out of the blue, was that I had just finished a very successful implementation, and that I was perceived to have at least a reasonable understanding of how the Civil Service thinks and ticks.

[28:35]
Mm. Mm. I mean people like Ray Atkinson, who we've already mentioned, you know, were very sensitive to the whole IT business, very knowledgeable.

Mm.

Did you find that in general, I mean, in Government?

[pause] My view of central government has crystallised over the years, and, as we, maybe we'll talk about later, I spent two and a half years working in central government, and I think without exception, I have found a significant number of very bright, very committed people in Government, particularly in the areas I was dealing with, which tended to be the, research, knowledge, IT sides of the business. I also found that there were skills that I took for granted which were not as prevalent in Government, in the Civil Service, obvious ones being financial management, being marketing, sales skills, even negotiation skills. And, sometimes I found extremely bright people who did seem to lack some common sense. Now that's, that does not apply…

Common sense was missing. [laughs]

You're smiling. [both laugh]

Common sense is by no means common. [laughs]

No. And I found, I find I could get on with these people, understand them, and that I could bring skills and views which were in short supply.

[30:28]
Good. From this… Also in 1978 you became sector support manager for something called S&TS, and I don't know what S&TS means.

Mm. Systems and Technical Support.

Mhm.

Yes.

So…

Which was…

That seems like a…

I was… I was going to say, I sort of, looking back on it, I regarded that as a sort of, fill-in position.

Mm. Mm.

I, I don't think I was there too long.

No you weren't. [laughs] But it does seem like a bit of a sideways move from, you know, this, the sort of, interface with Government, which is, you know, quite at the, the top end of business politics.

Yes. But having, having successfully completed the GRIP programme, we then got, we got accolades from senior civil servants and ministers to say thank you, you know, you've done what was necessary. So, maybe, maybe I was at a loose end and went into this role. I don't know.

It was called the GRIP, GRIP…?

GRIP programme.

g-r-i-p?

Yes. Government Relations Improvement Programme.

[31:50]
Fine. OK. So you were a comparatively short time in S&TS. And, also that year you became Marketing, Business Planning and Strategy Manager for the UK division of ICL.

Yes.

Mm. Who was managing director at that time?

Pete… Oh. Managing director, I think… Was Chris Wilson still there? Query.

Query indeed. It would have been… Or was it…

Robb Wilmot.

Robb Wilmot. Probably.

Might have been Robb by then.

I think it probably was.

Chris, I don't think Chris was too well. And certainly wasn't around for very long. So I think it was probably Robb.

Right. OK.

Yes. And, I… [coughs] Excuse me. Dr Peter Aylett was one of the people I always look back on, not as, such as a mentor, we didn't really have mentors in those days, but somebody that I certainly respected and looked up to, and offered a, a number of tips. As indeed did Peter Hall, who was the guy that I was working alongside on the GRIP programme, and, I had a lot of time for Peter Hall.

What do you think you learnt from them?

Peter Aylett certainly, a very bright guy, who had an incisive mind, and he was able to look at issues and problems and make pretty rapid decisions, which often were right. And, I think I picked up from Peter that, in many cases you're probably better making a decision, even if it's not the perfect, or the right one, rather than letting things slide.

Mm.

From Peter Hall, I learnt a lot about relating with people, and the use of words and vocabulary. He was an absolute artist with putting words on pieces of paper to express meaning in different ways.

[34:03]
So, this role of Business Planning and Strategy Manager, I man how high up the hierarchy is a job like that, or was a job like that?

Board director, I think it was Peter Ellis; Peter Aylett; and then me in the divisional role, looking across the division.

So you were a board director at that time?

No. No.

Oh I see.

Let's say it was Robb Wilmot. Peter Ellis I think, responsible for the whole of worldwide marketing and sales; Peter Aylett, and then me.

Ah. Right.

I think it was Peter Aylett.

[34:47]
I see, OK. Well what kept you in ICL? I mean, had you had offers from other companies, like IBM for example, or, any other company in the IT…?

I did progressively over the years get offers from various people.

So what kept you in ICL?

And I got various offers in ICL as well, some of which, many of which I, I turned down. I liked the people, I respected the people, and I thought ICL had a very bright future. And, I, I had never been short of a challenge. And I relished a challenge, and, I, pretty much every role I did, I found I was doing something slightly different, I was learning more, and I was meeting new and interesting people. And that kept me interested. And, you know, if something is going that well, then, why change?

[35:45]
Oh indeed. Indeed. Did you need your technological background in this kind of role, or indeed, how did you keep up with the technology? Because it was changing very rapidly then.

I have never used my maths training. And indeed, by chance I came upon some A Level maths papers, which, I couldn't do. I couldn't make an attempt at. I sent them off to school, and they said, 'Wow, we're going to see whether the sixth formers can do them now.' I'll be interested to hear. What my degree and everything I learnt

since did was to, I think give me a way of looking at issues in a logical way. I am sometimes taking decisions after careful thought, but then also, end up apparently taking some riskier decisions than other people would.

Mhm. Yes. Yes.

And, the whole of my background I think has developed those sorts of skills. Technically, I have never regarded myself as the ultimate technician. I knew enough – well I knew a lot, about the technology, but I never regarded myself as a technician. And indeed, for, for some time I was ICL's acting technical director, which was, an interesting divergence, and I was pleased to say I was surrounded by excellent technicians.

[37:40]
Mm. At this time, the main part of the ICL offer would be the big mainframes. The PC was only coming in at around this time, but, ICL didn't have a PC offering then?

Not at that stage.

Not at that stage.

No.

No. So, it was all big machines. And, not perhaps very much a service offering either. Sorry, at this time, which is '78 to '80.

Yes. No, you're quite right. Going back to those days, then, service would have been the engineering services, and for systems like this of course, there was a dedicated engineering team. The engineers' rooms on sites like this were of significant size, full of spares, coffee machines, and, all the other accoutrements. And those were broadly the only services that were charged for. And also, I mean just to add, all the software was there, incorporated in the price of the hardware system. So, things had to change.

