

John Higgins CBE

Interviewed by

Richard Sharpe

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Via Zoom

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Welcome to the Archives of IT where we capture the past in order to inspire the future. It's Wednesday, the 4th of August 2021, and we're in Zoom Land. Our contributor today, John Higgins, CBE, is probably in Bath, a wonderful city, and I'm in Wimbledon. My name is Richard Sharpe and I've been covering the, erm, IT industry, particularly the computer side since the, erm, early 1970s.

Professions and organisations have to have institutions around them, moulded for them either to, um, establish exams, for example, as with the British Computer Society or-or to advocate the very industry itself, erm, as in software and services. And erm, John Higgins, CBE, has played a very, very large role in the development and guiding these organisations, and indeed, at the moment, he is President of the British Computer Society no less. John, what were your parents doing when you were born?

[00:01:11]

My father was a draughtsman, not many people will know what one of those is, er, but he... He worked in a drawing office, er, doing design for a small company in the North West of England making measuring instruments [cough] and the measuring instrument they were most famous for was a wheel with a counter on it that measured the distance between things that you can still see surveyors and people marking out the roads and so on, using today. So, erm, yeah, he worked in a drawing office for a small engineering company in a town called Radcliffe, in, er, north of Manchester and m...my mother, like so many at the time, erm, her job was bringing up the family.

[00:01:58]

Erm, so, this was, erm, a skilled job, erm, and er, in fact, a, erm, an inside job as well, in the sense that he was in an office and he wore a suit and a tie and so on, to do this job, he was not on the shop floor, and he had a high level of skill to actually do that?

[00:02:16] He did, that's right, Richard, yes.

[00:02:18]

Was he a union member because there was a Draughtsmen's and Allied Technicians Association, I remember?

[00:02:23]

I think he was, yeah, in fact, yes, he was, he was.

[00:02:27]

And I can still hear it in your voice, that's where you came from?

[00:02:30]

Yes, absolutely, born in Salford, erm, er, which, you know, is now a very different place to what it was in 1954.

[00:02:41]

And erm, were your parents interested in your education, did they push you into education?

[00:02:47]

I don't think push, but you know, erm, the-the sort of feeling at the time was that-asas you mentioned, not a shop floor job, don't-don't be consigned to a-a life of a job on the shop floor but get into the office. I mean those were the two distinctions that were clearly made and if you could get into management as well, that was, wow, you know. So-so, I mean clearly, we-everyone thought yes, get a good education, go to grammar school, you know that sort of—you know, pass your 11 plus, those were the goals.

[00:03:20]

Erm, I-I worked in EMI, and there were four different canteens depending upon your status out at that site in Blyth Road, Hayes, although yours were—although your father's was a small company, '54, this was?

[00:03:34] Yeah. [00:03:35]

So, we've got IBM opening a plant in Greenock, erm we've got about 264 computers in the world.

[00:03:43] Wow, I didn't know that.

[00:03:45] A massive number, a massive number.

[00:03:47]

Yeah.

[00:03:47]

Now, you went erm, to primary and then secondary school, did they have the 11 plus then?

[00:03:54] Yeah, they did.

[00:03:55] Did you pass it—you passed it?

[00:03:56] Yeah.

[00:03:57] Did you enjoy school?

[00:03:59]

Yeah, I did, I did. I mean, I-I, erm, I mean, there are sort of little recollections I have...Our primary school was on a split site and the... Where you went for the junior part, was called the huts and they were prefabricated huts that were a walk up the road from the-from the main school. But you know, we had a good football pitch, a big

playground, and er, good friends and it wasn't too far from home so, yeah, that's my memory of it.

[00:04:32] And were you into sports?

[00:04:35]

Football particularly, yes, less so, cricket, the ball was always a bit hard, but football, I loved, you know, that was what... We used to go out at the end of every day and play football until dusk really when you couldn't see the ball anymore. And I was always fortunate that the houses that we lived in, I think, yeah, always, until I left home to go to university, had, er, playing fields at the back, always, so, you know, I could just hop over the fence, meet up with a bunch of mates and kick a ball about until dusk. And we really did do that a lot.

[00:05:08]

And you were in Manchester?

[00:05:10]

Yeah, well, North Manchester, a place... I grew up in a place called Whitefield, which is between Bury and Manchester.

[00:05:17] And are you red or are you blue?

[00:05:19]

Oh, well, red, but then changed to a different blue, to support Bury, erm, which of course, has recently, has had all its financial problems, but er, that was a true football ground, Bury, you could smell the liniment, and I'm not exaggerating, you could smell the liniment as you approached the ground, it had seeped into the wood of the stands obviously, over many, many years.

[00:05:44]

[cough] So, you passed your 11 plus, do you have sisters and brothers?

[00:05:49]

Yeah, yeah, a sis... I'm the oldest of three, a sister, and a younger brother.

[00:05:57]

And er, was the aspiration to go to university?

[00:06:02]

I mean, I was almost sort of expected in-in the sense of well, if you... You know, if you went to grammar school and you were... I was always reasonably near the top of the class in most things at primary school, and then, always in the A-Stream, near the top of the class at secondary school. So, it was sort of expected and I-I, it was slightly bizarre, we had-we had that system where you did your O-Levels as they were called then, GCSEs, as they are now in 4 years, not 5, [cough] so you could, erm, if necessary spend an-an extra year in the 6th form. So, because I was born late in the year, I actually ended up doing my A-Levels at the age of 16, I mean, I was almost 17, but... S-so I was, yeah. And yes, so I, er, it was expected that I would go university.

[00:06:54]

But your father hadn't been because he was a technical draughtsman?

[00:06:59]

Yeah, he hadn't been. In those days, you did night school to get your qualifications, which he did, like City & Guilds, you know, he got some qualifications that way.

[00:07:09] What were your major subjects?

[00:07:11]

Well, by the time I got to A-Level, I was doing maths, further maths, and physics. So, not what you would call a rounded education [laughs].

[00:07:21] [coughs] The arts had dropped away, had they?

[00:07:24]

They had somewhat—they had somewhat, yeah.

[00:07:25]

And without any problems as far as you were concerned, you didn't mind?

[00:07:29]

Oh, no, I didn't mind, I probably just didn't know at that time, you know, I mean, I just did what I was doing, and I enjoyed doing-I enjoyed doing the maths. And the further maths I found a bit harder, as you, er, might expect, but, yeah, you don't know what you're missing, do you, really, you don't know really. I remember for a bit of fun doing O-Level art alongside my A-Levels because I liked the drawing and I think I did alright in that, but it wasn't really the arts, was it, doing art?

[00:08:02]

No, okay.

[00:08:03]

You know, it's not... It's probably, I would take them home and my dad would check the sort of... Whether they were technically competent that if they were artistically creative [laughs].

[00:08:14]

[Coughs] And where were you encouraged to apply for university?

[00:08:21]

Erm, I... It was in those days, I think it was called UCA, it might be UCAS now, but erm, and so, you did... Nowhere, in particular, I-I don't remember the school being involved almost, frankly. Erm, it was just look through the handbook and see which ones, er, stood out, you know, and er, what you liked the look of. Erm, yeah, so, I think it was just what stood out as interesting places and it... You were... I wasn't really, in those days, you didn't really look at... Well, I didn't anyway. I wasn't examining what the job prospects were of the students who went to different universities. It was probably more what the pictures of the campus looked like and whether it had a lively student bar, and you know, was it far enough away from home as well, I mean, that was the other... That was the other thing.

