



# John Leighfield

Interviewed by

**Alan Cane**

15<sup>th</sup> January, 2016

At the

**WCIT Hall,**

32a Bartholomew Close, London, EC1A 7JN

Kindly provided by The Worshipful Company of Information Technologists

Copyright

**Archives of IT**

(Registered Charity 1164198)

*It's Friday January the 15<sup>th</sup> 2016 here in London, England. I am Alan Cane, and today I will be talking to John Leighfield, the former Chairman of the computing services group AT&T Istel.*

*John led the employee buyout of ISTEEL, as it then was, from British Leyland in 1978, one of the most significant employee buyouts ever in the UK, and he continues to be a key figure in the computing services business.*

*So good morning John.*

Good morning.

[00:38]

*Perhaps we could start at the beginning. When were you born and where were you born?*

I was born on the 5<sup>th</sup> of April 1938, so my parents had a full year's tax relief for having me for just a few hours. I was born in Oxford, in fact in Cowley, the sort of Latin quarter of Oxford. So, just before the war.

*Just before the war. And can you describe your parents? What did they do?*

My father came from very a humble background. He was one of thirteen children, typical sort of, late Victorian family.

*Mm, indeed.*

Born in Wootton Bassett, which most people wouldn't have heard of until, until the dead coming back from Iraq and Afghanistan were paraded through there.

*Of course.*

He was the eldest of the family of thirteen. He, his father was, ran a little decorating business. My father was a bright young man, and won a scholarship, but, like so

many people from poor families in those days, his family weren't able to let him go, to do that, so he got a apprenticed very early on in the neighbouring place of employment, Swindon, God's wonderful railway birthplace and so on, and was apprenticed in the railway workshops there. He subsequently moved, as so many people did in the very early Thirties, to Cowley, and he was a skilled production man, and became a foreman in Pressed Steel, the people who made the bodies for, so, the Morris cars, and Rolls Royce cars come to that. And he worked his way up. But, because of his humble background he, he remained a foreman until he retired. He was a skilled man, very intelligent, interested in mechanical things. When I was young we were always renovating old cars, and the car I learnt to drive on was a pre-war Jaguar, which we stripped down and rebuilt and, and so on. So I, I got a lot of interest in mechanical things, and electrical things, from him.

*Right.*

My mother was born in another place, which has become more, better heard of recently, perhaps not better known, but, and that's Chipping Norton. She wasn't part of the Chipping Norton set. [laughter] Far from it. Her father was, fought in the First World War, wounded twice. Set up a dance band in the Twenties. And he was very interested in education. She went to the local grammar school, and got School Certificate. And then eventually became, moved to Oxford, and again worked for Morris Motors, in fact in the publishing part of Morris Motors, what became Nuffield Press. And they met, and were married, and produced me.

*Did you have brothers and sisters?*

Yes. I had a sister two years younger than me, a brother seven years younger than me, and a sister thirteen years younger than me. So I was the eldest of four. Sadly, my sister, the one two years younger than me, died seven or eight years ago, and my younger brother died six months ago.

[04:36]

*Oh dear. What kind of family life did you have? Was it happy?*

Well it was... As I say, I was born in 1938, so it was a war-dominated family. And my father was working for Pressed Steel, which was very much part of the war effort. And so he was working incredibly hard. People today don't realise just how intense the war effort was, and how deprived people would think we were, and we didn't feel deprived particularly. But it was stringent; we were poor, you know, we had no money to spare. We lived in a rented house, and getting the rent money was a challenge. And of course we took it for granted we didn't have sweets, because they were very much rationed, and we didn't have the mythical thing called bananas, which were always sort of, one of the symptoms of deprivation that we saw. So it was... But it was, it was an enjoyable family life for all that, particularly, the fact that my sister and I were just two years apart meant we were very close. And events like Christmas, Christmas in those days was quite different from today. It really was magical. And, we didn't really have holidays, because, the seaside wasn't open to us in those days. We were very conscious of the war, and I remember my father taking me outside when we lived in Oxford in, I should think it would have been 1942 or 3, showing me the sky at night, lit up where London was burning. And that stays in one's memory.

*Mm.*

After the war it was still pretty tough. We've still got rationing, and, fuel cuts and cold winters and so on. So, it was, in terms of the sort of consumer society we have today, we didn't have that, but it was, it was enjoyable. And what was particularly important for me is that my mother was absolutely determined that despite the financial problems we may have, I was going to get a good education. And that's what changed my life.

[06:50]

*You've had a lifelong interest in education. Do you think that is the root of that, I wonder?*

I, I think it's, it's partly because my mother was interested in education, and certainly, the games, we all played family games in those days, and the ones we played were always, had an educational element to them. But she, without the aid of the Internet,

found a school for me for when I was seven, which was the, changed my life. It was a state school, and it was two and a half miles away from where we lived, which was quite a long way, bearing in mind there were schools within a mile of where we lived. And I met Mr Scott, who was the head teacher, who interviewed me, which we wouldn't be allowed to do today, to decide whether I was, should be admitted to his school. And, it gave me an interest, it gave me a foundation of learning that subsequently I realised had been fundamental to everything I did.

*Right.*

And my mother, I think with my mother's interest in education, and her ensuring that I had a good interest, was one of the things that made me, as you say, have a lifelong deep interest in all aspects of education, all aspects, from primary schools to the best universities.

*Mm.*

So I, it was interesting that one of the, in 1946 we had an American exchange teacher, Mr Caesar, and I met a chap I was at school with at lunch three or four years ago, and he asked me, did I remember Mr Caesar, and I said, 'Oh yes, Julius Caesar.' And he laughed and said, 'It wasn't Julius Caesar! It was John Caesar.' And do you know, he wrote a book about his time, a book called *Caesar Invades England*, and he wrote a book about my school, East Oxford Primary School in 1946, and it was amazing, to look back at what an American thought about coming to the deprived, cold, primitive England of those days, and the teachers who taught me, the teachers who changed my life. And I won a scholarship in the days of the evil Eleven Plus, and again without the Eleven Plus I don't think I'd be sitting here talking to you. And I won a scholarship. In those days Oxford City gave two scholarships to Magdalen College School, which was a very good independent school. And once I had won that scholarship, and gone to Magdalen College School, my life was set for me really. Because it was, providing I was reasonably bright and hard-working, in those days it was a dead cert I'd either go to Oxford or Cambridge. And sure enough, I went to Oxford. In fact I was, in my teens, got very interested in the Classics, but in parallel was very interested in physics, and as a hobby I used to make what we call wireless,

that's radio sets, and did work on radio-controlled model aircraft and flew lots of model aircraft. But I actually went to Oxford to read Classics. So I had got, I was a sort of, slightly schizoid, on the one hand interested in the arts and the Classics, but very interested in engineering.

*Why was it so certain that you would go to either Oxford or Cambridge?*

I think if, in those days, if you were bright, bearing in mind that such a small proportion of young people went, you know, five per cent of school leavers went to university in those days, but from that sort of school, it was just assumed, if you were bright, you could get to Oxford or Cambridge. And probably didn't really consider any other universities. And it was, it was almost just a straight, automatic machine. I didn't even think about, should I go to Oxford? I simply went through a series of processes, and applied, won a state scholarship, and I got a place at Exeter College, Oxford.

[11:16]

*Now, you had this interest in mechanics, you had been restoring old cars; you had this interest in physics, you're building wireless sets, at a time when it was a comparatively rare thing to do. But you read Classics and Philosophy. Why were you attracted to the Classics rather than to physics at that time?*

I think... It was a dilemma. I think, partly because of the way the education system worked then, and to some extent still does, that it forces one to specialise at the school leaving age. And, it was largely driven, as so often for young people, by, particularly people whose parents hadn't had a tradition of going to university, largely driven by my teachers. And the chap who taught me Classics was very inspirational, and he became a very good friend of mine, and, it seemed to me, talking to him, I'd enjoy reading Classics, and it would not shut my options down in terms of what I did subsequently. And that proved, proved to be the case.

*Mm. Did you enjoy your time at Oxford?*

Very much. I... It's hard not to in a way. And reading Classics, or, Oxford calls... Oxford has its own way of describing these courses. You know, it couldn't possibly call a course Classics. So I read Literae Humaniores, or Greats to use the slang, which was a mixture of Classics and philosophy and ancient history, and it's a four-year course. And, so four years at Oxford, with all that Oxford has to offer. And I still kept an interest in cars, we used to rally, and, a friend of mine at Oxford had a 1928 chain-driven Frazer Nash, and we used to modify cars. So, on the one hand I was reading Classics, but I was still quite deeply involved in the mechanical engineering thing.