Oh, at that stage software and hardware had not been separated, is that right?

No, that's right.

OK.

Mm.

[38:53]
But in 1980 you became Manager of ICL Education and Research Region. What was that all about?

There were, there were two sales regions, Education Region, which looked after all the universities, schools, colleges across the UK, and Research Region, which was responsible for, Agricultural Research Council, Rothamsted experimental establishment.

Oh yes.

British Ship Research Association, Building Research Station. A whole long list of research activities which were either directly or indirectly under the Government wing. And both those areas needed some shaking up, and I was invited to take over responsibility for both, put the two together, and end up with a more effective and efficient operation, which I did.

Mm. You had to get rid of a lot of people?

Yes. Yes, about 40 per cent. Mm.

That's a huge number. Is it a huge number?

Yes. Well yes and no. We did place many of them elsewhere. But of course ICL had, over the years, been, I think, I think it got up to 30, 35,000 people, and then progressively had to slim down to 20, 21,000.

Right. Mm.

So, there was a lot of, a lot happening over many years.

How difficult did you find that, I mean, basically getting rid of people?

I, I didn't enjoy doing that at all. It's a, it's not a pleasant activity. Never has been. And you are progressively, you try and do your very best for the individuals, to give them as many opportunities as you can. But, it's, it's a situation that, is not nice.

[41:01]
Well what advice would you give a manager who has to do that, that kind of job, you know, in the course of their work?

Two things. Firstly, be frank and honest. There is no point whatsoever in trying to prevaricate, or to hide the issues. And surprisingly, you do find that for some people it comes as a big relief, for all sorts of different reasons. Not all by any means. Secondly, communicate really well, and put in place as much as you conceivably can to help them understand, find new opportunities, develop further skills, and so on. I ran a conference once which was in the times when we were, the company, a much broader range of the company, was slimming down, and I ran this conference, and the theme of the conference was, training people in new skills, and how comparatively easy that was. So we had some very good speakers, from HR backgrounds and sociology backgrounds and so on, explaining to the management teams there, all of whom were sitting at tables. So we must have had, 60, 70 managers in the room, so, they were all at tables. And on the tables were papers, pens, carafes of water , glasses. And there was a low stage at the front. And we got a company to come in to give all these people lessons in how to juggle. And the aim was that over a short period of time, 45 minutes, 45 minutes, an hour, that this company would teach a large number of people in the room a skill that they never believed they had. So we handed out thuds to all the attendees, and there were a couple of guys on the stage demonstrating, and there were another couple of people wandering around helping individuals. And over a period of 45 minutes, an hour, a significant number of the people in the room learnt to juggle three thuds, much to their surprise. And the message was, you know,

for goodness' sake, there are skills you can teach people quite quickly that you don't know and they don't know that they have, and let's go and do it. They… [laughs] I rather liked the name of the company that we got in to do this part of the training. They were called More Balls Than Most.

[43:58]
[laughs] Excellent. After that you moved to the defence and research branch. I was curious to see that, you were responsible for relations between ICL and the MoD during the Falklands War. Now what did that involve?

[laughs] That was a, to say the least an exciting time. We had…

Mm.

ICL had a significant number of systems in Defence which were administrative systems. We, at that stage, were not involved in any, as it were, operational systems. But, with having intimate links with, for example the Royal Army Ordnance Corps, then they were one of the units, one of the corps, which was at the spearhead of putting in place communication links, and of course communication supplies, out through the Azores to the Falklands. Because the, the links were significant. And that applied in a number of other areas of Defence from main building through many of the sites. So I pretty promptly put a paper to the board saying, look, you know, we really need to do everything that we can to help. And the board said yes. So, we started taking machines off the top of the production line, and, putting this in place, and delivering such and such to various lay-bys for people to put up. Because we were also dealing with some of the organisations which were linked with Defence. And, it worked very well. We were able to assist, and it took us getting on for six months to sort the paperwork out after.

[45:45]
Mm. OK. This was, '81-'83. Was Fujitsu involved at this stage with ICL?

[hesitates] Not to my knowledge.

Not at that point.

[pause] It would be close. Because, we were the beginning to look at developing from the 2900 series through to Series 39, still using VM operating system. Series 39 of course incorporated significant amounts of Fujitsu technology, particularly for the big machine called Estriel.

Estriel. Yes.

Yes. Yeah.

[46:32]
Mm. OK. So after that… And you clearly enjoyed that collaboration with the MoD?

Yes. I, I found it quite refreshing at times to be able to deal with the armed forces. They were significantly different from the civil servants. That's a statement of the obvious.

Mhm.

But, but nevertheless, they were the sort of people that you knew, if they said they would do something, it would happen.

And do you think they had a better appreciation of the, you know, potential of computing than the civil servants? A bit of a loaded question really.

I have had a, a rather jaundiced view of the ability of some of our central government departments to accept and understand the total capability of computer systems.

[47:40]
Mm. Let's go on to '83-'85, when you were a general manager for the PERQ business centre.

Mm.

So, we are starting to think about, workstations and PCs and things like that.

Yes, indeed. This, this was part of the, one of the transformations of ICL. You commented, we didn't have PCs. And so this was part and parcel of a significant extension, intended extension, of the range of activities. And also, a restructuring of the company. So, we were now putting in place full cost centres, or, depending on which way you looked at it, profit centres. But, we were putting business centres in place, and they had the general manager of the business centre at full P&L responsibility for his area of activity, and was responsible for everything from development, design development, marketing, market introduction, but not selling. The sales were still done by the sales divisions. And I was asked if I would move from events to take over the Advanced Graphic Workstation business centre. And in those days, to be able to produce a desktop system which would do 3D topologies and moving images in full colour and so on., was really quite striking. They were, in context, very powerful machines, and we had got the basis of those, the basic original systems, from a company in Pittsburgh called PERQ Systems Corporation.