[00:09:12] Where did you eventually go to then?

[00:09:13] The University of East Anglia in Norwich.

[00:09:16]

Oh, right, okay, that's quite different from this big urban setting that you were in.

[00:09:22]

Yes, very, very different. One of the classic sorts of camp... 60s campus of universities.

[00:09:29] Yes, very self-contained.

[00:09:32]

Yeah, but... Yeah, but er, only a few miles outside Norwich, so, erm, you know, it... and the city was quite open to... There wasn't a history of town and gown because it was a new university.

[00:09:47] Yes, I know that feeling because I went to Kent, and we were on a hill.

[00:09:51] Okay.

[00:09:51] A couple of miles away, so, exactly. [00:09:52]

So, same-same genre, I think.

[00:09:56] Yeah, a lot of poured concrete.

[00:09:58] Yeah, yes, indeed-indeed.

[00:10:02]

Erm, so, you spent 3 there-3 years there and your major subject was what, maths again, or physics?

[00:10:09] Oh, er, maths and physics.

[00:10:10] *Right, enjoy that?*

[00:10:14]

I did, but I really probably enjoyed the rest of university a bit too much, I ran the student bar, erm, and you know I just enjoyed my time at university so much that frankly, studying was a bit of a second-order, erm, hobby really.

[00:10:33] You're quite an organiser, are you?

[00:10:37] Now, yes, maybe, I don't...

[00:10:39] Then?

[00:10:40]

Yeah, maybe, actually, when it came to it, I mean we had a staff of, erm, because they were all volunteers, over 40 probably, erm, running... It was a very busy bar, erm, so, I guess I must have always been a bit of an organiser, erm I never really regarded myself. I-you know, I just expected things to work well you know and... And I... The other thing I suppose, and you don't think of it this way, but I had a good bunch of mates, and we did it between us. So, it was, er, it was definitely a team effort, even though... There wasn't any of that, oh, you know, we must form a team. It was, no, it was just a bunch of guys, let's start... And it was all guys, let's-let's have some fun doing this.

[00:11:25]

And did you, erm, also organise entertainment in the bar, music and so on?

[00:11:32]

Well, the jukebox... Now you remind me, I mean the-the records that we had on our jukebox were so carefully curated, erm, I mean, I think that was... It was a relatively small bar at the main, erm, residences away from... There was an old RAF camp, erm, because the main student bar was part of the student union and I think run by the university, but this was a bar on... But it had a fantastic reputation. So, we, ahh, we-we didn't really organise too much by way of entertainment, we had a great jukebox, and then we did hit later in... I think towards the end of my stint doing it, erm, we persuaded some of the suppliers to provide us with discounted whatever it was, and so we'd have a themed Friday night, and I can still remember to this day, the, er, Southern Comfort night when, erm, I don't think people were used to drinking that sort of stuff and you know, it looked like a war zone at the end of the evening, you know, we had to pick bodies out of the bar really, it was...

[00:12:40]

[Laughs].

[00:12:41]

Yeah, so, that was our entertainment really, the jukebox and cheap drinks, good old student days.

[00:12:47] So, you, erm, passed, you got a degree?

[00:12:50] Yeah.

[00:12:51] Did you think of further education after that?

[00:12:54]

No, no.

[00:12:55] Just that?

[00:12:56]

No, well, I just don't think that was er, so common in those-those days, to do-to think about a master's degree. Erm, it was right, you know, go off, and get a job.

[00:13:10]

And the first job you got was at North West Regional Health Authority, yeah?

[00:13:15]

Yeah, it-it-it was but, er, you know, thinking, I don't know how... If it's... Well, it sort of is relevant, I mean, I suppose it was a bit of a shaper in that, erm, I would... I've sort of always wanted a bit of money in my pocket, and erm, I'd learned to settle bets in a bookmakers before I went to university for a Saturday job and so, when I went down to Norwich I basically walked into the Ladbrokes shop and said, "Look, I know how to settle bets, have you got any Saturday jobs?" And, oh, my goodness, you know they couldn't... and it was well-paid, so, I worked on Saturdays, I worked all the way through my holidays, erm, and occasionally, I'd get a call, I mean, and this did happen... The manager in the Ipswich shop has gone sick, could you get down to Ipswich and manage the shop? So, I'd sort of skive off lectures for a couple of days and go and, er, do a day's work in the betting office at the docks in Ipswich and it was, it was good money. And then when I left university, and while I was thinking what to do, I just dropped into, erm, a job with Ladbrokes, because I could do... I could work back at home in Manchester or in er, anywhere in East Anglia really, just by picking up the phone because there was such a demand for the skill. And as I say, it was-it was well-paid and you were your own boss, erm, you ran your own shop, you paid the staff out the till, you, erm... And it was a... The-the other thing that suited the sort of lifestyle was the shop didn't open till 10 o'clock and you know, it wasn't-it wasn't one of the... So, it was the easy thing to drop into, so I did that for a few months. And I have to say, I think as a Saturday job, being well-paid, working with numbers, erm, you know, settling the bets was quite a fun thing to do on a Saturday afternoon, with a 3-inch pile of papers, have to work out what the returns were for someone who'd put a 5p each way Yankee, which won't mean much to anyone, but er, yeah. Yes, so, yeah, I did that for a little while.

[00:15:27]

And-and you must have made them some money then?

[00:15:30]

Well, you know, I always had a car, erm, you know it was, er, er, so, I always enough spending money and that is really what counted at university, doesn't it, you know.

[00:15:43] [Laughs]

[00:15:44] Buy a beer and, er, h-have fun.

[00:15:49] Erm, so, you left in what, in '74, '75 yeah?

[00:15:53] '75, yeah. [00:15:54]

'75, erm, 1975, quite a big year, the Popular Electronics in, erm, in the United States has an advert from a company called M.I.T.S-MITS, the self-assembly microcomputer. And erm, Gates and Allen for Microsoft and er, the Cray-1 Supercomputer is launched, so, we've got action at both ends of the-of the computing spectrum and erm, probably, ICL went through some sort of crisis at the time.

[00:16:27]

Yeah, no doubt.

[00:16:26]

Dolby was in some type of crisis. So, you went back to Manchester, erm, to the North West Regional Health Authority?

[00:16:36] Yeah.

[00:16:39] And you had an old title, a very interesting old title, O&M.

[00:16:43] Yeah.

[00:16:43]

That came out of the Second World War, did it not, Organisation & Management, is that what it meant?

[00:16:48] Methods-methods, Organisation & Methods.

[00:16:50] Methods, what was your-what was your role, tell me?

[00:16:54]

Well, er, Organisation & Methods really was systems analyst but without the computer. Erm, so, it was... The-the other, erm, common title for a similar sort of job but more in the manufacturing sector at the time, er, was called, erm, Work Study, or Management Engineering. And it was really all about how to improve the efficiency of systems in the round. Erm, some things you've delved in a little bit into operational research, you know, you were really analysing a lot of data. But a good example of it was I had a project to look at, erm, where to efficiently site ambulances in the North West of England to respond to emergencies in the shortest possible time. Erm, we... But then, at the other end of the scale, erm, what should the-what should the traffic flow in car parking be at a major hospital? Erm, in order, you know, again, to make it efficient, to allow people to drop off at A&E and all those sorts of things. So, it was, erm, analysis of er, analysis of systems, perhaps with, you know, not computer systems but just systems, the way things worked. And I-I think that was quite, erm, in many ways shaped my thinking from then on because I've always been interested in how the systems work from one end to another and how can you improve their effectiveness? So, yeah, that's what... That was really... That did shape my thinking a lot.