*Were you a good student?*

I was OK. I, in retrospect, I know that if I had had a different background, if my parents had been academic, I could easily, I could have got a First. I didn't. I got a Second. But I, getting a Second in... I remember, a slight aside, but, I watched Jeremy Paxman interviewing Boris, Mayor of London, a few months ago, and Paxman was talking to Boris about his aspiration to become leader of the party, and Paxman said to Boris, 'Of course, David Cameron got a First; you only a Second.' And Boris sort of put his head down and muttered, 'But, yes, that was in PPE.' Because of course Boris got a Second in Greats, and that's better than getting a First in PPE. [laughter] So I think I, I was a pretty, a good enough student to get a Second in Greats, which Boris did. But I could have done more.

[14:30]

*Indeed. But you maintained your interest, as you say, in things mechanical. You were rallying, or...*

Rally, yes.

*Rallying.*

In the days when we were allowed to do rallies on public roads, which of course we don't do any more.

*Have you maintained an interest in cars?*

I... I have. In fact yesterday I just took delivery of my new Jaguar, I think the 26<sup>th</sup> Jaguar I've had. And I... But I wasn't that excited taking delivery of my new car. I said to a neighbour who sort of said, 'Oh John, you've got a new car,' I said, 'Yeah but it's just another car.' So... But I'm still quite involved in people in the motor industry. I'm having lunch tomorrow with one of the people in charge of Jaguar Land Rover, and, I'm still, particularly still linked into that part of the motor industry. And, I'm very involved with Warwick University, which has got strong links into the motor industry. So I'm still more interested than most, I suspect, in things to do with cars and the motor industry.

[15:44]

*Mm. Let's go on to your working career. I mean, you came out of university with a perfectly good degree. What were your ambitions at that time, what did you want to do?*

Well, people often ask me, 'How did you plan your career John?' And, the truth is, I never planned my career at any stage in my career. And towards the end, the sort of, somewhere in the middle of my fourth year, I realised I'd better – at university, I decided I really had better start thinking about getting a job. And I was interested in cars, and I thought, the automotive industry would be an interesting place. Because it was going through, I knew it was going through enormous changes. And it was intrinsically an interesting industry. So I wrote to all of the major car companies, to Ford and Vauxhall, and Rootes that existed in those days, and BMC as it was in those days, and Lucas and so on, saying, 'I'm about to graduate from Oxford. Have you got anything to interest me?' Several of them wrote back saying, 'Yes, we're interested in people like you.' Ford wrote back and said, 'We're particularly interested in people graduating from Oxford and Cambridge. Come and have an interview.' One of them, BMC, which subsequently became British Leyland, wrote back saying, 'We don't recruit graduates,' which later in my career I used to look back on with some mild amusement. But anyway, Ford wrote and said, 'We're very interested in talking to you.' They interviewed me, and very quickly offered me a job as a graduate trainee. And in those days, intakes into that sort of company went on a sort of Cook's



tour around the company from department to department. And I joined them in September 1962. I'll always remember going into Dagenham the first day in a coach with all the other graduate intakes that day, and one of them shouted out, 'I wonder where the computers are that run this place.' And I thought, computers? What are computers? And, do they run this place? Subsequently of course I realised the chap was talking through his hat, to think that in 1962 there were computers running the place. But anyway, we started the course.

*But seriously, I mean, had you not heard of computers at that time?*

I had vaguely heard of them. I remember having lunch somewhere in Oxford, talking to other students, somebody saying, 'God, the most boring thing one can go and do would be a computer programmer.' And I had no idea what sort of job that would be. And I knew very little about what computers were, very little indeed.

[18:36]

*OK. Let's just go back to Ford having this interest in you and other graduates. Was this a particularly enlightened approach on their part?*

I think it... Very, very much so. No, as we'll come to later on, subsequently I joined British Leyland, ten years on, and the contrast between the quality of management at Ford and at British Leyland was stark, and it was because of, I mean I've learnt all, all through my career, if you invest in good people, it pays off. And Ford did that. I remember talking, I don't know how many years on, fifteen years on, in the Seventies, at a recruitment fair at Cambridge, I had gone along there for some reason, and a headhunter started chatting to me, and said, 'Where did you start your career?' And I said, 'At Ford.' He said, 'Ah,' and he put his hand in his pocket, and pulled out a tatty organisation chart of Ford in the early Sixties, and said, 'This is where he's gone, this is where he's gone,' and there was a sort of diaspora of people from Ford that came out of that graduate recruitment scheme and went all across British industry. And you couldn't say the same of British Leyland of the 1960s. So yah. And it's something I learnt, and it's something I built on in the things I did, both in the IT companies I was involved with and in education.

*Yes, I think later on in your career you were very much responsible for a diaspora of talented people leaving and starting their own companies*

Yah. Yes, there was.

[20:20]

*Mm. OK. So, computer systems. I mean, on the one hand something, something new, exciting perhaps; on the other hand, very boring. [laughs]*

Yah.

*How did you approach this?*

Well to me, I realised... I mentioned a Cook's tour that we'd gone. In fact I didn't complete the Cook's tour. Very quickly I went into, I visited what Ford called its Systems Office, and that was very important. Some other companies in those days had data processing departments, and perhaps a computer department; Ford always saw it as a systems issue. To them, it was about changing the way the company worked, not a trivial processing of data. So I went in to the Systems Office, and was given a number of aptitude tests, and they immediately said, 'We think you should stay here.' And in fact I think my education at Oxford helped the ability to articulate problems and communicate clearly, and analyse, particularly communicate and write. And, so I didn't go any further. I immediately went into the Systems Office, starting to look at application, the way one could apply computers, the primitive computers we had, to the challenges that Ford had in Dagenham and, and other parts of the company.

*What kind of computers would Ford have been using at that point?*

Well, the first computer I saw was LEO. Now you, Alan, know all about LEO.

*Indeed.*

I still talk to people about LEO being the first compute I saw, and the sad story of LEO and what a success it was, and how we let it slip through our fingers.

*Absolutely.*

So LEO was the first computer I saw. I didn't ever develop an application for LEO. I looked at the applications that were working there, and it was a lot to do with production statistics and financial systems. But the first computer I developed applications for was the IBM 1401, which made such an impact around companies at that stage.

*Mm. Just for the record, I think we should point out that LEO was the computer developed by Lyons to run its tea shops, and it was almost certainly the first business computer of its kind in the world.*

Yes. And an amazingly successful machine. They had the bizarre situation that an American car company bought its first commercial computer from a British tea company. It's a, it's a symptom of how good the work done by Joe Lyons in that area was.

*Absolutely. So you're basically there working with 1401s, and possibly 360s later on?*

Later on, yes. In fact I, I left Ford before the 360 really made an impact.

*OK.*

But I worked, the first job I did, I was thrown in the deep end of the engine factory in Dagenham where they'd got an enormous problem with scrap. Foremen were digging holes to hide scrap, to improve the performance statistics, and I had to develop an application to analyse what was going on, to help solve the problem. And I learnt a lesson from that. I always remember, I was proud of my application, and I had to present it to the controller of Ford, the head of finance in Dagenham, a tough, red in tooth and claw sort of chap, notorious, a chap called Bill Hayden, whom I later on

became very friendly with, but he, he was so committed, he... He had a caravan, a Red Cross caravan, on the Dagenham site so he didn't have to go home at night. He was that sort of intense. And well-known for tearing people to pieces if they didn't do a good job. And I proudly presented my scrap report to him, typed, because in those days we didn't have word processing, with a little window saying, 'Scrap Report by John Leighfield'. But the typist, either maliciously or mistakenly, had missed off the s in Scrap. [laughter] So there to Bill Hayden was my 'Crap Report'.

*Oh dear.*

But I think I learnt a lesson about attention to detail at that point. But then... And that was successful. But I was then given, put on a special...

[25:01]

*Just let me take you back though. At that point, I mean, you were analysing problems, developing solutions.*

Mm.

*Were you writing code?*

No. I did a little tiny bit. But, that was not something I ever did seriously.

*Essentially you were doing what we would call the work of a systems analyst these days.*

I was a systems analyst, and a project leader.

*Yes.*

And so, and I had got the whole job of analysing what was going on, synthesising a new system, convincing the management, training the people to run the new system, and taking it through implementation.