Mm.

Now they had produced these, and they were selling them into the printing market in the United States, and to do that they had developed an operating system called the PERQ Operating System, which was particularly designed for the printing industry. It was a one-off. It was facility-rich if you were in printing, but not otherwise. And, we rapidly concluded that we needed a proper operating system for our markets where we were targeting the educational and scientific markets. So, I put together the first UNIX compiler team, I believe, in the United Kingdom, and we developed UNIX for these Advanced Graphic Workstations.

Yes. But you were based in Pittsburgh for a time, is that right?

I, I was never based in Pittsburgh.

Ah.

[laughs] I avoided that.

OK.

I did fly out to Pittsburgh on a, often on a sort of, four-, five-week basis for two or three days at a time, so I got to know parts of Pittsburgh really quite well. [laughs]

[50:48]
But that would have been your first experience of the US market, would it?

I had got experience, my first experience, when I was in defence. We were doing work with NATO, and I went out to the United States, I visited CIA headquarters, and spent some time at Norfolk, Virginia, which was the headquarters of the US Atlantic Fleet. And it was also one of NATOs significant bases out there.

Mm.

So that was my first meeting with the United States. And then, this was a frequent set of trips. And we also met up in, in Boston and other places.

[51:37]
Mm. I mean, did ICL have very much of a presence in the US at all?

[hesitates] No. We, we did, in due course, I think launch some smaller systems, System 10 or something like that, in the United States, but I had no involvement with that. The graphic workstation went quite well for a while, and we sold over 1,000 of the systems, and organisations like the Science and Engineering Research Council, the Atlas Computer Laboratory, were big customers, and found it very, very good. Of course progressively, not being in the PC market, then, the PCs over the next few years developed very rapidly, and started taking chunks out of that market.

On the other hand, you did develop the Distributed Array Processor.

Yes. I… For some obscure reason I had got involved with DAP, and, a gentleman called Professor Dennis Parkinson, who was the brains behind the fully-fledged Distributed Array Processor, and indeed, my teams sold a number of the original Distributed Array Processors into research establishments. What we were looking to do was to produce a mini Distributed Array Processor that would then help boost the performance of, basic serial systems.

Oh you mean as a sort of add-on?

Yes.

Yes.

Yes. Because, we had already worked out that the opportunity to sell these as stand-alone systems, you really need to think in a completely different way to make use of them. Dennis Parkinson always used to say, you know, 'When I'm looking for people to join my team, I always reject anybody who's in the computer industry, because they think the wrong way. And it's much more difficult to train them to un-think and the think again, rather than starting with somebody who's got no preconceived ideas.' And that… We prepared the mini DAP for, for sale, my recollection is, put it together as a package.

[53:55]
I'm interested in the way your career has moved from different, in a sense, levels of machine. I mean you've been selling very very large mainframes, now you're selling quite small workstations, and then these DAPs which are a quite different sort of animal.

Mm.

Was everything grist to your mill? I mean did you, did you find it easy to switch between these, these product lines?

I… I did between those. And the, the Advanced Graphic Workstations were in their time extremely powerful beasts. I mean it was really novel to find something that sat on a desk that would do this sort of stuff. So in context they were really powerful, and the market for them was very much the sorts of markets that, for one reason or another, I had been in contact with for many years.

Yes, defence, education…

Exactly.

Things like that.

Research. So on. Yes. Yes.

[55:00]
OK. OK. And yes, and then you became Director of Marketing and Business Strategy in '85. Robb Wilmot, would he have been Managing Director then, or would Peter Bonfield have taken over by that point?

I think Peter took over about '85.

Mm. Mm. How did you get on with…

We could check these dates.

…Robb Wilmot, I wonder?

Very well. I found Robb dynamic. He, he took a liking to products like the Advanced Graphic Workstation. He was, in terms of everything I saw, very supportive. I was also very conscious that Robb churned out 1,000 ideas a day, and I was grateful that I was on the receiving end of only a few of those. [both laugh] But…

Yes. But it was Robb I think who was responsible for the initial relations with Fujitsu and who sort of started the whole ball rolling for the collaboration with Fujitsu.

Yes.

Mm.

I think, he, and then Peter, took the view that, harping back to the market we had, the cost of developing new technologies to drive the mainframes forward, because we did, we did see a significant future for the mainframes. But given the marketplace we could tackle, the costs became prohibitive. We had done it for 2900; we then got Fujitsu, who produced the central processing unit for Estriel to our design. And there was a smaller machine called DM1, which pretty much we did ourselves. We had good manufacturing facilities, Kidsgrove, West Gorton. And, we used some of Fujitsu's technology to, to build those. That was a time also when, you know, one was beginning to say, are we going to be successful in Europe? Because we haven't been so far, despite our endeavours. How do we fare against organisations like, well the Bison Group. Do you remember the Bison Group?

Mm.

Bull.

Yes.

ICL, Siemens, Olivetti and Nixdorf.

Indeed.

And, we were clearly of the view that we had by far and away the better mainframe and mainframe operating systems. I, I don't think that was parochial, I think that would be the case. And there were a number of activities to see what it was that we could do together, because we were all conscious of the same issue, which was that, IBM and some of the other big American firms had much bigger markets than we did.

You know, roughly America's the same size as Western Europe. And they also had a good spread across Western Europe, Africa and Australasia and so on.
[58:38]
So, there were a number of steps, one of which – I'm jumping ahead slightly, one of which was to put together the European Computer Research Centre, ECRC. I was, I was not in at the foundation of it, but it's interesting, because it was a company to do research into computers and information technology that was put together jointly by Bull, ICL and Siemens. And the way they originally balanced the decisions was that, the company would be based in Germany, and it was in Munich; the managing director would always be recommended by Bull; and the language of the company would be English. And we ended up with, oh, 100 or so staff from 30, 32 different nationalities. Very bright people from a wide range of backgrounds. I quite quickly was put onto the board of ECRC, and then I took over as Chairman for two years.