[00:18:45]

And again, we come back to this organisation issue?

[00:18:51]

Yes, how to... I mean, organisation and methods didn't really mean, it didn't mean organisation so much of people but organisation of systems.

[00:19:02]

When did you see your first computer, what was it?

[00:19:08]

Erm, when I joined London Brick, which was later on, we had, erm... And I joined London Brick as... In a similar sort of role, organisation and methods and I quickly realised that the interesting systems work was being done by the people in a different building who had something to do with computers. Erm, and I got to know what was then called the data processing manager quite well, and he more or less created a job for me called, you know, well, as a systems analyst (but you don't need to know anything about computers yet), much. Erm, so, I-I became a systems analyst, and we had a computer room in that building, erm, where you went up to a hatch and presented them with punch cards. And the, er, the operations manager would, when it was quiet, would let me into the computer room to see the flashing lights and stuff and it was a Univac 90-Univac 9030, I remember. Why is that still in my mind, goodness only knows, but anyway, the Univac mainframe was the first computer that I think I saw.

[00:20:15]

Right. And this was in London Brick, you... After 2 years erm, in the er, health authority, you moved to London Brick in '77 and you spent, what, 5-5 years in London Brick?

[00:20:29]

5 years, yeah.

[00:20:30]

Quite interestingly, it seemed by looking at your CV, you spend about 5 or 4 years in each of these major roles, you like to move on, don't you?

[00:20:39]

It was, you know, more that circumstances-circumstances changed or there was a particular need, so, I-I met my wife on a health service course, and she was working for London Teaching Hospitals. And so, er, when we decided to get married, we, um, we were deciding where to live, you know, and where would we go and get a job, and-and so, London Brick was the-the sort-the job in a place where we thought we might like to live, so, it was more that, you know, and then... So, there was... It wasn't really that, oh, I've done this job for 4 or 5 years, I'm getting bored with it now, it was usually to do with some other change in my life. Although that might have been a factor, you know, maybe in some instances after 4 or 5 years.

[00:21:27] You may [unclear 00:21:27].

[00:21:28] Later on, it was longer periods.

[00:21:30]

Yes. Erm, what were the applications on this Univac mainframe?

[00:21:39]

Yeah, the... I think the first application was payroll, erm, when-and when I-when I first, er, joined London Brick, I mean, this will mean something to people of our generation, Richard, but I think it won't to a lot of others. Erm, we had... and the office, again, back to my dad's days, you know, there was the-the yard, the brickworks, massive brickworks, and then there was the office block. And a lot of the people in the office were preparing payroll. And so, every Thursday, I think it would be, you know, big trucks would arrive with loads of money, and they would put them in brown envelopes, ready for collection by the workers. And erm, London Brick, I recall, had a very complicated payroll procedure, erm, that... Where there was lots of different piecework input, you know how many hours related to something or other or you know, whatever you had done.

So, actually, the calculation of the payroll, and then somebody did some clever calculations and said, okay, that means we need so many £1 notes, so many 10 bob notes, so, many, you know, coins of this, and so that sort of... That would then arrive all in the right mix in order that the each pay packet could be made up accordingly. And that application, I-I think, there must have been in the big works in Bedfordshire, there were probably 30 or 40 people employed doing that. And so, the payroll computer system was the first one that came in and, erm, it didn't immediately replace all those people, but gradually, it did.

[00:23:23]

The first commercial application was really on the LEO was it not, in the '50s and that was payroll, for Cadbury Hall.

[00:23:29]

It was quite common, I didn't know that, but it was quite common that payroll was the-was the first application. Interestingly, in BCS now, chartered institute, erm, we still have a payroll software group.

[00:23:41] *[Laughs]*.

[00:23:44]

Yeah, so, it's still an active-an active field.

[00:23:49]

And where were you actually based?

[00:23:53]

So, when I... The computing department, the data processing department as it was called, was on Bromham Road in Bedford, near both Bedford Prison and er, the girl's school, er, on the high road, not far from the station in Bedford. So, er, I think the computer department had been moved out of the-the works, which was in a place called Stewartby, just down the road, near 5 miles away. I don't know why, maybe because a factory environment was perhaps too dirty, you know, because brickworks, brick dust, erm, a bit easier to run a clean computer room up in a smart office block in town.

[00:24:33]

I should think it gets everywhere. But your wife was living in, er, sorry, your wife was working in London?

[00:24:39] Yes, she was, the London Teaching Hospital.

[00:24:41] So, she commuted?

[00:24:42]

So, when-when we-when we, but when we married, she moved up and we bought a house in Milton Keynes.

[00:24:48]

Oh, right. Erm, so, did you remain in the same position, as a systems analyst for those 5 years, or what happened to your career in London Brick?

[00:24:58]

No fairly, erm, [coughs] fairly quickly, I became a project manager. And erm, the big-the big projects I had to put in was an accounting system, erm, and it seems bizarre but, erm, now, you would never do this, but we wrote our own.

[00:25:20] [Laughs], yeah.

[00:25:20]

So, I, as a project manager, I had a couple of systems analysts on my team, I had a junior accountant on my team, and er, we-we built an accounting system from first principles. Erm, and I decid... On the back of that, you take me back now, I-I thought, I probably need a bit of... I need to understand the-the framework here a little bit better, so, I did a...It was called a certified diploma in accounting and finance, which was a 1-year-course that gave me the basics of, erm, accounting, which has stood me in good stead ever since actually. I've avoided finance directors being able to too easily pull the wool over my eyes, I think.

[00:26:08]

So, erm, did you use the same Univac machine for that application?

[00:26:15] Yes, we did.

[00:26:16] What was the language you used? [00:26:20] Cobol.

[00:26:21] Cobol. You're now managing people.

[00:26:24]

Yeah.

[00:26:25] What is the John Higgins style of management?

[00:26:29] Yeah, so, I guess so, yeah.

[00:26:32] What is it?

[00:26:34]

The—so, you just broke up there, what is what, the trick, or what is the...?

[00:26:38] What is the John Higgins style of management?

[00:26:44]

Probably-probably that-that was erm, created when I managed the bar, in erm, at the university, you know, it-it's a team, and erm, er, we all have to do our bit. I think a lot... You know, it's a bit, I know it's a bit of a cliché, but you think about, er, you know when I-when I talk to my team, I-I say, well, think-think about just the England football team, you've all got to know what your part is, erm, and what part you play. I-I think I... One of the most important jobs of the manager is just to make clear what everybody's job is and how they work together. And so-so you say, well, this is what I-this is what I want you to achieve, this is... These-these are your performance outputs if we're going to put it that way and I-I want you to create this many passes or

cross from the wing or whatever. How you do it, I want to use your-I want you to use your best possible skill to do it and of course, I want you to react to situations, but that is primarily your job. And you've got to know how you interact with the other people to do... who are doing their job, and if everybody does their bit, then, erm, we'll all do our job together. So, I think I'm very... I was always very focussed on making sure everybody knew broadly what their-what their outputs were and, er, then, and of course, tell me how you're going to do it and let's just run through if you've got any concerns about how you're going to do that. But erm, I think that is... I would say that is the style.