*Right. Good.*

[25:37]

But I was very lucky that the... A chap took over the head of all of that part of the finance staff at Ford systems and data processing, a chap who had been brought in from the Bank of Canada, who was very experienced in systems terms, which is saying something in, we're in 1963. And he set up a database project in 1963. Now, 1963, to start databases was incredibly early. And I was part of a team of six I think who went round and talked to all of the people who ran Ford, all the directors, about the way the whole company worked. And we analysed and documented all of the major processes of the Ford Motor Company. And this chap, a chap called Bob McDougall, the chap from Canada, had made a huge chart which was professionally drawn of all of the flows of information. And it was called the EMS Study, the Engineering, Manufacturing, Sales Study. And it was designed to show to the management of Ford the profound importance of the way data and information flowed, and how tortuous it was, and how if we set our plans properly we could make a major change to the effectiveness of the way the company ran. And I was so lucky that I went off to talk to the director of trucks for Ford, me, sort of, a wet-behind-the-ears graduate from Oxford, talking to this very senior chap about the way his part of the business ran. And that was an enormously important experience in terms of thinking about computer systems and all the services that could be developed subsequently.

*Mm.*

And there are other bits and pieces, and I... In those days computers were isolated, they were, everybody knows, they were in great big rooms with sterile environments and so on, with no communications between them. Except that in Ford we were opening the Halewood factory in Liverpool, and we wanted communications between the two. And we had communications, we had transceivers. I'm not sure how many people ever worked on those. They were punch card driven. But I could send scrap data from Halewood to Ford in Dagenham and back over telephone lines. So very early on I got involved in a very primitive form of data communications, which became a very important part of my life.

*What kind of information were you sending over the telephone line?*

Scrap information.

*No, I mean, in terms of coding. I mean, what kind of language were you using?*

It was ASCII coded punch cards from one, just, images of cards sent from one to the other. So it was just as though you had keyed in a punch, a punch machine.

*Right, right. Was that one of the earliest uses of that kind of system?*

I should think so. I didn't... I never talked to anybody else at that time who was doing a similar thing. And I've never talked subsequently to anybody who did a similar thing. But it was, to us it was a fundamental part of the system, and we just took it for granted that you could do this.

[29:00]

*Mm. You stayed at Ford until 1965.*

Yes.

*What sort of a rank had you risen to in the company by then?*

I was a project leader. So I'd got a number of, a dozen or so people working for me on projects coming out of this EMS Study.

*Yes. Yes. And, why did you decide to leave? You then joined Plessey Telecoms.*

Yes, well, my boss, a chap called Jay Moore, another person who made a big impact on me, he had been a bomber pilot in the war, shot at the age of nineteen flying Lancasters to Berlin, not for a holiday but... And was shot down, was a prisoner of war. But, he moved into ICT, but was recruited by Ford, and he was my boss in Ford. And he was offered the job of running the computer activities for Plessey

Telecommunications in Liverpool. And Plessey was a big company. And Plessey Telecommunications had 40 per cent of the telecoms market in the UK, and a big export market. And he rang me and said, 'John, would you like to move to the north-west?' And I didn't really know where Liverpool was, but he persuaded me to join him as his systems development manager in Liverpool. So I did.

*Mm. And, eventually you became IT Director at Plessey.*

Well I became IT Director at Plessey Telecoms and IT Director of the Plessey company and moved back to Essex, moved back to Buckhurst Hill, with an office in Ilford.

*Mm. IT Director, would that be the equivalent of what we would describe as a CIO, a chief information officer, today?*

Yah, yes it was. It was the early manifestation of that sort of role.

*So who were you responsible to, let's say, at Plessey Telecommunications?*

In Plessey Telecoms, I was responsible to the chief executive of Plessey Telecoms.

*Directly to the chief executive?*

Once I had become IT Director of Plessey Telecoms, yes. And again in, when I was IT Director of Plessey company, it was to the finance director.

[31:17]

*So at Plessey Telecoms, did you control the IT budget for that part of the company?*

Yes. Yes.

*That was under your control?*

Yes, all of that.

*And were you on the board of that part of the company?*

No. No. No.

*OK.*

The... I'm not sure that anybody in Plessey Telecoms was on the board. It was a...

*Because it was a subsidiary?*

It was a subsidiary of Plessey. Plessey was a public company, it had been floated and it was a big public company, but it was still largely run by the brothers of the founder, John Clark and Michael Clark, the sons of Allen Clark who had set it up. So, the thought of anybody from Plessey Telecoms being on the board, it was a highly unlikely thing to happen.

*OK. And what did you do at Plessey Telecoms?*

Well when I arrived, when Jay Moore, my boss, and I arrived in Liverpool, it was to inherit some decisions that had already been made. Plessey at that stage owned a part of ICL, they owned ten per cent or twelve per cent of ICL. But they had gone out... They had convinced themselves, and I'm not quite sure how they had convinced themselves, that computers were going to help them solve their problems. They'd got problems of inventories that were too big, shortages on making telephone exchanges, engineering problems. And they had gone out to tender for four or five computer companies, for them to make proposals about what Plessey should do to take advantage of modern computers. And one of my regrets is that I didn't keep the proposals that they received, and they were from companies like Standard Telephones, STANTEC-ZEBRAS, and, EMI and ICT and, and so on. And IBM. And they were amazing documents, how to solve a company's, all of the company's problems, and the puny machines that were then provided. But the ICL one won the day. In fact we, by the time Jay Moore and I arrived in Liverpool the decision had been taken to buy an ICL 1904, which, of which there weren't very many installed.



And the logic that ICL used was that, this is a multi-programming machine. You can run four programs at once. One of them you can use for doing finance, one for manufacturing, one for engineering, and you'll have one free to do anything else. And it was such a naïve view of, of what computers actually did, and how one would handle manufacturing, and so on. But it sold, it was sold to the directors of Plessey on that sort of basis. So inherited an ICL 1904, with very very poor software, and very huge challenges in terms of making telephone exchanges, which was fundamentally what Plessey Telecoms did.

*Yes. Indeed.*

It's a complex job. In those days they were huge electromechanical devices. Every one purpose-built, made from tens of thousands of components, huge inventories. Massive manufacturing operations. 10,000 direct employees in Liverpool making components. So huge logistical issues. And the 1904's got to solve all these problems. And of course we had no staff, and there weren't 1904 programmers waiting to be recruited, or systems analysts. So we recruited local Liverpool lads and lasses, put them through training programmes, and gradually built software. There were no high-level languages for the 1904 at that stage, so we were writing in autocode, or PLAN as it was called for the 1900s, a very low-level language, and very error prone, particularly for young people. Tyro programmers. We had, I think we had one experienced programming chap, somebody who had worked on LEO, ironically, at Lyons. But it was very very hard work, training these young people in PLAN, developing in the applications, finance applications. But we, we managed it, and we did put these machines to work. Even the most expensive device we had, we had a disc drive, a disk drive. Now, in those days, having random access machines was unusual. And, I think this was the first one that ICL had sold, and there wasn't a software for it. So we wrote a disk sort system and disk software. So we weren't just writing applications, we were writing system software. But we produced applications to handle the inventory, to handle production planning. We even started work on CAD. In fact one of the proudest achievements we had in those days was designing ways of, in fact designing the components for crossbar. Crossbar was an interim telephone system between the old-fashioned electromechanical and stored program machines. And we produced some superb computer-aided design systems to design

crossbar systems. And it transformed the way Plessey Telecoms built those components. So it was the first glimpse I had had of computer-aided design being truly productive.

[37:20]

*Mm. You would have had, I suppose, the problem of persuading people who had been working in completely different ways that, you know, using these new computer systems were a good idea, the way ahead. How did you solve that kind of problem?*

It was a problem. Now I remember, the first thing that was said to me... J Moore[sp?], my boss, who took me there, in an open meeting one day said to me, 'John, explain to these people how you'd handle goods receiving?' He gave me no warning of this, but I had done a number of goods receiving systems back in Ford. And I described a few. An immediate reaction from one of the little people was, 'It'll never work.' And that was the sort of common cry, 'It'll never work.' So it was pure charm, Alan, you know. In fact it was back to my education at Oxford. Now the Oxford and Cambridge tutorial system forces you to handle arguments, intense arguments, with very bright people. And, it was through logic, convincing, not brutal, not aggressive, and over time people began to say, 'Oh yeah, it does work.' And we did install things. So, obviously there are always some people in denial, and as there still are today. But largely people were, they wanted the business to succeed, and they could see that, if we did it properly, our computer systems could help the business succeed better.

