Kenneth William Senior Interview Summary

00:00:00 - Interview is Gavin Clarke, who is interviewing Ken (on the 60th anniversary of D.E.C opening its first UK office), on the 8th of May 2024.

00:00:33 - Personal Details. Born in Boston, Massachusetts USA, 13th of August 1939. Mother was also born in Boston but had Scottish roots. Father's forebears had come from England. Mainly grew up in Waltham, just outside Massachusetts.

Father did a variety of jobs, grew up in the Depression. Worked in factories all his life. Was a supervisor for a time. Mother did various kinds of work. Mostly middle-class American people owned their own house. Ken had four siblings, three brothers and a sister. He was number four of five. Had a good upbringing.

00:2:14 School.

Went to nearby Primary and Secondary Schools. Graduated High School when he was 17. Own schooling was unremarkable. Didn't think he was going to go to college (or didn't plan for it) so he didn't train for it. Enjoyed maths and science but didn't have the full gambit of them.

Was not a great student, largely bored. He was bright. Wasn't motivated to get better grades.

00:03:55 - Ken describes motivation as been a big part of the events of his life.

Ken was never good with English (had a terrible time with poems), did better with mathematics, enjoyed science and chemistry. Wound up taking the business course in the last few years of school. Learnt typing, which he didn't enjoy but which became very important later in his computing career.

00:05:18 - interest in cars and mechanics.

Recalls when he was in the eighth grade (14), one of his older brothers taught him how cars worked from magazines and stuff. Ken gave a presentation to his class on how every part in a V8 engine worked. Ken knew how the engine worked, but didn't know how the spark was created in the spark plugs. Thought he would go into car mechanics.

00:06:50 - time in the US Navy.

Got out of High School, got recruited into the Navy and did very well in their test battery. By the time he got through boot camp, the officials told him he could go into any school that the Navy had. And Ken chose to go to the Electronics Technician School and he was taught very well, even tutored in the parts of mathematics which he had not understood in High School. When he finished they asked what kind of ship he wanted to serve on, requested aircraft carrier and got it where he worked as an electronics technican. Worked on several different ships, many of which

were top of the line. On his second ship, the USS Indepedence, he and the rest of the crew were the first people to man it. It was brilliant work, but very hard.

00:09:23 - learning at sea

Ken learnt hard and fast everyday, since when you're out at sea, you've only got yourself to rely on. You just had to figure things out yourself. After he had finished serving on the ship it served in the Cuban Missile Crisis and even went to Vietnam. Ken thinks that an aircraft carrier is one of the most exciting places on earth.

00:11:13 - **after finishing in the Navy,** Ken went to work for Honeywell in 1960 (Ken was about 28), which was a thermostat company. They had an ambitious programme to build computers and they had designed a large transistorised computers, amongst the first of the serious commercial ones. The company seriously wanted people like Ken, and they trained him and others in computer science.

00:12:05 - what was a transistor computer like back then compared to today?

Honeywell had been making vacuum tube computers, which would take up a very large room. The transistor computer that Honeywell made, it's CPU was thirteen cabinets long. What Ken did was work in the Honeywell engineering under an engineer, debugging prototypes. This was again working in the deep end since a prototype is a machine that has never worked and has all kinds of problems, maybe design faults, logic problems, wiring issues etc. Difficult work, but really interesting.

00:13:14 – On the production floor

After working with prototypes Ken went to work on the production floor, where we were commissioning new CPUS. This was around when electric keyboards were being hooked up to computers in order to issue basic commands. Now Ken could type, which tended to have him in charge of the toubleshooting team, but also helped him learn a lot (including managerial work). It was a thrill to get the first instruction working, until the whole thing was fully operational.

00:14:30 - How did you become aware of DEC?

Ken did like in Honeywell that there were a number of employees who were rather "union-orientated". Ken in fact had colleagues on the production floor who told him "hey don't kill the job", which meant "don't work too fast", don't be so good that there's nothing left to do to get money out of. You would log yours hours and the number of problems you'd fixed and if you got to like 7 or 8, his colleagues would say "that's enough".

00:15:28 - Unions at work

Frequently there would be union people outside the company's front door handing out cards and trying to win a union election. This was a work environment that Ken did not care for. Many of the bosses were administration focused so if you wanted help with a particular problem, you

often wouldn't be able to get it because they were not trained for the work that was being done.

A colleague and friend of Ken's, (who even was the best man for Ken and his wife Audrey's wedding), heard of DEC and went to work there as a sales engineer and told Ken about them. He would bring small little products over to Ken's house and tell him about them. Ken thought that the DEC designs were simply more elegant than Honeywells. DEC was just ahead of Honeywell at that time. So Ken went to interview at DEC and was probably the most knowledgeable field engineer that they had. DEC had two PD computers at the time, the PDP1 and the PDP4 and Ken learned each of those in a week with some tutorial from another guy working there.