Right, mm.

And the way it worked was that we were allowed to do whatever research we chose, with input from the three owners, and suggestions from them, and then whatever research ideas and conclusions we came to were all freely available to any of the three partners. And they could take them or not as they wished, but then the cost of the development and the launch and marketing was theirs. And it, it worked, it worked really well. We came up with certain, I recollect, pretty bright ideas. We had software into the Hong Kong container port.

Oh yes.

I had never realised how complex the issue of putting containers on ships is, you know, but when you've got perishables and refrigeration, and explosives, and you've got to balance the weight, and you've got to take into account where all these things are going to be offloaded. And we got some really smart software, in essence, the sort of, beginnings of AI. You know, people are talking about AI these days as though it's brand new.

Mm. [laughs]

As, as you and I both know, it's, it's not.

Quite.

The concept goes back some while. And, ultimately, I understand, after, after I had stood down as Chairman, I think ICL bought out Bull and Siemens for a few hundred thousand pounds, and then, polished ECRC up a bit, and I think sold it for a couple of million. [laughs] So, it… Whilst it lasted. There were also talks that I was involved in with some of the other companies, with Peter Bonfield, where we were looking to see whether there were opportunities to coordinate our activities, leading to whatever.

[1:01:45]
OK, let's, let's continue. In 1990 to '91 you were Director of Purchasing. Now this seems a, a change of direction for you.

I wondered about that. And, when I got into the job, I found it fascinating. My sales background was extraordinarily helpful. And, the ability to work with people and negotiate was a, a great help. I had a significant team, 250 or so, both direct and indirect, and we had a spend of some 700 million. I recollect getting home one night and saying to my wife, 'Goodness, have you seen the price of electricity?' And we were spending millions in the manufacturing plants on electricity, and this was the time the market was beginning to open up. So we did a lot of negotiations and reduced our costing significantly. That I found fascinating, because, you could quite quickly spot the good salespeople, and there were many who were not. But the ones who were good, you thought, yes, we can work together. It was also a time when we were looking to develop our complete skills across the whole piece, so I employed a company called Karrass, who are, were at the time, recognised as the best organisation in the world in terms of negotiating skills. And we put all our managers through the Karrass course, and I went through it as well.

How is that spelt?

k-a-r-a-s-s[sic]. Karass. Don't know whether they're still going. But I found the way that they presented the collaborative methodologies, they had some sayings, one of which was, in a complex negotiation, there is always, always a better deal for both parties. And indeed you find this, that, the weight that the different parties put on to a particular attribute is different. So you can do a lot of balancing and trading.

Sounds like our present Government could do with a bit of that.

You may well say that. I'd rather not comment. [both laugh]

That won't, that won't go on the transcript. [both laugh]

What… What we did do as well was, I developed, with one of my key managers, a vendor accreditation programme. The concept of, you know, knocking hell out of your suppliers, and battering them to reduce prices and so on and so forth, was not the way to deal with big companies, dealing with complex issues, complex products and services. And so we, we focused on the top 100. We measured on the three key factors of quality, cost and service in great detail. Everything that we did and measured was completely open to the suppliers. We also started opening our development plans under NDAs to these companies. They started doing the same with us. And you are therefore able to work more together in terms of what it is that you're going to be looking for, for the future. That vendor accreditation programme and the awards programmes that went with it was a significant success, and we had a number of great developments as a result of that, and it continued after I had left. It also was picked up by the BCI, and the CBI developed it and introduced it on a broader basis, and that was their partnership sourcing programme. And I let my manager, Neil Urwin[sp?], go and become the head of the CBI programme. And, I regard that as one of, one of the innovative developments.

[1:06:30]
Mm. Yes, indeed. You were involved I think also with the ESPRIT projects?

Yes.

And ALVI as well?

And ALVI, certainly. That was, that was in, in prior times. But that was looking to both help the development of, of, certainly the ALVI, sort of, what the ALVI programmes ought to be. And then, heading up the technical units, how we could make best use of the ESPRIT funding and get involved in some of the ESPRIT programmes. Which of course was another mechanism by which European computer companies were encouraged to collaborate, and, typically they worked out pretty well.

Yes. I mean I think just for the recording, we should say that the ESPRIT project was a European project to develop information technology, and ALVI was a British-based…

UK equivalent in a sense.

Equivalent. Yes, indeed.

Yes.

[1:07:32]
Indeed. Good. I think this the, the big change now at around '91, '92, when ICL moved from being exclusively a hardware manufacturer to a provider of services. Is that right?

Yes. We…

And what was your role in that change?

I was a champion for services, and, in the role of sales and marketing director for the customer service organisation did many things including putting an overall strategy together. We had about, nine different operations, some of which had been internally grown, some of which had been acquired, like ICL Sorbus, also an outsourcing company, and, typically the branding and positioning was different. So, I pulled the whole lot together under a single banner, and, built up overall a team of a couple of

hundred. As a result of this, we managed to get the software and services, professional services businesses, growing something in excess of 30 per cent per annum. And this was, in my view at the time, the way forward for ICL.

Mhm.

We could still continue to provide mainframes, which gave a huge margin, and do that with the intimate involvement of Fujitsu, but the future for the company, the growth of the company in the future, was in my view services, and I was championing that cause, along with others.

[1:09:32]
Mhm. Mm. But, that change must have been enormously difficult to, to bring about.