[39:00]

*Mm. So did this, I mean the success of these systems, did that lead to you becoming IT director for the whole Plessey company?*

Yah, it did. I think in Plessey Telecoms... Plessey was split into divisions, a components division, radar division and research activity. And we achieved more in Plessey Telecoms than anybody else did by a long way. And, my boss moved on, and I decided I could do things, I had learnt enough in Plessey Telecoms, and I started thinking about, where would I like to move to? And one or two people approached me, and I went to the finance director of Plessey, in fact a chap called Tom Hudson

who set up IBM in its early days, who was my boss, and said I was planning to leave. And they immediately said, 'No no no John, your future's with us.' And they then offered me the job of becoming head of IT systems for Plessey. And I moved, working for Tom, Tom Hudson, to that job. And then I had got, I don't know, 600, 700 people working for me across, scattered across the country from Sunderland in the north to Havant in the south, and Taplow in Buckinghamshire where we had Elliotts and, and so on. And Swindon in the west.

*Mm. Again, were you responsible for the IT budget at that time?*

Yes I was.

*What sort of size of budget would you have had?*

I can't remember Alan. I wish I was... I was saying to your earlier, before we started this, my memory for that sort of thing is, is not good. But it was a budget to support that sort of, 700 or 800 people, and relatively big computer centres. We developed a big computer centre at Weybridge with big 1906As, which were the biggest machines that ICL provided in those days. So, by most companies' standards in those days, it was a significant budget.

*It would have been a big part of the Plessey company's budget.*

Yes, it would have been.

*Indeed. Again, who... You said, I think, earlier, that you were responsible to the finance director at that time.*

Yes. So this would, this was Tom Hudson in those days.

*Tom Hudson. Yes, of course, who was very well acquainted with computers and computer systems.*

He was. He was, yes. [laughs] He had set up IBM before Eddie Nixon. And then left IBM, and moved to Plessey as Finance Director, and ultimately went on to become Chairman of ICL. And he was a great chap to work for, a great character. I learnt a lot from Tom about how to run big departments, and how to make the most perfect gin and tonic.

[42:02]

*[laughs] So in a sense you were sort of pushing at an open door there with ideas for how to improve systems.*

Yah, I was. And, but bearing in mind Tom, Tom's position in the industry, going along to meet, whoever was head of ICL in those days before Tom moved there, with me a big customer, was a great joy, because, Tom's own credibility was very high, my credibility as a big customer was very high, so I got very good attention from the senior people in ICL.

*Mm. How did you approach the job of, you know, this much bigger job, this very large number of people, very large budget, how did you approach that?*

I approached it particularly by talking to the senior people in the divisions of Plessey about what the real challenges were, and what we could do in terms of systems, almost taking the sort of, going back to my earlier days in Ford, the company-wide look at how you use computers to improve the systems in the company, encouraging people to take a systems approach by working with the senior people in the business, not looking at it as data processing, a sort of low-level data issue. And that really became the norm in Plessey, that people did see it as something to support the businesses in a system, systematic way.

*So you were trying to... I mean was there a barrier at that time between the IT function and the rest of the management do you think?*

It would depend very much on who was, who my divisional IT heads were. Some of them were quite abrasive people, and if you, you've met lots of IT, heads of IT, whatever they were called in the day, Alan, and, it always amazes me that some

people think that they can talk jargon and can be aggressive and abrasive, and don't have to be clubbable. My, my way of doing things would always be that we're part of a club of a management team. Not all of them, not all of my divisional IT people saw it that way. Some of them were, wanted to talk technology, whereas the business people wanted to talk about systems.

*Indeed.*

And so it was, it wasn't easy.

*Mm.*

But we, that's the way we, we developed and...

*Yes. Were you on the board?*

No. It was still, it was still a family-dominated company, with Michael and John Clark still dominating it. And a typical board of those days of a typical British company, of the great and the good on the board, rather than people, than executives close to the action.

*So essentially, Tom Hudson was, was translating to the board your ideas.*

Yes he was. Tom was on the board.

*He would have been, of course, yes.*

Yes, Tom was very much seen as the great and the good.

*Mm. Would any IT director in any big company have been on the board in the UK at that time?*

I don't know. Peter Herman at...

*At British Airways.*

... British Airways, possibly.

*He was British Airways, wasn't he?*

Yes, it was British Airways. Very very few, if any.

*Mm. Mm.*

I think still at that stage, now we're talking about the late Sixties and early Seventies, IT still wasn't really seen as a strategic issue by many companies.

[46:00]

*Mhm. Mm. You were IT Director for Plessey for a comparatively short time.*

Yah.

*You left in '72 to join British Leyland.*

That, ironically, yes.

*Mm. Why was that, why did you leave?*

Well I had a phone call one day, as one does, from John Barber, directly, from John Barber, who had been Finance Director of Ford when I was at Ford, when I had left Ford he was Finance Director, who had become Finance Director of British Leyland, and was going on to become Managing Director of British Leyland. And, he was trying to recreate the Ford Motor Company in Longbridge, and other such places, and he looked around at the bright young people in the different functions at Ford, and tried to persuade some of them to join him in his new role in British Leyland. And he asked me to join the central systems activity of British Leyland. And, it seemed to me, bearing in mind I had a residual interest in the automotive industry, having forgotten all about the fact that BMC said to me, 'We don't appoint graduates,' I

thought, yeah that sounds interesting. And I went and had discussions with them, and, agreed to join. And I joined as Systems Planning Manager, leaving 800 people in my old job, with one person working for me in the central staff of British Leyland, with the remit to look at systems all across the sprawling British Leyland to come up with plans to bring about dramatic, drastic improvement.

*Mm. So your empire shrunk from 700, 800, to, to one.*

To... Well to...

*To two.*

Two if you include me. [laughter]

*But that was a promotion in a sense in terms of salary, in terms of...*

Oh it was, in terms of salary, certainly. And I, in those days I was living in Buckhurst Hill, with an office in Ilford. I then had an office in Piccadilly, and another office in Cowley, and another office in Longbridge. And, I had a sort of functional link to, I don't know how many, 20 locations across the UK, from Scotland down to the south coast, and again Swindon and Oxford and Birmingham and Coventry, and Southall where we made buses, and so on.

*It sounds like a basis for a good telecoms network.*

Yah. Yes. We'll come to that. Actually, well, you having raised it... Well I'll talk about that later on when we talk a bit, what happened in British Leyland.

*Well I should ask, who were you responsible to at Leyland?*

I was responsible to the systems director, a chap called Mike Nichol, who had come in from British Oxygen, and he reported to John Barber. And he had a functional link across the systems activities all across the country.

[49:33]

*So, there you are with your empire of two people. How long did that last, and, what did you do there?*

Well, it was in some ways a question of how long did British Leyland last? Because, you remember, this was the bad old days of, of strikes and British Leyland being the sick man in industry.

*Indeed.*

And, there was a total upheaval in that the Government, if you remember, put in large sums of money to save the life of British Leyland, and the Ryder Report was done to look at what should be done with the company. And, he came up with a new structure. And quite remarkably, he put systems right in the heart of the new organisation, very senior. And he split it really into Leyland Bus and, Bus and Trucks, and Leyland Cars. And each of those had got a systems office. And, my boss didn't get the job of being the head of systems for the new British Leyland. In fact I was deputed to tell him he hadn't got a job. It's the first and only time in my life when I've had to fire my boss.

*Oh dear. So who was that?*

The man who left? I'd rather not...

*OK, that's, that's...*

But if you look in the history, you'll find out.

*Yes.*

But I... And I was offered the job of head of systems of British Leyland, which gave me a shock, and I... In fact, I was systems for Leyland Cars, but effectively for the whole company. And, I was offered that one Thursday, and told, 'Come in on Monday morning and tell us what you're going to do.' So I spent the weekend



producing a plan, and getting my sister-in-law to type it and so on, and presented to Derek Whittaker, who was head of Leyland Cars, my ideas. So I went from having an empire of two to having, I don't know what it was, 1200 or so, a large number of people, again.

[52:00]

*How did you approach that?*

Well I decided that, having seen the state of systems, and the structure of it, of computing and systems in British Leyland, it needed a total rethink. And I decided to set up what was effectively a services organisation within the company, divisionally oriented. So I had a person, a head of systems in sales and marketing, and somebody else in engineering, somebody else in manufacturing, each of them with teams of systems analysts and programmers and, and so on. And I had a very strong OR team; operational research in those days was still potentially a very powerful thing. And I chose, from among the people I had got, people to head each of these divisional activities, and I said to the heads of engineering and sales and marketing and manufacturing in British Leyland, 'I want you to have a strong functional link from in your organisation to the heads of my organisation,' so that effectively they've got almost two bosses, so that the sales and marketing systems chap felt as close to the head of sales and marketing as he did to me.