00:16:57 - Travelling

Then Ken was off travelling all over the place. Would go to places like J.P.L in California, which was involved with Voyager satellites in the 60s. Sorts of places and ordinary person would never get into. You never know what you're going to see as a field engineer, going out fixing different machines.

00:17:37 - Competition (including IBM)

Ken was certainly aware of other companies; he wasn't aware of the differences of computer architecture. He was an expert on Honeywell and DEC, but he didn't get what was going on with IBM 7090s and other such models. Understood that they were big and some things about them, but Ken didn't understand the relative "elegance" as he just described with the comparison between Honeywell and DEC.

00:18:32 - DEC's reputation

Did DEC have a reputation at that time? Yes, amongst the relatively small science community, universities and governments, big companies like the phone companies loved DEC. A major point was that DEC's products were typically much cheaper than IBM or CDC (or even Honeywell).

DEC built the internal architecture of their computers to be elegant and fairly easy to put together, so DEC learnt fast how to do that. Gordon Bell was the chief computer architect, and he talked in his oral histories with the Smithsonian Museum about making it easier, e.g. a machine that Gordon designed and Ken helped debug the prototype for, was the PDP6, and the back panel for that machine was wired by hand (there would be long benches of women who would do all this wiring by hand). It took a long time to sort out this stuff to make it all correct.

00:21:00 - Wirewrap

Gordon introduced **Wirewrap**, which was basically a computer-generated wiring list, which could be fed into a machine, and the machine would then do the wiring between all the pins on the back panel into which the circuit modules would plug. This made the PDP8 cheap to

manufacture compared to older models. Practices like this made DEC computers easier to produce and thereby cheaper to buy.

00:21:56 - what made DEC computers better for customers? Time sharing and networking were very important things. By the time they got to the PDP6 DEC's computer could handle lots and lots of users, so lots of people at whatever workplace or institution that purchased the computer would be able to use it at the same time. This was very novel at the time. In the earlier days with the IBM machines if you were in a university with a calculation problem you would program it in some language, and the programme would come in a stack of punch cards and wait your turn with the IBM computer. and then sometime later you would get a printout to say what had happened and then if it didn't give you enough information you had to go through the cycle again of queueing for the machine.

Whereas on a timesharing computer or if it were your own computer, you would just work it out.

00:23:58 - DEC Culture

What was the DEC culture like at this point? What is engineering culture and how did DEC get it so right? The founder of the company, Ken Olson, partnered with a guy called Harlan Anderson. Olson was an engineer and participated in the design of some early computers like 0TX1 at MIT, and MIT's Lincoln Laboratory in the mid-late 50s. Olson was always an engineer and was the chief engineer at DEC. Olson was a puritan, a religious man, and had beliefs about how he wanted his company to work. The engineers had to be entrepreneurial; they had to take something that they designed and make a success out of it. This was what he wanted and encouraged his staff to do. To a certain extent this worked very well.

Olson was an entrepreneur, in 1986 he was named the entrepreneur of the century by Fortune Magazine, and it was believable. This kind of engineering culture filtered down.

00:26:57 - about Gordon Bell

Who was Gordon Bell, what was his input? Gordon was immensely important in DEC's history. He wasn't there for the creation of the first computer, but he joined in about 1960, three years before Ken himself joined. His early days he was particularly involved in the architecture of the computers, such as how they handled data and connected and how they did everything. Ken worked with Gordon for a year debugging PDP6 which he designed. One day they discovered they had the same birthdate though he was five years older. Good pals for years (haven't met in about 30 years).

Gordon later went to work at Microsoft. Ken thinks he partly went to focus on the academic things that really interested him. Gordon was very much into the nuts and bolts of how it came together, from the logic of the computer to how the customer would be interacting with it.

Gordon ran into some problems with becoming a competitor with Ken Olson about how things should be done. Gordon thought that Olson did some things well but should stay out of the computer architecture business. Olson was more interested in incentivising the engineers to invent products. Gordon was more of the engineer.

Gordon left the company once or twice to work in academia. He had a heart attack in 1983 (still alive now, about 93),

00:30:37 – Installing DEC systems in Germany

Ken has a trip to Europe and installing the first DEC systems in Germany, and then there was the opportunity to relocate to UK. Installed PDP6s in Germany in Bonn and Aachen universities, had previously installed them in USA in various establishments. Had some nice stays in London and Paris.

Went back to the USA and DEC was concerned about the proper maintenance of the machines installed in Europe (though personnel had been trained to take care of them). So Ken and his wife were asked if they would like to move to England for a year or so to provide technical support for Europe and be the first European field service manager.

00:32:49 - The move to Reading

This led to Ken learning about what was happening in Reading. So, Ken and his family sold their US possessions and went off to England.