It was difficult for the people who had, for many years, been selling the same sorts of systems to the same sorts of customers. We had developed significant skills capability in-house, Dataskil and organisations such as that, and then with these acquisitions also we had brought in people who were really very good at services. So, applications development, the taking on board of outsourcing management. We were into servicing and support, obviously of our own systems, but we also entered into servicing and support of OEM, other people's systems. And, it all seemed to be going pretty well. Yes, there were some who found that switch difficult. But it was, it was, it was good. We even got to the stage where we were looking to buy out, take over, a significant sized French services company, and I was involved in the very small team doing this, and, indeed I was, I even started doing a total immersion French course. So every Wednesday I would go off for one-to-one total immersion French, and at the end of the day you, you really felt as though you had been through the wringer. But, sadly, in my view, sadly a decision was taken by the board, for reasons I still can't understand, to buy a company called Technology Plc. Technology Plc were a PC delivery organisation, sales organisation, based in Warrington, and they sold ICL PCs, and they sold PCs from other suppliers. And, the work with the French services company was dropped. Now I've linked the two together there. I can't unequivocally say that it was a binary decision. But I have to say that, given the strategy that the company had, given where we were heading, the thought of buying a technology

company that sold PCs, was the wrong business. The culture of the organisation was totally different from ICL. And I felt rather sad that we had put our money down that avenue.

Mm. Which French company was it?

[pause] I, I both can't remember and not sure I should say if I could. [laughs]

That's fair enough. That's interesting. No, I can see parallels between ICL and IBM there. I mean, IBM had this huge task in turning themselves round into a services company, and, they made no money out of their PC operations. [laughs]

No. But, but…

Culturally so different. Yes.

Yes. I mean you used to go, if you went into the huge offices in, open-plan offices in Warrington, you know, and there'd be noise and bells ringing when a PC sold, and it was all frenetic. We tried, we tried very, very hard to get T plc to sell services, alongside the PCs that they were selling. But, it just, it just didn't work. It just didn't work.

[1:13:33]
Mhm. Again, what sort of level in the company were you at this stage? Were you a main board director, or…?

I wasn't main board. I was director of… Well, Director of Purchasing was…

That's pretty high.

…Director of Purchasing. But, yeah, but not main board.

OK.

I was variously on the boards of UK customer service, different things, but not, not on the main ICL board.

[1:14:06]
Right. Right. '91 to '92, you were director of marketing, or, the lead, Marketing Services Division. What did that involve?

[pause] [looking through material]

Oh, sorry, just…

Could I start again?

Just, just before we pick up that point. I mean, I see from your notes here that, the Services Division went from £900 million of revenues in '91 to £2,400 million in 1995.

Mm.

Presumably that was mostly by acquisition, rather than…

Both. Both. I mean, some of the businesses we were in were growing very rapidly.

Were they?

Yup.

Yes, OK.

But, but yes, as I, as I mentioned, there was acquisition.

Yes.

So that, that was customer services. Oh we, we… We also won a couple of awards. The CSSA, so-called at the time, they gave us their award, top award for software and services. Marketing in 1993. And then in the national quality awards in 1994, we won best IT company. Which we were proud of.

This was before the Fujitsu full takeover?

Yes. Fujitsu progressively took a larger and larger shareholding. But even when… When did they get 100 per cent? Would be, late 1900s I think.

Mm. Mm.

Even then, they left ICL very much to do its own thing, particularly whilst Peter was there. And Peter was there, Peter Bonfield was there until, 1996. So, it still felt as a separate, independent company.

[1:16:08]
Fine. Mm. Now I'd like to turn to what seems like a very interesting change of direction, Project Director within the Department of Trade and Industry. So you've become a gamekeeper or a poacher, [laughs] one or the other.

Yes, well I, I did that of course by becoming Purchasing Director, which was seen by many as becoming a gamekeeper after a poacher. I was sitting in my office in King's Road, Reading. I can still see the afternoon. And my PA came through on the telephone, she said, 'Charles, there's a gentleman on the phone from the Department of Trade and Industry. He says, you won't know him but he would be very grateful if he could have a conversation.' Of course. And, Martin Rumbelow came on the phone, and explained that the DTI were in the process of launching a programme to investigate whether the Internet and World Wide Web would have any impact on businesses in the United Kingdom, and if so, what was it, if anything, that DTI and Government should do? And, they would be very grateful if I would consider a secondment to Department of Trade and Industry. I must have been silent for quite a while. It's not often you get a phone call like this out of the blue. Anyway, always of a view that you should at least investigate opportunities, I spoke with Peter Bonfield,

spoke with Martin Rumbelow. Peter and the DTI conversed. And we all ended up agreeing that it could be a helpful proposition for DTI, ICL and me. So I headed off to DTI, to help them work out whether the Internet and World Wide Web would have any impact on business.

Mm. And this was called the Information Society Initiative.

We decided that indeed it would. [both laugh] It's, it's… This is nineteen…

just a little bit.

Yeah. [both laugh] Well, this is 1995. It's very difficult to believe, I mean that's, that's just over twenty years ago.

Yes.

I used to ask… I gave many presentations. I used to ask audiences of computer, IT people, computer managers, IT directors, many people from the supply side, for example, 'How many of you have got an email address on your business card?' Which seemed to be a definitive…

Mm.

And I was lucky, very lucky, if 20 per cent of the audience had an email address. And, it was very much in those days, that was the industry, very much in those days, 'Really? What is this? No, it's a, a…' And it was one of those, one of those situations where, it's not the IT that matters; it's what it can do for you.

Mm.

And there was… So we, we put a whole series of programmes together, to help businesses in the UK, particularly SMEs, understand what the opportunities were, what it was possible to do with all this capability, and a whole series of programmes including support centres, documentation, advice lines and everything else, to give

them practical support and practical help. And we launched the whole of that in February 1996, in Canary Wharf. And we were due to launch on the Monday. We had secretaries of state, ministers, the whole panoply. And we had a number of people, you know, people like Aardman Animations, who even in those days were ahead of the game in terms of what they did, and their overnight transportation of stuff electronically to California and back again.

Yes. Indeed.

It was, it was good. So Nick Park came, and other people came. And, on the Friday evening, half-past seven, I and many of the team were still in the office putting the final touches together in Buckingham Palace Road, and one of my team rang through, and she said, 'Charles,' she said, 'I've just heard the news, and the IRA have blown up Canary Wharf.'

Mm.

And… So, we had a busy weekend.

I bet you did.