*Mm.*

And, we implemented this, and, and that's what we did. And, rolled that out quite quickly after that. And I spent the next few years refining it, changing some of the people, particularly strengthening the skill levels. Because, I compared Ford with British Leyland, it was the skill levels that were the big differentiator. And to me, the reason that British Leyland was in the mess it was, was all to do with skills, of management, of production management, of engineering, and management of systems. So I started putting in serious training and education plans for my own staff. We had a... As you can imagine, British Leyland at that stage, in the mid-Seventies, was not an attractive place to go. And again, in those days skilled systems people and programmers were in very short supply. The newspapers and *Computer Weekly* were

full of advertisements. And my turnover rate was something like 30 per cent which is almost unmanageable. And, I used to say to the HR people in British Leyland, 'We've got to do something radical to change this.' And we, I began to recruit large numbers of graduates, high-quality graduates, and set up big training programmes, and built training facilities, just to train systems people.

[55:11]

*How were you able to attract these high-quality people to a company which was in desperate trouble?*

We put a lot of effort into it. A lot of effort into this being a challenge, the key industry. And we did recruit, and we put a lot of effort going round universities, and setting up an attractive training scheme, as attractive as anybody else's. And we, we centred the training scheme at British Leyland's own training centre in Redditch, and we agreed with the local housing authority to housing at special rates for our trainees. So we were quite radical in what we did.

*Indeed. Mm.*

It was still very difficult. And I began very early on saying, we're only going to solve the recruitment issues and the retention issues if we can set the systems activity up as a separate company, with its own terms and conditions, without the overhanging influence of the trade unions. So I want to set ourselves up as a company trading with the rest of British Leyland on equal terms, and trading with anybody else, if we can persuade people to buy our services. That was met with great opposition.

*This would have been the origin of ISTEEL, is that the thinking behind ISTEEL?*

It was what then led to ISTEEL.

*Mm, yes, OK.*

But the, particularly the very good friend of mine who was HR director, a very eminent HR person, a chap called Pat Lowry, a man held in great regard by all of us,

but in this he was a great enemy of mine, because he said, 'No John, if you do this for your systems people, the toolmakers will want to set up their separate company, and it will fragment and it will all become uncontrollable.' But I just plugged on and on and on. And...

*What year would this have been? Because, in 1975 you became IT Director of Leyland Cars.*

Yes. From '76 I started the campaign to set a separate company up.

*Ah. Mm.*

And it was '77, '77 we set it up as a subsidiary of British Leyland, owned by British Leyland.

*'79 I think, according to these notes.*

Well the campaign... It was a long campaign.

*Mm. It must have been, yes.*

And we had been doing, taking various steps internally to make ourselves more and more self-sufficient. In '79 the board accepted, partly under great persuasion from Michael Edwardes who had come as, had been brought in as Chairman, to set it up as BL Systems, a subsidiary of British Leyland.

*Was Edwardes as supporter of your ideas?*

Very much. He, Michael Edwardes was a very abrasive chap. Very strong in his opinions. And he, he decided to put all of the top 30 or so people in British Leyland through a very intense psychological assessment process, and through Christmas and the New Year, whatever year it was, we all went through this. And I'll always remember the debrief between me and him, and obviously I had come out of it quite well, and he said, 'What do you want to do John?' I said, 'Well, I want to set the

company up as a separate company, and trade, and live on our own success.' He said, 'Well do it.' So, and he, he subsequently, when we came to do the buyout, he wasn't Chairman any longer then, but was a great supporter from outside, of us doing that. So we became BL Systems Limited, that part of BL.

[59:20]

I quite quickly decided that long term we were probably going to be a separate company, we were going to get ourselves out of British Leyland one way or the other, either British Leyland would want to get rid of us, because Margaret Thatcher was putting enormous pressure to privatise British Leyland, and which obviously in the end happened. And it seemed to me that, being called BL anything was probably not going to be a positive thing, and we decided to change our name. And I then had the difficult task of choosing a name for this company. And we had all sorts of names that we thought, I thought were good, and we'd go off to Companies House and find they were already registered. And it was getting quite, quite tight on the programme, because we wanted to change the name on the 1<sup>st</sup> of January 1980, and this was the summer holidays, and the PR chap was saying to me, 'If you don't get this sorted soon, John, it'll be too late.' So, one weekend I said to one of our bright chaps, 'Go home with your, whatever computer he'd got, an Apple II or whatever it was, and take these three syllables, i-s, s-y-s, c-l-m, c-o-m-p, permutate them, and print the list out, and bring it in, and I'll choose some, choose 20, and one of them will do.' Anyway, he came in on the Monday. I said, 'Did you do it David?' He said, 'Yes.' I did, 'Did you print it out?' He said, 'Well, there were 32 million combinations, so I didn't print them all out. But I have printed out this list.' And he printed out a list, and I went down, and somewhere in the list was ISTEEL. And we, we registered that on the 1<sup>st</sup> of January 1980, BL Systems became ISTEEL. And I gave a talk to the management, the middle and senior management, that day, saying, 'The name of our new company is ISTEEL.' And almost, a sort of Pavlovian response from somebody in the front row, somebody said, 'Ah, yes, I Stand To Earn Less.' [laughter] And people often ask me, what does it stand for? And it doesn't stand for anything. It's just... If anybody wants a suggested name for a company, I've got 32,000,995 left.

[1:01:56]

*And in 1979, 1980, there were already a lot of very successful UK-based computing services companies. Did you use any of those as a model, or was ISTEEL something on its own?*

I've always networked, and I've always been quite active in things like the trade association and the British Computer Society. So I used to talk to lots of people. And I remember advice I was given... Now Philip Hughes for instance, who was running Logica, said to me very early on, 'Get a good legal service.' And I hadn't even thought of that. But when it came to getting contracts and so on, I realised later on. So I talked to lots of people, people you will be talking to as part of this exercise.

*Mm, yes indeed.*

And, and people like Steve Shirley and Bryan. I talked to lots of them. We were in an unusual position though. We had got certain characteristics which meant we could do things which others would find difficult. I mentioned working on transceivers in Ford Motor Company in Dagenham.

*Mm, yes.*

And you said something about, the computer networks, and an ideal thing in Plessey or BL, I don't know which one you mentioned.

*Yes.*

One of the good things that had happened at British Leyland, an amazing thing, when the BMC-Leyland merger happened to create British Leyland, an engineer in Cowley, a very bright chap, whom I met a number of times in the early days, wrote to the Post Office, who in those days controlled telecommunications, and said, 'We're now merging Morris and Austin. There's going to be a lot of traffic between Birmingham and Oxford. We want to use closed-circuit television. Please provide broadband, a broadband link between Birmingham, well Longbridge, and Cowley, so that we can do that, so we don't have to go charging backwards and forwards.' The Post Office wrote back saying, 'We can't do that. We're not technically capable, we don't have

the capacity to do that.’ And this chap said, ‘Well, in that case, would you oppose us under the monopoly act, if we applied for a microwave network, so that we could do it ourselves?’ And the Post Office said, ‘No no no, go ahead.’ So we got a dispensation, they got a dispensation from the monopoly act to set up a microwave network. And it was a 7 GHz network that went from Birmingham to Oxford over the Chilterns down to London. The only one of its type. And that became part of my organisation. And it was used, it was never used for closed-circuit television, but it was used for telephone, as a telephone system. And it was in very, a very bad state. It had no credibility at all, it didn’t work very well. There wasn’t a very good telephone directory. But I employed an ex-Post Office Telephones senior engineer, and we transformed that. And so one of the bits of my organisation was a communications activity. And I persuaded the managing director of Leyland Cars to let me invest £2 million transforming the network. And we built microwave towers in Birmingham, Coventry, on top of the Chiltern Hills, at Cowley on top of the old wartime chimneys, and in London, and put in superb equipment, built a telephone exchange. And overnight we transformed something that had been an embarrassment to being a fantastic internal telephone service. But of course, we had also got the 7 GHz network, and we immediately started doing experimental work on electronic mail, which nobody had got in those days.