[00:28:23] Are you a good butcher?

[00:28:26] A good?

[00:28:26] Butcher?

[00:28:29]

Erm, I am, er, interestingly, you know, I did have a job in a-a summer job in a supermarket boning bacon, but I don't suppose that's really what you meant.

[00:28:39] [Laughs].

[00:28:41]

Erm, er, I-it-it was always part of the job, you know, if, er, if someone wasn't part... Fitting in, in the team, then you just had to go about, erm, removing that person from the team in the best possible way. I was looking, you know, in the context of another... Er, something else I've been doing recently, at interestingly, at Netflix's culture. And they make that very explicit, that, you know, if you don't meet the performance targets, they expect you to be gone, but with a better than average payoff. So, that is like part of the deal, if you join us, you know that you've got to perform, and if you don't perform, it's not going to be a horrible failure, we're just going to say, well, sorry, that hasn't worked out, we need someone with... I don't know, better passing skills with their left foot than you've got, so, erm, so, here's a decent pay-out, while we go and look for a person that does have the attributes that we want.

[00:29:46]

Right.

[00:29:47]

So, I think we... So, over the years, we've always dealt efficiently, with that part of the business as anything else really.

[00:30:00]

In the early '80s, things were really-really brewing. We had, in '81, erm, the Acorn establishing itself, we have, erm, ICL, er, announcing 49.8 million pounds losses, on a hundred- on 711-million-pound turnover. Erm, we've got IBM launching, erm, what became a relatively interesting type of technology, to say the least, erm, SQLDS relational database. And also, erm, we've got, in 1982, which is the year, erm, youyou moved to, erm, Triad Computing Systems of London. Erm, we've got the awareness campaign, erm, by, er, by the UK Government, IT82. Were you aware of that awareness campaign around you?

[00:30:52] No, no, I wasn't.

[00:30:54] Okay.

[00:30:56]

Because you know, you... I mean, these days, or the last... I don't know, 20 years or something, and in roles, like you have, Richard, in journalism, you know, in journalism, you were aware of those things, but when you're doing a job, in a company, in the middle of Bedfordshire or wherever it is, your life... You know,

your... You see, you read-you see different things. I'm not even sure that would have made it very much the [coughs] front page of Computer Weekly or Computing, you know, which were the 2 magazines we all read at the time.

[00:31:29] Erm, and IBM was introducing the PC, erm...

[00:31:33]

Yeah.

[00:31:34]

In 1981, and in 1982, erm, in-in this country and so on. So, we've got a very interesting and turbulent time and you decide to move from London Brick to Bedford, erm, to the, erm, a business manager in Triad Computing Systems of London, what was Triad Computing Systems of London doing?

[00:31:52]

[coughs] Just picking up though, on one thing you said, one of the things I did latterly at London Brick, while I was doing the accounting thing. I-I saw the launch of the, erm, PC and persuaded the accounting team to buy a couple with a spreadsheet, I can't remember which spreadsheet it was, you know, VisiCalc or something. But I'd say that made more difference to the accounting team than the big underlying accounting system we were putting on the mainframe. That ability was transformative. Up until then, you know, the-the ledgers, I mean, these carried on for a little while, the ledgers, the handwritten ledgers at head office in London, erm, were beautiful things. And they-they had this system for checking the adding up in them, which I think I could probably still remember today, called Remainder 13, and so, you-you, er, you put in an extra column, next to your... Whatever the entry was, what the remainder was if you divided that number by 13. And then at the end of the day when you added up the columns, you also up the remainders and some of the remainders should have equalled the remainder of the sum if that makes sense.

[00:33:10] *Okay*.

[00:33:11]

So, it's a super little [unclear 00:33:15]. The-these handwritten ledgers really were, erm, you know, really were handsome things, that you know, you would have recognised from Dickens' time or-or whatever. And, but now, having spreadsheets for the accountants to do what-ifs, on their management accounts, and you know, if we change the price of this to that or the unit price of, er, this brick by that much, or we sold this much more, it really transformed. And I don't know why, but I-I-I spotted that sort of PC and VisiCalc or whatever it was opportunity and I think that was really, really quite transformative to business, in a way that I think, it was a really good tool. Anyway, I digress slightly, but I...

[00:33:59] No, that's not a digression at all.

[00:34:01] That was interesting.

[00:34:04] A very important part.

[00:34:06]

I think the move-the move to Triad, I mean, look, if you can imagine, I went to, er, and I do remem-remember this, erm, time... UEA, it-it was great, and I think it is for something for people to think about. I went into London Brick, and I don't regret doing that, but it was like, where have all the graduates gone, where have all the smart people gone that I used to go to university with? Whereas London Brick was a terribly tired old-fashioned traditional, and we too, had four layers of restaurants. And I immediately, as a young systems analyst dropped into the second-highest tier. We even were known by the bank account that we were paid from, it was so old-fashioned, it was unbelievable. And I think by just keeping in touch with friends, I realised actually, there was this whole exciting world of systems houses in

London developing. And although I had-I had fantastic opportunities at London Brick because here I was, in-in mid to late 20's running big teams putting in major systems, affecting business, but, I-I just hankered after that, er, that sort of catching up where with where all my, er, graduate friends had gone. And-and so, I saw this opportunity for a job at Triad and it was an absolutely classic London systems house with smart people doing interesting client... Er, interesting project work for a variety of different clients, working on a whole different range of computers. I mean, it was-it was just wow, I was... I was like, you know, there was a bit of, okay, so, this is where they've all gone. [laughs]

[00:35:46] Where was it based?

[00:35:48] Oh, Kingsway.

[00:35:49] Oh, wow.

[00:35:50]

In London, you know, right... Still a bit old, you know, still a bit old-fashioned, we had luncheon vouchers and places where you went to, er... I don't mean the company was, but you know, working in London in those days, was not like it was today, but nevertheless, it was a lot of fun, near Holborn Station.

[00:36:07] And you were a business manager?

[00:36:10]

Yeah, that just meant... It was like a project management group, now with some commercial responsibility because when you're on the other side of the fence, erm, supplying things, then the, you know, the sums matter a bit more, don't they?

[00:36:25]

So, you made this transition from being the user to being the supplier?

[00:36:29] Yeah, exactly-exactly yeah.

[00:36:32] That was an important transition for you?

[00:36:36]

I think you learn different things from doing both. I see the same in, you know, latterly when I've been in this-in the lobbying world, you see people who are, erm, public affairs specialists within the client and you see public affair specialists in the consultants. I, you know, good... The best people I have met, are... They know how those two parts of the picture fit together.

[00:37:04]

Erm, 5 years there and then '87, erm, you become general manager of an IBM agent, Wilkins Computer Systems in London. IBM is now, erm, not only selling directly but, of course, to get the volumes for PCs and other, erm, smaller ticket items and mainframes [coughs] it is setting up networks of agents and dealers. What was the particular role of the IBM agent?