The, the decision was rapidly and easily taken, the first decision, do you go ahead or do you call it off? And, there was no way that we were going to let the IRA… So we went ahead. The building we were using had only had some windows broken, so it wasn't severely damaged. The security cordon around the whole place was a big problem, and it meant that a number of people could not get there. So, we, we missed out a bit. But, we went ahead with the launch, and in retrospect I'm sure that was the right thing to do.

Yes indeed.

[1:21:45]
And it went well. The programme itself took off. We had got large numbers of people involved. We had business centres and support centres around the country that

were offering practical help and guidance. You could go and see and touch and feel. We had a variety of documentation. I think we… I did a calculation at the time, and it said that we had 35 different programmes, all targeted at this marketplace. I like to think that it's one of the reasons why even still businesses, SMEs, in the UK are always measured as being somewhat in advance of equivalence in most other European countries.

Well, there are all these continuous complaints that, you know, British industry is less productive, less competitive, than those abroad. And I mean, do you feel that this, this project has perhaps helped to turn that around?

I think it helped the adoption of the technologies, for what they could do.

Mm.

I still worry, as many others do, about UK productivity overall, you know, which has not changed significantly. And curiously, you know, the employment rate is so low, the lowest it's been for, 30 years or so.

Yes, indeed.

And you would expect that it would be pushing productivity up.

Mm.

So I, I do concern myself that we are not collectively making as effective use as we should be of the capabilities of technology, and particularly these days, social media. But that's, that's a different issue.

No, no, indeed.

[1:23:41]
[laughs] No. So that went really well. As a result of that, the Government decided that it would be a really good idea to launch a programme to tell the general public

what was happening and how useful all of this would be to them. And, because DTI had run this programme so successfully, the Information Society Initiative, DTI were, inverted commas, 'invited' to run the programme, to brief the general public. And I ended up as the programme director for a programme that turned out to be called IT for All, and that, we did again in collaboration. The ISI had done in, significantly in collaboration with people like, CSSA, with many of the big industries, all of whom had been big suppliers, all of whom had been very helpful. This was done with, again, collaborations, but this time it was companies like Dixons and the big retailers, and we had buses touring the country, and millions of leaflets distributed, and competitions. And we launched in December 1996, with a big do in Victoria, at the DTI headquarters, headed up by the Prime Minister, John Major, and our star of the show was a lady called Martine McCutcheon, who at the time was the most popular lady in the United Kingdom. And she was a star of, *EastEnders*.

Mm. Something like that, yes.

Yes.

Yes, you're right.

And the aim was to, was to get this balance. And so we had secretaries of state and ministers galore. And, it went very well. And, that and the ISI were then being driven ahead. The IT for All programme included representatives from a number of different departments, all of whom were responsible, doing different things. And then, in spring that year we had in prospect a General Election. So I, I stayed on in central government for the General Election, and it was fascinating to see it from the inside.

Mm.

And then, ended up briefing the Labour ministers who came in, about these two programmes. And they believed that they were both good and successful programmes, and both were continued by the Labour administration.

[1:26:40]
Good. Good. And after this, you went back to ICL as Marketing Director for, and of the Corporate Development Services Division, for a couple of years?

I was… I was a bit disillusioned when I went back. I had been away two and a half years, and there had been… You know, I had, I had a contact in ICL, a director who I spoke to on a regular basis just to keep in touch. But there had been a very thick Chinese wall. So, they had not in detail had any knowledge about what I had been doing. They… And I had no detailed knowledge about ICL. So I went back, and I found that, many of what I had regarded as issues when I left, were still there. Some of them I thought were worse than they had been. And, I even briefed Keith Todd on what it was like to come back. And…

He was the Managing Director.

He was the Managing Director. Yes.

At that time.

Yes, he, he had taken over from Peter Bonfield in '96.

Yes. Mhm.

Nevertheless, we, we did get everything pulled together. We got Services Division continuing the sorts of work I had been doing before, and, we were bringing in over £500 million a year, which was a, a big, big operation.
[1:28:15]
Then, in, two years later, 1999, I had the opportunity to leave. Grasped it with both hands, and set off.

Mhm. Yes, you were 53 then, so presumably you felt you were young enough to have a second career.

Yes. Yes.

Right.

And, I, I was in the fortunate position of being able to take my pension.

Ah. OK.

So, whatever I chose to do, I had that safety net. But I had discovered that, I had got skills in leadership, sales, marketing, and I had a really good understanding of the interface between the industry or business in general and Government, and could talk and understand both sides.

Both sides. Indeed.

Whereas, as you will have seen many times in your career, so often one of those talks to the other, and, and the communication just doesn't work. So, I set up eManagement Limited, and started undertaking a variety of tasks, typically on that interface, working for, for example, Her Majesty's Treasury, Department for Education and Employment. Then, Reed Business, BT, Mantix. And a particular project that springs to mind which was on behalf of the IT industry, and that was eight supply side companies, and the CSSA, who got together to say, 'Look, we have had continual problems with projects in central government going wrong. Why?' And, so I led a team to put a report together to look at, why projects in central government went wrong. And it will be no surprise to you to discover that we came to the conclusion that there were no, there were no unknown reasons why projects went wrong.

Mhm.

We ended up listing sixteen issues, and all of those had been known and understood previously. That report was regarded as seminal by CSSA, and was used as their way forward for several years. It was also a report that went to the Cabinet Office, and we briefed the Cabinet Office, because they had been looking at similar issues. And, it

led to changes in central government, the way that projects were managed and implemented. And…

[1:31:23]
What do you think the three principal reasons for failure are?