*No, indeed.*

Moving data along electronic data interchange, so we called it in those days. So we began to set up a strong communications activity. And we’d got some strong engineering and automation people. One of the things we did, BL Systems did, and later on ISTEEL, we got very involved in what in those days were relatively advanced forms of computing. I met a chap from Ann Arbor, from the University of Michigan, in Ann Arbor, who was doing work on using local television cable technology to link machines in factories together. And I, that sounded to me very interesting, bearing in mind we were building the plant to build the Metro. And I persuaded the Leyland Cars people to install, I don’t know how many miles, five miles, six miles, of broadband coaxial cable to link all the robots, or, lots of mini-computers. So we’d got a sort of local communications skill, linked into robots and automatic storage systems, linked onto the microwave network. So when the Metro came out, we’d got the skills

to enable the systems in the press shops where they pressed the panels with the vices which we helped design in the presses, straight into mini-computers, linked into the microwave link, with the pipes going off to Longbridge so that we could match up deliveries with data, into storage systems that were controlled by mini-computers, linked into the local area network over this cable. So, our organisation was a bit different from most of the other contemporary services organisations, because we had got automation people, communications people, CAD people, as well as people working on production control systems, finance systems and so on. So it was quite an interesting mix of people.

[1:08:43]

*Mm. It coincided, I mean the formation of ISTEEL coincided with the liberalisation of telecoms in the UK.*

It did.

*So this allowed you the opportunity to offer value-added services across, across the network.*

Yah, it did. I said earlier on that people often asked me, 'How did you plan your career?' Because people normally say, 'Well how did you plan ISTEEL?' I always say to people, you don't plan your career, most people don't. You, you look for opportunities, and take risks and exploit them. And to us, the liberalisation of telecommunications was an enormous opportunity. It's the only time in my life where I've sat down with my sleeves rolled up with the local MP working on a White Paper, working on the telecommunications bill. Because, it was essential for us, if we were to exploit the value-added, the whole communications opportunities which are now taken for granted, it was essential there was space for us legally to do things that might have become monopolies of British Telecom, and the value-added regime was very much part of that. So I worked very closely with Bryan Carsberg, the first Director-General of Oftel, on the legislation. And there was a lot of battles between us and the BT people who were trying to keep as much of the value-added in their hands as possible. Luckily for everybody, and I think probably including BT, those battles were won by those who wanted to provide value services. So we ended up a

bit further down the line putting equipment, in the early days, into British Telecom exchanges, so that we could have local access to the BT network all over the country. So, that whole battle on legislation, and finding a space for ourselves so that we could take the opportunity that the liberalisation gave, was something that ISTEEL was very deeply involved in. And in a way, the fact that we called ourselves ISTEEL was a nice happening, a nice thing in retrospect, because, it was very much a question of information systems and telecommunications, was what made us achieve any success that we did have.

[1:11:14]

*How did know the Oftel people?*

We didn't know them until Oftel was set up, and I simply went and knocked on the door and said, 'We'd like to talk to you about the legislation.' We did a similar thing with the competitors to BT. Was it Mercury who was set up in parallel?

*Yes.*

My memory's fading of those sort of things. But, I forget who was head of Mercury, who was chairman of Mercury. But I went along. It's somebody I got to know very well. His name will come back to me. I went along to him to say, 'Look, if you're going to fight BT, you need value-added services. We in ISTEEL are working on the early days of electronic mail.' And eventually they realised that, yes, probably those sort of things would help them in their battles. But it was very early days. I remember we worked very closely with Butler Cox.

*Yes.*

I don't know whether you want to talk to any of those. They did a lot of research into some of these topics, about liberalisation...

*Yes they did.*



...about Viewdata, or Videotex, about electronic mail. We were avid readers and participants in this research. And they produced one research report on electronic mail. And we launched the first publicly-available email service in ISTEEL called Comet, and persuaded the banks, a number of the banks, and other companies, to use electronic mail from about 1982 or so, '83.

*Mm.*

So coming back to your question about organisation, and our colleague companies and competitor companies in the industry. We were similar to them in some ways, but a bit different in the range of things we did.

[1:13:16]

*So, at the point of formation, I mean, all work would have been for British Leyland.*

Yes.

*How quickly did the outside business grow?*

That's a good question. I remember in 1980, at the first, those first talks about ISTEEL, our new company ISTEEL, I said to the management team, 'By the end of this decade we're going to a real player in the outside world.' At that stage probably less than five per cent of our business was from outside BL. I said, 'By the end of the Eighties fifteen per cent of our business is going to come from outside BL.' People, I could see people shaking their heads, thinking, this man's an idiot. We'll never achieve that. The following year I said to them, 'By the end of the decade, 30 per cent of our business is going to come from outside BL.' And by the end of the Eighties obviously it was much, much more than 30 per cent. I don't know what it was, 60, 70 per cent or whatever. So very early on it was a tiny amount, but right from the beginning we began to market, do a lot of marketing where we might create our markets, and selling. And very quickly we got into various markets. For instance, the white goods area. Our EDI business, electronic data interchange, where we were one of the two big players in the country, white goods people very quickly saw that. The travel industry, we became the biggest provider of services to the package holiday

business. The finance industry, we became the biggest provider of endowment policy quotation systems in the days when all our mortgages were backed by endowment policies. So very quickly we began to find our way into new markets.

*How did you go about generating these ideas?*

Again, it's a good question. You know, some people think it's an intellectual process. One can sit down and analyse the markets, and look at, match one's skills to the sort of Michael Porter competitor analysis, and we did that. Some people think, no, it's more by luck, by intuition. The truth was, it was both. And sometimes it was just by looking hard. And we did lots of planning. We put lots of resource into management development. We had a middle management scheme, and a senior development scheme, and they were really part of developing our business plans. So we, the senior group had a six-monthly away two or three days, an intensive team development thing, business development thing. And we began to see that, there were some natural areas for us. And almost adventitiously other routes would spring up as a result of going into the white goods business. The dealer business, you know, the motor industry, dealers were a natural place for us. And so we gradually began to build up more and more markets, particularly based on our automation skills, and our value-added networking skills.

[1:16:47]

*Did you get much support from the Government of the day during this build-up period?*

Depends what you mean by support. In those days, I think it was probably easier to talk to junior ministers. Now the DTI were interested in what we were doing. The IT industry was seen as an important industry. So we had a regular dialogue with the head of, ministers in DTI. And I would get invited, I remember getting invited along to a typical Margaret Thatcher discussion evening on the industry. So we had a lot of discussion. I don't think we had support in terms of resource in any way, or doors that were opened. It was very much us doing what the other IT companies were doing, building our strengths, defining our markets, doing selling, supporting people.

[1:18:00]

*So let's move to the employee buyout.*

Mm.

*This was part of your scheme for getting out of BL was it?*

It was. I think we always... It was obvious that we would not remain part of British Leyland. Because British Leyland itself wasn't going to exist. Margaret Thatcher had made it absolutely clear that the board had to privatise British Leyland, so it was a question of, not whether we got out of British Leyland, it was how we got out. Were we going to be bundled out somehow with the remnants? And we decided that, there were one or two routes: either to find somebody to, well, first of all to buy it. The National Freight buyout, which was a very big employee buyout, was being done at that time, and that was a superb thing. The British transport system, which had been nationalised, and denationalised, and there was a superb employee buyout with a very big activity. And we thought, we could do that. We could do...

*When you say 'we' John, who do you mean? I mean there's you obviously as...*

There was a group of, there was a group of...

*Who were your key lieutenants at that time?*

Well Chris Chiles who was, I was Managing Director and he was COO. I then became Chairman and he was Managing Director. He and I, and two or three others. Peter Marchant who was looking after the sales and marketing; Peter Teague who came in from merchant banking, accounting field. So those four particularly, and two or three others. There were really eight of us called Octagon who did the planning, intensive planning. And we began to look at the feasibility of an employee buyout. And, there were certain particular advantages of doing an employee buyout where the company remained employee-controlled. In other words, the employees had more than 50 per cent of the equity. And that took a lot of engineering, because, the value of ISTEEL, how much are you going to pay for ISTEEL, for us to raise, and I don't

know if we put a notional value of £20 million on it, for us to raise £10 million ourselves, wasn't going to happen. So we, I began to talk to lots of the key financial institutions. And we managed to persuade something like ten of them to support an employee buyout. And I got to know people like Lloyds Development Capital, Citibank development capital, Kleinwort Benson. A lot of the key names in the development capital world.

*Yes.*

And, persuaded them... And it was led by Kleinwort Benson, Kleinwort Benson was the lead financial provider. And persuaded them all that this was only going to be viable if it were an employee buyout, and employees had control. And, in the end we did manage to find a way between equity and debt for doing that. And we, cutting a long story short, we persuaded BL to go along with this. This is where Michael Edwardes coming in and supporting me, he having moved onto the board, saying, 'They are capable of doing this, you should support their buyout.' And, it was done on the basis that, BL wanted £32 million for it. But, Graham Day, who was then the Chairman, decided he wanted to keep 20 per cent, because he thought we'd do quite well, and he wanted to do well out of his 20 per cent. And, so we had to raise the money to pay for the other 80 per cent. We raised, something like £2.2 million from our employees, which was an enormous amount of money.