[00:37:33]

Well, er, Wilkins was both an IBM agent and an IBM dealer, and erm, so, you could be a dealer for their-for their PC-based systems and er, the basic model there is you buy them and sell them on. Erm, and I don't know whether the...I suppose the agent model, which is where IBM sells it directly, but then they pay you a commission, it'sit was either because they realised that-that for the bigger computer. So, er, the agent model was for the Assistant 36 and 38, which were the bigger mini-computers of the day. And I-I suppose the... The attractiveness of that model was that IBM then stayed in control of the configuration, er, which was slightly more complex than just selling a couple of PCs. So, erm, IBM stayed in control of that, and also the agent didn't have to layout, erm, money buying a wide range of IBM system 36 and 38 stock. So-so, I think that it was the right business model for that sort of er, for that sort of thing. And... I mean, and typically, we would work with clients to specify... We would do the specification, we would say, okay, well, you need 1 of these and 3 of those and you need this size disc and, but it was primarily, that's the hardware you need to run the application that we're developing for you. Then IBM would sort of check it over and say, are you sure you don't need, er, one of those and a couple of these as well? Oh, yeah, thanks, that's a good point, you know. So, that was the-that was the agent model and then IBM would deliver the kit and then you would-you would get a slug of money. As I remember, it would be maybe 10% or 12% of the purchase price, which was, erm, you know, good income for a software company in those days, because you could also, basically, sell your software and services at, erm, a fair margin as well. So, having the... I mean, typically, what we did was we used that agent income for our R&D pot, you know, so, we could invest speculatively in research, in developing the software.

[00:39:52]

You, erm, mentioned the, erm, IBM system 38, erm, which was quite a machine in its time because it integrated a relational database into the operating system, did it not? It had very big issues of performance early on because, erm, it took up an awful lot of disc space, and erm, erm, basically, the mainframe people controlling IBM said, no, you don't need that amount, but the designers thought you did. Eventually, they got it right and it was a very successful machine.

[00:40:20]

Very successful, and er, yeah, a very successful machine and e-so easy, you know, that that was a period where putting an application in worked, you know, a lot of the time. It-it suddenly became a lot more, erm, Lego-like than it was, you know, in the mainframe days. You-you could actually... We put systems into quite big organisations, like, funnily enough, er, you know, links to them now, the Institute of Mechanical Engineers was one of our big em, applications. So, we had a lot of reasonable sized clients, er, and these-these systems were ideal for them.

[00:41:02]

And that morphed later on, into the AS400, which I believe...

[00:41:07]

Yeah, yeah, the AS400, yeah, and that-and that got even slicker, you know, that was even more, erm, that was more... What shall we say? It had, er, components that you could assemble more easily, er, it was a... it was a dream to work with really, I think our developers loved it, it had the best of the 38, but they had, erm, it was a bit less... You know, 38 was always a bit—oh, you need some specialist technical knowledge to deal with a system 38. AS400 made it more-more accessible I think.

[00:41:40]

Who owned Wilkins Computer Systems?

[00:41:43] Jeffrey Wilkins.

[00:41:45] You knew him directly?

[00:41:48]

Well, he and I... I mean, he and I ran the company, erm, er, you know, I ran the operations, he own-he owned it and, I mean, a lot of our... When we were doing our budgeting together, it would be l-l-literally, Jeff with his, erm, very nice fountain pen, and you know, a sheet of A4 paper and er, we-we would go through it together. So, er, yeah, he... It was his business, erm, and I did the day-to-day operations.

[00:42:22] Was he a mentor to you?

[00:42:25]

I learned a lot from him, I certainly learned a lot from him. I learned as much about... In those days as w-as well, you-you had to be sort of seen to be successful and Jeff wanted to be seen to be successful. So, when I look back I think he probably bought his Audi Quattro a bit before the company could afford it if you know what I mean? So, erm, so, I learned, I did learn some things from him, yeah. [00:42:56]

So, erm, then you went to, erm, a medium-sized, software development company, which was developing for the AS400, was it?

[00:43:05]

Yeah.

[00:43:05] And what was that called?

[00:43:07] SSA.

5511.

[00:43:08] SSA? That was out of Chicago?

[00:43:10] Indeed. And er...

[00:43:13] *You stayed*...

[00:43:14] Go on?

[00:43:15] Sorry, did you stay in the UK?

[00:43:18]

I stay-I stayed based in the UK, erm, but I used to go over to Chicago quite a lot. Erm, and er, yeah, that was, you know, that was good fun. [00:43:31]

As I recall, the UK arm of that was run by an ex-marketing director of IBM UK, was it not; who ran the UK arm?

[00:43:38]

[sound] you'll have to remind me, I can't remember.

[00:43:43]

No, you see, I was-I was hoping that you would remind me, I've forgotten...

[00:43:46] Yeah, I can't, I can't remember who that was, that was...

[00:43:50] It wasn't Peter Morgan, I know that.

[00:43:53] It wasn't Peter Morgan, no.

[00:43:54] *No*.

[00:43:55] One of his sidekicks though, you're right.

[00:43:56] Yeah, yeah. Erm, a relatively successful company, I thought, SSA?

[00:44:01] Could have been, I think.

[00:44:04] What happened?

[00:44:06]

They hired a technical director, erm, and he had this vision that, er, AS400 was a thing of the past and the Linux-based client-server model was the way forward. And the-the way I got-the way I got into SSA, was actually through another company call-called Softrite Systems, er, that acquired fairly quickly... Was acquired by SSA. Erm, and they had some... Softrite Systems had some, erm, object-oriented language that they developed, we developed our own object request broker and SSA acquired that company and acquired that technology, with a view to re-writing their very sucsuccessful application, which was a... I mean, I think it could have been a competitor to SAP, frankly. And er, but they chose to re-write it, er, to take it off the AS400 platform and onto this new client-server approach.

And I think a lot of, a lot of what they were doing, was chasing good reviews from Gartner, and that was the tech-that was the sort of tech hype of the time, AS400 was beginning to seem a bit like old hat, and the client-server model was seen as the-the coming thing. But-but they just screwed up the re-writes and from having happy, contented clients that were running on AS400 quite merrily, they now went to this object-oriented Linux-based thing, a techie's dream but never works as reliably as the AS400, and I think that's what, you know, then, they were forever chasing their tail, trying to pretend with clients that it was working when it wasn't. It was a period when somehow computer hype got carried away and you know, people were prepared to believe very strange things when the evidence, right under your nose was, this isn't working, yeah.

[00:46:21] What's the moral of the story?

[00:46:25]

Well, you know, I think the Gartner hype curve probably came out not long after that and so people realised that there was this hype thing. And erm, so, I suppose it's wait until you've got over the cusp of the top of... the top of the Gartner hype curve and things are settled down, down below. There are not many businesses need to be taking massive... Well, I'm not sure there are any businesses, that need to be making, taking those big technology risks. By all means, do it in a bit of computer department at a university where you want to see how these things work out, but don't bet the farm on that sort of stuff, bet the farm on it, when it's right down the flat end of the-of the hype curve and you know it works because it's worked for lots of other people.

[00:47:13]

You moved to Res Rocket, a start-up company, in 1996?

[00:47:18]

No, so. So, you know when I look back at most of-most of my moves, erm, most of them have come from somebody I know who has gone to that company or has a link with that company, who I had worked with in the past, who gives me a call and says, "Hey, we've got something here." And Res Rocket was, erm, it was a call from a guy I had worked with in the early days at SSA, who... And his pitch to me was, "You must be getting fed up with that, you know, Chicago-based thing that is now going completely wrong, I've got this really wacky opportunity for you", erm, he'd moved into venture finance at the time, and they were... Wanted to put some money into this company that allowed musicians to play together on the internet and he said, "We, erm, we need a CEO." I-I think the job spec was you don't have a ponytail, you don't wear sandals, and know a little bit about tech and numbers, er, and a vague interest in music, you'll do. I exaggerate slightly but that is, you know, Paul's pitch to me was that was what they wanted, they wanted someone who understood tech, business, numbers, and er, come and a have a bit of fun with them. And er, so, that's how I got into doing that.