The, the top one, the one that we put right at the beginning of the management summary, was, there is no such thing as an IT project. And we had discovered, as, as we had seen, we had looked through all the government records and all the PAC reports and everything else, and so often people were buying significant chunks of hardware and software, and sometimes services, to implement against a terms of reference or a project which was ill-defined. The customer, the people who were going to be using all of this, was often neglected, and at the end of the day, particularly if these implementations took slightly longer than had been anticipated, as often they did [laughs], then you found that what was being delivered was not what it was at that stage, that the user wanted. And… And the reasons for that were various, you know, and there was, not invented here; there was a significant, usually a significant lack of communication both ways round. The leadership was often really pretty poor. The management of the contract from the Government side with, whoever the supplier was, was sometimes very weak. A whole list of issues which you knew very well, if, if each one had been tackled carefully, then, we could have had significant more success, particularly, you know, if, if people had moved away from the concept of, I think generically called waterfall project where, you know, you, you work along steadily for many years and then all of a sudden, the intent is, it goes over the edge and it all goes live. If instead of that, you had done a, a cascade and developed it slowly.

[1:33:33]
Mm. Yes. Just going back to ICL for a moment. Are you disappointed in the way the company has, has developed?

[pause] The expectations, early 1990s, were that, we would collaborate with Fujitsu, which I think everybody saw as, as a significant benefit. I spent many, many days, weeks, out in Japan, because when Purchasing Director, we were buying from most of

the Japanese corporations, and I had a team of a dozen out in, based out in Tokyo. And so I worked also quite closely with Fujitsu. I was also a founder member of the Anglo-Japanese High Technology Industry Forum, a catchy title [AC laughs], that had been set up by our Government and by MITI in Japan, to get senior people from high tech industries to work together and to collaborate. So, get a better understanding. So I, I got to know the Japanese really quite well. And although I, I was always pleased to fly out of Tokyo, nevertheless, I had tremendous respect for the work that they did, and I felt that, in combination with them, ICL could be really successful, particularly with the focus on a services strategy, which I've mentioned.

Mhm.

And it didn't work. We ended up, all the senior guys had share options. We were all aiming for ICL to be floated again by 2000, you know, and by '97 it was quite clear that there was no chance of that. So yes, I think, I think, a few different decisions at some stages, and the future could have been different.

[1:35:40]
Can you think of key decision that turned ICL down the wrong path?

[pause] I would have liked to have seen us do more acquisitions in the services arena. I would also really, really have liked us to have developed a close relationship with some corporations who could sell and distribute our mainframe systems in, particularly Western Europe and the United States.

Mhm.

Those would have helped significantly.

[1:36:28]
Let's turn to eManagement. I mean, is eManagement basically you, or is, is it a company, of what size?

Yes. No, I, I decided… [laughs] I, I decided… My wife helps me out. I decided very early on that, I had got the T-shirt for managing very large teams of people, and I was very well aware of the additional responsibilities and work that you need to do to manage large teams of people. So what I did was, to work on a project basis. And when I was running a project that required additional resource, then, I hand-picked the people I wanted to work with, and we worked together for the duration of that project, and then, went on our various ways.

[1:37:22]
Mm. Right. You've had a number of very high-level roles in the industry as such, President of the BCS, the British Computer Society, Master of the Worshipful Company of Information Technologists, where we're sitting today. Have you enjoyed these, these kind of activities?

Very much. It sort of all started in the 1990s, when the BCS were doing a major strategic review of their way forward. We had people like Alastair Macdonald, Mike Watson, several other very senior people from different corporations. And I was invited to join that group to work out, help work out the strategic direction.

Mm.

Then in the BCS, I, I was eventually, having been a member for many decades, I was invited to join the Council, and become Vice-President of Member Services. And I did a lot of work supporting the branches and the specialist groups, which I think are one of the jewels of the BCS.

Mm.

I also discovered that there was a significant international flavour, and spent some time in Mauritius and Sri Lanka, managing, being the figurehead at graduation ceremonies, meetings with the presidents and ministers, and we have got significant numbers of students in those countries who believe that the BCS programmes and exams are absolutely fundamental to their, their growth. I was particularly taken with the enthusiasm and commitment that many of those students have to education and

their parents. You know, I remember a, a vivid graduation ceremony in the biggest hall in Colombo which, really big, built by the Japanese for the Sri Lankans. We had hundreds of people there. And some of the parents had travelled for three days just to get to Colombo, from Trincomalee and far north. And, all ladies were in their very best, very colourful saris, and the gentlemen. And, I thought, you know, sometimes you find students in this country who are a bit iffy about education, and there was no such iffyness in these countries.

Right.

So I, I did quite a bit of work. The Sri Lankans in particular were particularly pleased with what I did, because, at the time they were having a lot of internal problems, and, they were delighted I was out there. I also opened the new headquarters in Colombo. [1:40:33]
So from there, I went on to help completely rebrand the BCS. It had a very poor marketing and branding image, and I managed the programme to completely rebrand it and produced the new designs and brand image. I was then invited to stand for election as President. I had already committed myself to professionalism as my thing, and over the years as Deputy President, President, and then Immediate Past President, I committed significant time, and the society committed significant resource, to the professionalism and IT programme to raise the level of professionalism across the IT industry.

Right.

That was picked up, I'm delighted to say, by many organisations, and we had a steering board with senior representatives from, all over the big industries, big supply industries. It is, is still ongoing. BCS has introduced Chartered IT Professional, and other qualifications. We were quite clear what we meant by being a professional, which hadn't been explicit in the industry before.

Mm.

And I think that that is one of the fundamental major steps that anybody coming into the industry really needs to take heed of.

[1:42:10]
Mm. Looking back over your career, what do you think, what are you most proud of?