*That's out of their pockets?*

Yah, out of their pockets. So people took out mortgages. I took out a £90,000 mortgage, second mortgage, on my house, which was, would have made me bankrupt if, if the thing had failed. And other people did somewhat similar things. And we raised the money, and got the debt, and did the deal, and acquired the company. And, there we were, running our own company, with a couple of directors from the finance companies on our board. And we were quite successful. We were particularly successful in paying off the debt, in winning new business. There was a tremendous sense of camaraderie and morale. Now I chaired over the years dozens and dozens of annual general meetings. Usually they're dour, dour efforts, boring. Annual general meetings of this staff, when it was employee owned, were parties. You know, they

were family events, and tremendous. And we were continuing to put lots of investment into the people, into their development training. And we were winning good business from a whole range of blue chip companies. And we were beginning to have German and French companies, so we were expanding quite a lot.

[1:24:17]

*Just take me through the money again. You had to raise £32 million.*

Mm.

*And the staff raised 2.2.*

Between us, staff and directors, 2.2.

*How was the rest raised?*

And the 2.2 was for something like, 52 per cent of the equity. So, the other equity was from the banks, and the rest was debt. And Lloyds Bank provided the senior debt, so they took quite a big risk.

*Sorry, I don't, my mathematics isn't working. 52 per cent. £2.2 million, of a £32 million bill?*

No no. No, £32 million was for the company.

*Right.*

Twenty per cent BL capped.

*Right.*

So 80 per cent. So it was 20-whatever, 80 per cent of, of £24 million or whatever.

*Mhm.*

Of the £24 million, that was funded mainly by debt. The equity bit, of the equity, 2.2 was 52 per cent-ish.

*OK.*

And the 48 per cent completed the equity, and the rest was debt.

*Oh, I understand now. Mm.*

So it was important to us. And we had options that would be granted based on reducing the debt, clearing the debt. So you can imagine the incentive on us was very great. Partly to keep control of the company. Having control was important, for all the employees, because, in those days, and I don't know whether it's still true, there were tax benefits for employees if they borrowed money to invest in an employee-controlled company.

*Oh right.*

So that's why we were so keen. That's why the, that's one reason the banks were so willing to let us keep control. For us it was a good thing, but, for everybody it was a good thing.

[1:26:32]

*OK. A couple of years later, ISTEEL was acquired by AT&T.*

Yes.

*What was the procedure there?*

Well, we're back to looking for the future and opportunities and risk. We were quite successful, very successful, soon after being acquired. But, we could see ahead of us two things. One is the state of the economy in the early Nineties. It was pretty obvious early on that we were going to be going through some very tough, tough

times. And there was also the process of consolidation in our industry. The EDSes had come into this country. All those companies that were contemporaries of ours when we were, in the early days of setting up BL Systems, were being sold to the French or to Americans. And it was part of a, almost, a trend that was hard to resist. The resources needed to compete were getting greater and greater, particularly in the sort of fields we were involved in.

*Mm.*

Now we were, we were running big networks, nationwide networks. It was clearly something that potentially should be part of a global network.

*Right.*

We were never going to be able to invest in that. And the robotics and CAD areas again were big investment areas. And the competition with the EDSes and other such, and the big French companies, was going to get more and more intense. And we could see either, many many years, tougher and tougher competition, or getting resources through floating, or finding a partner with resources. We had tremendous arguments about which of those two routes. There was no dispute that we had to do something. We couldn't stay as an employee-owned company, we couldn't generate the resources.

*Mm.*

And there were two factions for quite a long time within the company, within the Octagon group, the leading, senior people, about floating or finding an acquirer.

*Which side were you on?*

I believed that the, that the, that one would lead to the other anyway, that if we floated we'd be vulnerable right from the beginning. And we then would find ourselves owned by a partner not of our choice.

*Right.*

And my view was, if we were going to become part of a bigger operation, better to choose that partner than to let the market choose it for us. And eventually we all came to that conclusion. We had some very robust arguments, very tough, very very tough arguments. But in the end we decided we should find a partner. And we went through a very professional process to find a partner.

*You sought a partner?*

We, we enlisted an American organisation to help us choose a partner.

*So essentially you were looking for a partner that you could offer the company to, is that right?*

Yes, we did.

[1:30:00]

*Mhm. So, you are using US-based M&A experts to help you here.*

Yah. We got...

*Now tell me about that.*

We got to know Broadview, who were very successful in the States. They hadn't really got an operation in the UK. But through various people I had met in our industry in the UK, I had come across Broadview. And they were planning to set up a London office, and sent over a very bright young chap called Steve Markman to set the London office up, and we began to talk to him, and some of the other people who were operating in the M&A world in those days.

*Mm. yes.*



And Steve's approach was different and imaginative, and he said to me, 'If you let us handle the assignment, I suspect we'll come up with people you wouldn't otherwise have thought of.' And, he was clearly very bright, clearly got tremendous access to, particularly American companies, and probably it was going to be an American company who were going to have the interest and skills. And they set about the assignment, and they started off coming back with a list of 80, eight zero, potential companies, which was probably three times as many as we thought were likely to be. And they worked and worked on refining the list, and got it down to a dozen or so. And, in the end got down to a shortlist of four. And the shortlist included two companies that we wouldn't ourselves have gone to. And one of them was AT&T, and we saw AT&T as simply being a telephone company, who run long-distance telephone services in the States. One of the others was a Baby Bell, one of the people that came out of the divestiture of the Baby Bells from AT&T. One was a computer company and one was a British company. And, AT&T were very keen, and, the more we talked to AT&T, the more excited we got. And by coincidence, I had visited AT&T back in 1965, when I worked for Plessey Telecoms, and I visited AT&T's manufacturing operations in New England, Western Electric. And I visited AT&T's research activity, Bell Labs, that most wonderful research outfit at Bell Labs, back in 1965.

*Mm.*

And, AT&T were interested in ISTEEL because, particularly because of our computer systems activities, and they were still very much in the PC business in those days, but particularly in our network and our value-added activities. Because they, Bob Allen, then the Chairman, saw the future of AT&T very much as being a globalised one, and they wanted particularly to get into Europe, and to get into Europe they needed to work with Europeans, to have value-added activities. And they saw ISTEEL as a little model of the way the value-added business may go in the States.

*Mm.*

So they were very enthusiastic, very keen. They flew a lot of people over, and I went over a lot to talk to them. And they were keen that ISTEEL should make an impact on

them. In fact I'll always remember, sitting on the sofa in Bob Allen, the Chairman's, office, and him saying to me, 'John, if AT&T acquire ISTEEL, you must change AT&T. You mustn't let AT&T change you.' And I said, 'Yes Bob, fine Bob,' thinking that, they were going to buy us for, that amount of money and they were, that amount of money. But in the end, we decided that for all the reasons, price they were prepared to pay, the capability that AT&T would give us, and the nature of the company in terms of the people and their culture, that that was the place for us to go.

*Mhm. Did they buy the entire equity?*

They bought the whole equity, including the 20 per cent that BL had kept.

*So everybody got their money back in spades.*

Well, I think BL did quite well out of it, because they got 20 per cent of £180 million. So, they did well indeed. And the employees did well, the institutions did well. So that that, those ten institutions, subsequently when I was trying to do things, they tended to get a good reception, when I went along, and I came across a number of them in other things that I did subsequently.

[1:35:33]

*What was it like being inside AT&T?*

Well it was different. Now, ever since 1980, I had really been running my own show. And then I became an officer, in fact I think I was the only non-American officer of AT&T, part of \$100 billion operation, one of an enormous organisation, huge, with a global name recognition. In the States it was *the* telephone company. And here was little ISTEEL part of that.

*And again, I must ask you, who did you report to, as chair of ISTEEL?*

I reported to the chap who really ran the, the, handled the long-distance operations inside North America. So the biggest part of North America. One of my colleagues ran the long-distance services. So I was right at the heart.

*Right. So he was a board member, or...?*

He wasn't actually. If you look at American boards, they tend to be non-executive.

*Ah, OK.*

The chief executive tends to be on the board, but not like a British, typical British board.

*OK.*

But my boss was very very senior in AT&T.