[00:48:37]

And you are interested in music because you've got 3 guitars behind you?

[00:48:41]

Yeah, that's... I should have moved that picture, yeah, yeah. Don't look too closely, they've probably got too much dust on them.

[00:48:47] [Laughs] Did it work out?

[00:48:52]

It depends what... no, I mean, no, in the classic, in the classic sense, erm, we, er, we raised several rounds of funding and eventually got acquired by, I think-I think by Cisco, eventually, who incorporated the technology into something else. But honestly, we-we had no idea what we were doing, er, this was all new stuff. We-we knew what we were doing technologically, but in terms of what the business model would be, it was, it was completely cutting-edge, and we-we were predicating our, erm, approach on the idea that people would pay a monthly subscription for this service, and in those days, everything on the internet was free. So, you-you were really pushing... We were trying to push a model that had been, that was completely untried. We then switched the model to try to tie up with music equipment providers and that was beginning to get, er, that was beginning to get some traction.

But, you know what-what... I think the main thing we discovered, was once we got the thing built and up and running, which was no mean feat. Erm, and we'd done quite a lot of things, like, we'd moved from New Mexico to San Francisco, and erm, we tried a lot-we tried hiring different people, it hadn't worked, and we'd hired... Because we didn't really know what we wanted so we-we'd discovered a lot of things, we'd worked out the challenges of bringing in Australian developers to work in California. I mean, oh, my God, the things we learned were phenomenal, but probably the main thing we learned was once we got the thing up and running, the business was a music business and the network that you needed to run it was the music industry business, and I had a tech industry network.

Also, it was getting to the point where I would have had to commit full-time to living in the States, and I think my eldest daughter and just got a good offer for a university in... well, Oxford in the UK and we didn't want to go to the States. So, at that point I said, well, I'll come back to the UK and help you find another CEO and, er, you take it on as a music business in the States.

[00:51:04]

And you came back in 1998, erm, and you became director-general of the Computing Services and Software Association, er, this is where industries need lobbyists to lobby government particularly, but also to make the face of the industry known, erm, to other people. There used to be 2 organisations and that merged into, erm, CSSA. I remember as a journalist, if we were short of a comment, we always said, phone up Benji Berg and Benji berg was a made-up name of Alan Benjamin and David Thornberg, erm, who, er, on the one hand, Alan Benjamin was the Computer Services Association, and David Thornberg was the Software Association, so the two mermerged together and by 1998, you were director-general; what was your objective there, John?

[00:51:59]

Well, I think the... Perhaps the story of erm, how the job came about, erm, was also interesting because, anyway, someone that I had worked with in the past, [coughs] er, who called me one day and she said, "The CSSA are looking for a director-general, erm, had you thought about applying?" and I said, "Hang on, I'm a West Coast US entrepreneur, erm, running an association doesn't sound like my-my sort of thing." And she said, "Talk to the guy who's running it at the moment, Rob, er, see what sort of time he has and, er, you know, just explore it." and that was brilliant advice because Rob said, "Oh, just come and do it for 4 or 5 years, you'll meet some amazing people, er, you'll get to know all the leaders of the industry, and, you know, it's just a fantastic thing to do." And he was quite right, it was a fantastic thing to do.

And it-it's interesting, what you say about erm, sectors needing people to lobby government on their behalf, and [cough] somebody said to me, "Oh, CSSA, is that a lobbying organisation or a networking organisation?" he said, "Because lobbying organisations tend to be better funded but networking organisations are more fun." And actually, national associations for software and services, I'd take throughout the world, certainly, throughout Europe, we are much more focused on networking, on self-help, you know how can-how can you learn from colleagues in the industry, how is the industry doing? The lobbying of government was quite immature, and largely because it was a non-regulated industry that government didn't really have a lot of impact on, er, frankly.

Move forward a few years, CSSA then merged with, you know, these mergers continue... We merged with FEI, the Federation of the Electronics Industry, to create one organisation which we called Intellect. Now, Intellect did have a bigger, erm,

advocacy requirement, it still did an awful lot of networking. I move on, you know, a step further to when I run the Brussels organisation, and perhaps we'll come on to that. The Brussels organisation was 99% advocacy and 1% networking really. So, there is a big-there is a big transition in these organisations and CSSA was very much at the networking-the networking, mutual benefit, er, en-end of that spectrum.

[00:54:37]

And international networking as well, I remember, erm, a CSSA conference on Lake Como and they were all staying in the Villa d'Este, which had...

[00:54:47]

They worked hard now, Richard.

[00:54:48]

Yes, oh, very much so. [laughs] I-I sat and waited for Alan Benjamin to come out and tell me what was going on and happened to order a-a [laughs] a pot of tea, which nearly bankrupt me [laughs]. Erm, what do you think you achieved in your first stint at, erm, CSSA, what did you-what were your real achievements? Because many of these organisations, I feel, and you maybe think I'm being over-critical, erm, their achievement is only to exist.

[00:55:22]

Er, yeah, it's a good question. I think if you asked me about the later organisations, I'd be able to put my-my finger on that a little-a little bit more. But erm, I suppose one-one of the things I've come to realise over the years is the-these organisations are very, very much a fabric of our society. Erm, they are a place where the lonely CEO can talk to another lonely CEO of another company, in a non... You know, in a way that doesn't risk any sort of cartel issues or competition issues. You know, they can chat to other people doing things like them. Erm, and realise, well, they're not alone in doing that, they do have the same HR issues, they do have the same, where do I buy my directors and officers liability insurance? You know, the-all this sort of stuff is a really valuable part of the fabric of, erm, certainly of a sector. And, and, I'd go beyond that, I mean, I think, er, society generally, what is interesting to note is that erm...

My American colleagues ran a project once to help set up associations in Africa, erm, tech associations in Africa. And, what they did, er, you know, it was like a grass-roots spreading of how do you public sector procurement in a-in a way that's not corrupt? You know, it-it's a very grass-roots way of s-of spreading the message of just how you do business in a good way. And I think they, they're really, really valuable. And I think what... yeah, we did-we did exist, but we grew slightly, I don't remember us growing hugely, we moved to new offices, we definitely modernised ourselves, erm we-we built a good, erm, young enthusiastic team that, you really did help facilitate that networking. And we started to build a reputation with DTI, I suppose, particularly, who were starting to pay a little bit more attention to our sector.

[00:57:36]

1998, of course, is 2 years away from, erm, the catastrophe that never happened, Y2K, and your members were stuffing hundreds of thousands of pounds of, erm, their clients' money into their trousers, erm, trying to sort out something that some people say, was almost made up by Gartner.

[00:57:59]

It could well be, but I think a lot of people rode that tide to, erm, yeah, basically maintain and improve their systems. I don't think many of... Well, I don't, I don't think any of the people on the supply side were going in and pretending to do stuff and not doing it, you know, they were using that opportunity for system upgrades, system crashes, and taking care of that, you know, that Y2K issue at the same time. So, if... Who knows what would have happened. I mean, as you say, it was the dog that didn't bark, and a lot of money was spent investing in the infrastructure, which probably stood us in good stead to this day. I mean, look, the pandemic, I'm afraid, has done the same sort of thing, you know, people have invested massively in the infrastructure, erm, and it will stand us in good stead.