[pause] I'm proud of my record at ICL. I enjoyed the variety and the opportunities I got. I'm certainly very proud of becoming President of the British Computer Society, the Chartered Institute for IT. And, similarly, very proud for having been a Master of the Worshipful Company of Information Technologists. Roles that I never countenanced, they just seemed to happen. Particularly in the case of the livery company, I know that our company is doing great works in the charitable field, in the education field, and I was very proud to be the person who led the team to acquire our Royal Charter. It was prior to 2005. We were an incorporated, we had a couple of small limited operational companies, we had a charity. We were… We were a bit like Topsy. We had grown and, and we decided that we really did need to become incorporated. [coughs] Excuse me. And the way to do that for a livery company is to get a Royal Charter. And that was a fascinating process. Took the best part of three years, and we had to completely restructure the governance, because you are then beholden to your court, obviously, but also the Court of Aldermen, the Privy Council Office, and ultimately the Privy Council. To become a Royal Chartered organisation, you need the Court of Aldermen, a couple of Government departments, the Charities Commission, several other, various bodies. And then also, you've got to think of a dozen or so organisations who might be in your space, because you can't have a Royal Charter if somebody's already in your space. And you've got to persuade these organisations to send you a letter of non-objection. And so we got fourteen or fifteen from all sorts of organisations.

Sounds like a very big IT project. [laughs]

Yes. [laughs] Yes. And, got our Royal Charter. I always, I used to say to new members who were thinking of joining before 2005, I said, 'We must explain to you that we are not an incorporated body, which means that you are jointly and severally liable for any liabilities that crop up.' I said, 'However, that is only to the full extent

of your personal wealth.' And they used to look at me. [AC laughs] We became incorporated by Royal Charter. And by a quirk of fate, having led the team to do this, which was a fascinating process, and I was ably supported by people like Michael Grant and Laurie[sp?], we, we were fortunate to have a QC, who I know really well, Laurie[sp?], who is the expert on the legalistic issues of Royal Charters. Michael Webster, John Poulter I roped in. And then, coincidentally, I was invited to become Panels Warden, which is the first step on the way to become Master.

Ah.

It's a, you know, if everything goes well, then you progress to Master. And during that process I was invited in fact to leapfrog a year. So I leapfrogged a year, and then lo and behold, two years later was the year in which the Royal Charter was due to be delivered. So I ended up being Master of the Company when we received our Royal Charter. Which in true information technology form we did with a, little bit of profile. So we, we had a service in St Paul's; we then processed through the streets of the City of London, at rush hour, with the Pikemen and Musketeers from the Honourable Artillery Company, from St Paul's to the Mansion House, where we had a banquet, where the Earl of Wessex was the royal who came to present our Royal Charter. And I have to say, he was charming, absolutely charming. And, I took him around various groups of people to introduce him, you know, a group of Past Masters, the group of people who had put the Royal Charter together, the people who had built, was building our school at Hammersmith and so on. And, and I just gave him two sentences, and each time he formed a rapport with those groups of people, off the cuff. Very impressive.

Oh good.

And he laughed at my jokes as well. [AC laughs]

[1:47:49]
And what would… I mean what's your, your biggest regret or perhaps your biggest mistake, do you think?

One regret is, and I suspect there are several, is that I never worked abroad. I had various opportunities. I was invited to work in the States, a couple of times. Robb Wilmot invited me to go across to California.

Oh yes.

I was offered the job of managing director of Africa, excluding South Africa, based in Nairobi, which I, I had an alternative offer which I chose in preference. And I have over the years, for various reasons, I've been on the boards of companies in the United States, Germany, UK. I was on the board of ICL Australia. So I, I have travelled extensively, and I've spent loads of time in the United States and Japan, but I've, I've never worked abroad for a significant period of time. And I do sometimes wonder whether that would have changed things. But no.

[1:49:00]
What, what advice would you give a young person starting out in today's IT industry? So different from when you started.

The industry is totally different, the market's different, the size is different. I'm not sure, I'm not sure my advice would be different. I think there are some things which are the same. So I, I would, I would start off by saying, whatever you do, give it your best shot, and be professional. And that includes being ethical, it includes collaborating and working with others. And, following on from that, develop a political sensitivity. That becomes in a sense a sixth sense, and can be very helpful. I would also strongly recommend people to spend some of their early career on the interface with the customer. There is nothing to beat actually sitting down and understanding the customer and working with the customer to know what it is your organisation needs to be delivering. And finally, I would say, get involved outside the day job. I, I have fallen into the organisations I've been involved with, Institute for Management of Information Systems, I was on the Council; the CSSA, I managed one of their major strategic groups; and of course the Chartered Institute for IT; the livery company. The Real Time Club, I was Chairman of the Real Time Club for a couple of years, and now there's an interesting organisation. And, I've been heavily involved with the Parliamentary IT Committee, I was on the Council for many years. And

then, beginning of 2000, 2001, I took over as Chairman of the Programme Committee. So I was organising all the events for PITCOM, me and my team. Those experiences have broadened my knowledge and scope. They have interlinked and interfaced, and I think it's extremely helpful for people in the industry to have an involvement outside the comparatively narrow concerns of their day job.

[1:51:44]
Mhm. In this interviews we've covered a lot of, a lot of topics, a lot of ground. But I wonder, are there things that we haven't covered that you think are important to this interview?

I would just like to mention, I became a mentor and adviser to a small recruitment company, IT recruitment company, Outsource UK Limited, in 2003, 2002/2003, working with the chief executive, who was and is the largest shareholder by far, and was the founder of the company. And after the Millennium, the IT industry was in pretty dire straits, and the company was struggling. It had a small number of employees. The number of contractors it had out with customers was, about 30. And I helped guide it from that position. A few years later I became Chairman, and I still am Chairman. And, we celebrated 25 years of the company last year. I have just helped in the process of changing chief executives last week, so, Paul Jameson, the founder and major shareholder and ex-CEO, is handing over to Nick Dettmar, both of whom are superb characters. And the company now is 70-odd people strong. We've got offices in London, our headquarters in Swindon, in the Midlands and Manchester. We've got 850 contractors out on contract, and a significant permanent business. And we are doing, quite nicely. So, we, we intend the that will continue for the next few years. That is my sole remaining fee-earning activity. I still do a lot of voluntary work of course. But, that is my last one. And this is the last one before full retirement.

[1:54:10]
Well that's probably a very good point at which to conclude this interview. So Charles, thank you very much indeed for your time this afternoon.

Thank you Alan, much appreciated.

[End of Interview]