*And you had your own budget in AT&T?*

I had a budget that had to be approved by AT&T. But, very, they were very understanding of the budget that we needed to develop the thing that they had bought. But I, I was an officer of AT&T. I was put on the strategy group, the chairman's strategy group, so, of the key people, so I was very much involved in the strategy discussions of AT&T. And when they were talking about mergers and acquisitions with major European telecommunications organisations, I would go along on some of those discussions. So we were not treated as just a little outfit of liness. No, we were treated as important. When AT&T held events across the world, I would go along to the, the world events and meet the people running AT&T all across the world. And we had a couple of members of AT&T on our board. We had a lot of televised video conferencing boards in the very early days of video conferencing. And sometimes they would come over here, sometimes we'd hold board meetings over there. And it was interesting being part of an American company. And it was, it was, it really opened our minds. We always think of Americans being very aggressive, gung-ho sort of people. The senior people from AT&T who were on our board were shocked at the aggressive nature of our board meetings. In our board meetings, there are no punches pulled. You know, people sort of, bang, argue back and forth, no hiding things. And the AT&T people were quite amazed at this, that we

were so like that. It may be partly to do with our ancestry, that the motor industry is very aggressive, so we were used to that style. But it was, it was quite interesting, a) to be taken into the fold by AT&T, and then that they treated us very seriously. But we were still ISTEEL, we weren't AT&T ISTEEL. We wanted to keep our name. But after a while they said to us gently, 'Don't you think it would help you if you were called AT&T Istel?' So we then, after a year or so, became AT&T Istel.

[1:39:36]

*While you were there, did AT&T Istel prosper?*

They prospered; they had a tough time. You know, we have a...

*You anticipated it, didn't you, things getting touch?*

Yah, we knew it was going to be difficult. Competition was getting greater. But, it was, it was fine. You know, we were, we could hold our heads up. And we, the senior people made up of Chris Chiles, who as I said was Managing Director under my chairmanship, was very highly regarded by AT&T, and other people. The chap who ran PR for ISTEEL ran PR for AT&T Europe, until just a year or two ago.

*Oh right.*

So... And the network control centre that we had established for ISTEEL's computer and communications centre is still the AT&T centre for Europe in Redditch. So that, AT&T got a lot of the things out of it that they wanted. The problem was that, as happened with AT&T so often over the last couple of decades, they changed their strategy. So they got out of the PC business, and they sold off Western Electric and so on. So that, the whole world has changed quite a lot. But I think AT&T were in a stronger position for having acquired ISTEEL. An individually ISTEEL did interesting things as a result of the acquisition that they wouldn't otherwise have done.

[1:41:14]

*Yes, I think we were talking earlier about the diaspora of people in the company going off and doing their own things.*

Yah.

*Something you encouraged over the...*

Yes. As I said to you before we started this interview, one odd idea I had had in the mid-Eighties, before we actually did our buyout, was to turn ISTEEL into a perpetual buyout machine, to allow young people to build their businesses and help them float them off. And, that didn't ever happen, in ISTEEL and AT&T Istel, but subsequently some of the bits of ISTEEL went off, people went off and took their bits with them. There were certain part of ISTEEL that just didn't belong in AT&T. And that got more and more true over time. And other people went off with AT&T Istel and AT&T as a springboard, had good careers elsewhere. But we still have annual, or biennial, or triennial, get-togethers of the, of ISTEEL. So we've got one coming up this year, and we'll have 100 or so people who will come back together to talk about the old days. And I still meet people... I'll be sitting in the Tube in London and somebody will say, 'Oh John, John Leighfield. Gosh, I still remember those days. I learnt things on management development that I still get value from.'

*Mm.*

So, ISTEEL, it doesn't exist any more, but, it did make an impact, and you can still see the effect of it.

[1:42:53]

*Mm. I mean you retired as Chairman of Istel, oh, quite a long time ago now.*

1992.

*Yes. Indeed.*

I try not to use the word retired in the hearing of my wife, because she, she's got the wrong idea of what that word means. So I went on to do other things.

*Well, but why did you decide to do that?*

Well I just, the word retiring, some people retire and play golf and so on. I want to do other things. And, I wanted to, particularly to do what had become a fashionable thing subsequently, have a portfolio of things. And by coincidence a couple of organisations were looking for somebody to go in either as a director or as a chairman. One of them was a building society, and I became a director and subsequently chairman of Birmingham Midshires building society, and the other was something much closer to my heart, what was called Research Machines, the leading provider of computing to education. The company had always focused on, entirely specialised on education, and had got a preeminent position. And they were looking for somebody to become a director of what was then a private company, and asked me. And it coincided with me retiring from, leaving AT&T. So I became Chairman of RM.

*You've been involved in quite a few companies since then. Synstar, Minerva, training companies of one kind and another, Infinity and Getmapping.*

[laughs] And I'm still a director of Getmapping.

*That must be very close to your heart.*

Well yes.

*Were you interested in maps, or are you?*

I, yes you're right, you're well-informed Alan. [laughs] One of my interests outside work is historical cartography, old maps, and I collect old maps, and I give lectures on old maps. And Getmapping is the preeminent provider outside the Ordnance Survey of photo imagery, mapping from the sky, and we produced the first photography-based atlas of the UK. And we're still the strongest provider outside the Government

monopoly Ordnance Survey. And that gives me great satisfaction, to bring some of my background to Getmapping.

[1:45:25]

*Mm. Despite your interest in, your early interest in cars and wireless, I mean my impression of your career is that it has been your skills in management which have been important, more than your skills in technology.*

Mm.

*What lessons do you think you can pass on from your career?*

I think that, certainly over the last, after AT&T and I became Chairman of RM and floated it, made that a growing and successful business, a lot of it really demands the qualities that you get from a good education, I think, not from a technical education particularly, unless you want to be in a very specialist senior job. If you want to be looking at a company and the way a company should develop, and the way its people should develop, it's above all being able to analyse issues, to absorb issues, to communicate clearly, to find your way through to the best among a number of alternatives, to have a real interest in people, and to choose, to have a very ruthless desire to recruit only the best people, and having recruited them, develop them to the maximum of their ability, and the ability to look at opportunities in a general sense. It's a combination of that package of things, I think. To spot trends. But it's above all analysing issues, articulating arguments, communicating, and choosing good people.

[1:47:11]

*Looking back, have you made mistakes?*

Oh yes.

*What was, probably, the worst one do you think?*

[pause] It's hard to say what was the worst one. The big ones I think, I don't think I made mistakes on the big ones. One or two, and I don't want to name names, because

it would be invidious, one or two senior people mistakes, which, I learnt, the lesson there is, the business didn't do very well when those people were in place. So... And not facing up to those fast enough sometimes. Usually I have faced up to people issues, and we all make mistakes on choosing people. But I think the, the biggest mistakes have been choosing the wrong people, on those small number of occasions when I've done that.

*Mm. And what do you think your outstanding achievement has been?*

Apart from producing two superb children. I think...

*That's, extracurricular. [laughter]*

So we'll treat that as extracurricular. [laughter] I think, I made some contribution to the IT, the way IT developed, partly by being President of the British Computer Society and making some key decisions there that have had an effect ever since, and in the trade association, making effects there, and helping pioneer some of the aspects of IT, particularly in the communications field. And some of the things I've done in education. Now we've talked a bit about my interest in education, but certainly my contribution to schools, particularly my old school that helped me, and in two universities, Oxford and Warwick University where I've been very involved for the last 25 years or so, 30 years, more than that. So, some of the things in the IT world. I think I've made an impact there.

*You talked about the British Computer Society. What do you think you did there that was significant?*

Well, in a membership organisation there's always a governance issue, because you, you've got people who give up their time to run it, and it can be difficult to make decisions. And in my time we developed the governance of it to become more like the relatively good decision-making organisation it is today. And we made the decision to, to enter a key financially successful thing which was to take on board the European Computer Driving Licence, which sounds a very odd thing, but it was such a financially good thing for the BCS that it was one of the things that transformed



their financial success. And I was just part of the process of improving its governance, from something which didn't have a huge credibility outside the group of people who were interested in it, to what today is a very professional and very effective institution.

*Oh, so just for those of us who don't know what the Driving Licence is, can you explain that?*

Well it's the, it's the most widely held certificate for competency in the use of computing. So that, it's in the millions of people who have that. And it's something licensed by the British Computer Society, and it's a very good basic computer competence qualification.

*John, it's been, as always, a great pleasure to talk to you. Thank you very much for giving us the benefit of your experience.*

Alan, thank you very much, it's been good to talk to you again.

[End of Interview]