[00:58:53]

During this whole period, and you were there from erm, '98, to erm, 2011 [coughs] 13 years at the help of this organisation which morphed and merged into other ones. Erm, we have a series of catastrophic computing failures, and particularly in the public sector.

[00:59:13]

Yeah.

[00:59:12]

I didn't hear much from the CSSA or any other organisation representing the industry saying mea culpa.

[00:59:22]

Well, the-the... We weren't saying mea culpa, but we were really, really, and I genuinely mean this, putting a lot of effort into fixing the problem. And I spent a lot of my time in the latter years at Intellect, working with the public sector, with government department CIOs, er, with the Office of Government Commerce, really trying to improve the public sector's use of IT. I even went-I went on an international tour to tell, I don't know, the Australians what-what we'd learned about how we'd done it in the UK. The Dutch were interested in our models, we really did put a lot of effort into it. And erm, I remember, erm, the then head of, er, OGC, saying... Calling me up and saying, "John, I've been called into a cabinet meeting to explain what is going on, erm, with all these computer failures. And I'm going to tell them to stop changing policy on the hoof without understanding the implications of, you know, what they're proposing." You know, when they go out and make some new-"We're now going to do this" and the people in the... back in the operational team are going, "Oh, my God, how are we going to do that by then, you know, that's impossible." Erm, so, he said, I'm going to tell that, what do you think? And er, I said good luck, you know, I mean, how will you... How will you get them to change those spots but, there was a-a lot of this... I-I'm not shifting the blame, I mean, the-the whole ecosystem here was one of not really understanding the end-to-end nature of what you were doing.

Erm, it was the whole ch-it was the process of change management, of which, yeah, I'm sure there were problems with faulty engineering and er, like I said, er say, er people believe in hype and using untested software, I'm sure there are elements of that. But I don't think that was the major cause of it. I think the major cause often was, erm, that trying to specify some end-to-end thing that was massive and unproven, and nobody-nobody really knew-knew what they wanted until they'd got it. That's why things like agile computing, doing things a bit at a time, all these moves came about because of the challenges of building, erm, channel tunnels when you'd never dug a hole before, you know. Erm, so, er, we did spend a lot of time, we did-we produced codes of conduct that we worked with, we had, erm, we created new roles, we had—remember the government had a senior responsible officer for every, erm, project. We developed a senior responsible industry exec role, we matched the roles out, the SRO and SRIE, you know, what... So, we put a lot of effort into that, we really did put a lot of effort into that.

[01:02:18] With some impact?

[01:02:20] Yeah, I think so.

[01:02:23]

You then turned your, erm, attention to Europe, you became director-general of Digital Europe, what was that role?

[01:02:34]

So, D-Digital Europe is an organisation that represents the national associations, like Intellect across Europe, 40 of them, interestingly, because it's not just the EU, it's Switzerland, Norway, Ukraine as well, and in some countries, there is more than one, like there was in, in the UK in the old days. Erm, I could ask you to guess which country had the most fragmented structure of associations in Europe, what would your guess be?

[01:03:06] Italy.

[01:03:07] France.

[01:03:08]

France, oh, France, okay [laughs].

[01:03:09]

ROI. And the Germans had the most joined up. Anyway, er, so, I-I, so, we were a member, as-as Intellect, we were a member of this organisation and, erm, the directorgeneral there, I think her time had come to an end and I said to the president, "Well, you know, how would it be if I applied for the job?" because I was quite interested in, erm, doing something a little bit different, erm, broadening my knowledge of Europe and so on, and-and he encouraged me to apply, erm, and-and so, I did. You know, that was basically, I applied, as well as the, erm, the associations across, er, Europe, as members. We had the 60 or so, largest tech companies as members in their own right, so, from SAP to, erm, to Google, to you name it, Microsoft, erm, they were all members in their own right. Erm, and er, so, I-I stepped across to do, erm, to do that role in Brussels, and er...

[01:04:16] Was there not... sorry, sorry John.

[01:04:19] Oh, no, go on, no...

[01:04:20]

Was there not resistance to an Englishman, erm, as there would be to a Frenchman or a German, why didn't it go to one of the lesser countries?

[01:04:29]

No, there wasn't, there wasn't really. Erm, there was-there was none, there wasn't really any of that. Erm, in an association, it's not... There isn't that same need to do the sort of window dressing that you might see in the political bodies, it is much more pragmatic. Erm, you know, arguably, it could have been an American, or an Australian even, I-I think, you know, they just wanted someone with the right skills and knowledge.

[01:04:57]

You also became president of the European Commission Strategic Policy Forum on Digital Entrepreneurship.

[01:05:06]

I did. I suppose it...

[01:05:09] Go on.

[01:05:10]

It's worth, er, it's worth just... So, I-I, I mean none of us really know how systems work until you get into them, but erm, what I-I think hadn't appreciated was that organisations like Digital Europe and, you know, similar bodies for other industries, they're much more integrated into the... Both the policymaking and to the research spending agenda that such organisations are in the UK. And I think the reason for that is that European institutions need to deal with European bodies, I mean, because otherwise, who do they talk to, I mean, er, what are they going to do? Yes, they get input from the member states, but when it comes to, erm, understanding the impacts on, I don't know, the chemicals industry or the car industry, who do they talk to? So, the-they, you know, these-these European representative bodies are, er, very much part of the fabric.

Brussels is a small town, and you get to know people and people, people get to, you know, trust you and know what you can bring to the part. So, w-when the European Commission were thinking... I mean, the-the although it was called Digital Entrepreneurship, the, erm, the job, you know, the... like the mission should you choose to accept it was... Well, the exam question was, we need to look at how we can get European industry to adopt digital technologies more quickly and more effectively, for all the reasons that we know and love, you know, to become more globally competitive, erm, efficient, er, you know and so on. And er, so, I was delighted to have that opportunity to be able to work with the commission, spending their money on consultants, bringing together people from all over Europe, to look at how we could accelerate the uptake of digital technologies across Europe's industrial

base. It was a fantastic opportunity and fitted in [coughs] exactly with what I was trying to do in my day job, representing, representing the industry. So, I really, I really did enjoy that, and er, I still do things today that are spun off from that.

[01:07:33]

Let me suggest something to you and you can come back and say, no, no, wrong, you're wrong, Richard. Erm, Europe is actually in a pretty poor position, in information technology, is it not? It has very few real world leaders anymore. It has not innovated Amazon, it has not innovated Google, and it has not innovated YouTube, it has not innovated any of the, erm, the-the new services really based on, erm, based on the internet. If it has, that we... If it has an operation as important and as vital as ARM, Advanced Research, erm, Machines, erm, suddenly it's bought, and it becomes, erm, a political football... A commercial football, excuse me, erm, now being sold by its Japanese investors. Probably one or two companies are worldclass, bits of Siemens are, where is Phillips? Hugely important to the IT sector, whwhere is it, what's happened? We've got SAP, okay, SAP is being beaten into the ground by Oracle, is it not? I'm over-egging the cake, tell me I'm wrong.

[01:08:48]

No, as you might imagine I've heard that point of view, er, a number of times and-and often put to me, er, like, you know, in a finger-pointing way, poking you and yes, the European Commissioner saying, "Why has the European industry not...?" you know, just done what you've described. And when you, when you dig under the surface of it, I mean, obviously, there are any number of reasons, but if you were to pick out one reason above all others, to me, it is to do with the fact that Europe is not one market. And you know, people will tell you that the huge advantage that the American companies have is one big English-speaking market that they grow quickly in and then, because of the, because they've grown quickly, and erm, because they're English-speaking, they quickly can move into other markets.

I mean, I-I've talked to... A good example is, er, a French company called BlaBlaCar, and the guy who runs it said to me, you know, I hadn't realised that when I moved BlaBlaCar, you know, I tried to expand into Europe, I would have to learn how to run a German company, an Italian company, A Spanish company, or... He said, you know, and we... And that is the problem, er, if you-if you talk to Phillips, I've talked to Phillips about this, it is so much easier to expand bus-their business in the States than it is in Europe, because of the fragmentation of the European market with different rules in different countries, different ways of doing business, it's a, it's enough of a burden to slow-to slow us down. So, I think above all the other things, yes, you can point to infrastructure, you can point to skills, you can-you can point to venture funding, you know, that German model of more of a banking and loans system rather than an investment. But I think all those are secondary to the fact that, er, the US is a single market.

Now, I think that is borne out by the advances in China, where China is a single market, and look at the success of the Chinese er, companies. And frankly, if-if we all spoke more Chinese in, er, Europe, erm, well maybe it will come. You know, the-the Chinese companies will be the the Googles, and the, erm, the Amazons, er, of the future. So, I think that... And, I mean, I think the other thing to say, while we're talking about Europe is, we-we-we look at... In Britain, we look at Europe the wrong way to my mind. I think the Eur, the, er, the EU, ought to be seen as a club for member states to do some things together that it makes more sense to do, at a pannational level than... Rather than some big institutional identity federal Europe thing. It-it's not and if you look at the compet... Some people would like it to be undoubtedly, but if you look at the-the things they actually do, it's pretty boring pragmatic stuff, on the whole, you know, electro-magnetic standards and product safety standards, you know, things that genuinely just make, for a more common market. So, erm, you know, I-I actually came away from my few years in Brussels thinking, actually, it does a pretty good pragmatic job on a lot of boring stuff and thank goodness it does. And now, we've leapt out of the market, so, it will...

[01:12:38]

Yeah, in your, in your, erm, mid, mid-60s, then, you came back, and you are now president of the British Computer Society.

[01:12:46] Yeah. [01:12:47] *Congratulations.*

[01:12:49]

Thank you, thank you.

[01:12:51]

Erm, sorry, that was said with a degree of irony [laughs]. Erm, what is the purpose of the BCS?

[01:13:01]

I'd say the main opportunity for the BCS at the moment is, it's to deliver on the requirements that we all have to be able to trust computing and IT professionals more. The-the BCS did a s-survey very recently following the, erm, the A-Level, I suppose fiasco is the right word to use. Erm, do you trust algorithms to make decisions about your life? And of course, the majority answered no. Would you like the people who write these algorithms to be professionally qualified? Yes, we would. Erm, and and I think we, as a sector, as a community, we've got away for too long for... In not being professional enough, i.e., not thinking through the sort of ethical and societal implications of what we're doing, alongside... You know, we-we... The-the CEO of Phillips consumer electronics business once said to me a few years ago, he-he's not there now, but he once said to me, "You know, the trouble with this business is too much engineering and not enough consumer." And erm, and I get his point, you know, we're driven, we-we have an engineering mindset in our community, and we don't think, we haven't, in the past, thought enough about the ethical and, erm, societal implications of what we're doing, erm, dare I say, post office, but anyway, that is maybe a whole different scale.

[01:14:32]

No, no, you can say that.

[01:14:33]

We've not thought about that... We've not thought about that, and I think the BCS has a real opportunity to drive, erm, to drive home the need for and benefits of professionalism, to-to be part of the drive to increase trust in what we guys can do.

[01:14:52]

John, you really can't do that, can you, unless you can throw people out of the profession. You can throw doctors out and you can throw architects out, but you can't throw people out from claiming to be software engineers.

[01:15:04]

You can't, but I mean, clearly, you can throw them out of the institute, the BCS, you can throw them out of that.

[01:15:09] *Have you?*

[01:15:10] And er...

[01:15:12] *Have you?*

[01:15:14]

B-because we have no licence to operate, you know, there is no concept of a licence, and also it's... As we know, it is a very hard thing to define, you know the-the scope is so, is so hard to define. Erm, I don't know whether we ever have, Richard, but er, somebody wrote to me the other day, one of our members wrote to me today and said, "What are you going to do if any of your BCS, erm, members, are implicated in the post office scandal?" and I think that will be a very interesting test for us and I, you, know, we will, we will look very carefully at the public inquiry, I hope it doesn't last too long. Erm, and then I-I will certainly be raising the question, what is BCS's response going to be, erm, if we find that, erm, there are any BCS members that get, you know, are found to be culpable in that.

[01:16:12]

One final question, what are the biggest mistakes you've made in your career, and what did you learn?

[01:16:20]

Oh, yeah, that's a, that's a really...that's a really good question... it's an interview, I ought to-to have, I ought to have, er, l-learned that, erm, you know, and thought about that in advance. You know, I don't really, I don't think in terms of mistakes that I have made but things-things that I've sort of spotted on the way, like, erm... I mean, we had a time in Wilkins where we really, nearly ran out of cash and that made me very conscious of having a sort of financial-a sound financial footing. Erm, again, it's... I wouldn't say, I wouldn't say that is a particular mistake I've made. I don't wish to sound arrogant, I'm sure I've made loads of mistakes but I just... I haven't sort of picked them out and said, oh, that's a mistake, I won't do-I won't do that again. I think you... I genuinely hope that what I do is just l-learn or learn new things all the time and don't really categorise them into successes or failures. I mean, you know, I think somebody once said to me, you should do, win analysis as often as you do loss analysis, and I think that's right.

I mean, so, I-I've just become chairman of a small business selling basically go faster software in the open-source, er, for open-source private clouds. And, I was saying to the CEO the other day, we really need to, in our case studies, spell out why people bought from us, you know, what is it they bought and why? Er, cause, er, you know, for different reasons. Of course, we want to know why didn't people buy, but I think you... It's all part of learning from your experiences. So, a bit of a waffly answer but, I don't think I-I haven't got a list of mistakes and learning from them, I, hopefully, I just learn all the time.

[01:18:08]

You seem to be a person with, erm, an appropriate level, um, of self-confidence without being totally over self-confident, but also an appropriate level of savoir-faire, you have a certain ability to distance yourself, is that true? [01:18:25]

I don't know, I don't know how really resilient I would be if it was-if things were really tough. I don't think I could be a politician.

[01:18:36] *Right*.

[01:18:37]

I couldn't-I don't think I could take that sort of level of, erm, and I-and I think what they're teach... you know, what people teach about mental health and resilience these days, is really important, erm, because I do think resilience is important. I think I've been lucky that it's not been really, really badly tested, er, I'm not, I'm not, if you push me, I'm not sure I'd be brilliant.

[01:19:00]

Well, we'll see, erm, in your prem-er, in your presidency of the BCS, won't we?

[01:19:05] [Laughs].

[01:19:06]

Thank you very much, erm, for a very enlightening contribution to the Archives of IT. John Higgins CBE.

[01:19:14] Thank you very much, Richard, I've really enjoyed talking to you.

Audio Ends: 01:19:17