First thing they did on arriving in England was to go to Germany and check in on the computers there and fix any problems (there were a few). But during that time Audrey was not feeling well. Her doctor recommended a doctor in London, so after finishing in Germany they went to London and were picked up at Heathrow by Geoff Finch who was a DEC employee. He brought them to a hotel in Reading, and then the next day they went to London. This doctor told them that Audrey was pregnant (had been married for five or six years and had thought about children). That same day, Ken had ordered a car and they picked it up, learning to navigate driving on the other side of the road. That was the start of their arrival in 1965.

00:35:32 - Moving to England

What were your emotions moving to England at that point in your career? Ken was only 26 at the time, but often in his work and life he had been thrown into the deep end, so this was just another deep end to swim his way through. Ken was somewhat used to it and survived most of these events in his life.

Ken and Audrey only knew what the average American knew about England at the time, which was a few bits about Buckingham Palace and the Queen.

00:36:56 - Reading in the sixties

Ken remembers reading that it was a provincial town, something about a village, but there were about 200,000 people living there in 1965. Still may be the largest town in England. In England, he was also aware that the war was just 20 years ago. There weren't any bombed out buildings that he could see, though he heard of a few. Was also aware that England was still very much struggling with the economic recovery from the war. Lots of troubles recovering from a total war.

Wages were low, and things which had started to modernise in the US were behind in the UK. Houses without central heating, cars were different. People's patterns for shopping were very different in the UK.

Ken often shopped in Sainsburys (and the Waitrose in Henley), a greengrocers in Caversham that they favoured. Audrey's doctor told her to have plenty of steak and salads. So Ken went to the local butchers frequently.

00:40:46 - living in Caversham

Yes, it was a fabulous house. Found a place that was brand new in Caversham Park village which was fully furnished and for rent. Was nice as could be. Only thing was that house did not have a telephone. All the wires had been installed underground, but the GPO had not installed the banks of relays for new telephone numbers for all the new houses. During that year was maybe the hardest year for Ken physically. He made maybe 25 trips to London Heathrow into Europe and then back again. Ken would be either hiring subsidiaries on the continent, or fixing things.

So Ken would often send telegrams to his wife to let her know to collect him form the airport.

DEC Reading established in 1964, John Leng credited as the executive who started it.

00:43:55 – Starting DEC and introducing John Leng

Story of DEC Reading started with \$1,000 dollars.

John Leng earned his degree in electrical and mechanical engineering at Oxford, maybe graduated around 1955. Worked at the Atomic Weapons Establishment at Harwell. Perhaps starting this job around 1955, around 22 or 23 years old. Also, around 1955, Claire Manson, John's future wife, in Canada, and she took the Queen Mary to England and got a job at Harwell. She and John met there and got married. It was after this that they moved to Canada (possibly inspired by joint projects at the Canadian Atomic Energy Establishment at Chalk River.) John and Clare were there for a time. Whilst there, Chalk River became a customer of DEC. So, one of the things that Chalk River wanted was a device to monitor one of their reactors, so they asked DEC (Gordon Bell managed the design), instead of a process control gizmo to do the monitoring, Gordon said "hey why don't we design a computer to take care of this".

Ken doesn't know this for certain but believes that John Leng was the Chalk River customer working with Gordon. Later learnt that Gordon and John knew each other very well. Things carried on from there.

John naturally became a fan of DEC, and he was hired by the Canadian subisdiary of DEC. It became obvious soon that John would be an excellent person to start a subsidiary in England.

Another story Ken has which came from Peter Hearke, this is what Peter said to him "I knew John Leng from Atomic Energy of Canada when I was a graduate summer student in 1963. And before I came to the UK as a postgraduate student, only to meet John Leng again in Feb 1964, when John had a \$1,000 from DEC to open a subsidiary for the company".

So DEC opened a small office above a carpet shop called Bilbeys. So small was this setup that when Ken was hiring engineers whilst he was working there, he even got some engineers who resigned from IBM to come and work for them, and once they got to the office and saw how modest it was they would said "what have I done?", because it looked so unassuming.

00:48:55 – About Bilbeys

It had previously been a church but was repurposed into a furniture shop. There was a loft above the main shop, and this became the main office of DEC. When DEC first rented it, it may have been just a wide flat room, and this was built upon a little part and set apart into some offices with an open area in the middle. It was nice, despite the modesty.

The company main headquarters in Massachusetts was also pretty spartan, but it was larger, despite being grubbier. Ken even got lanolin on his shoes from working there in the early 1960s as it had been woolen mill (had made blankets for the US civil war).

For DEC to have spartan facilities was not unusual. But the main office in Massachusetts eventually was filled with a million square feet of DEC. Bilbeys wasn't terribly unusual.

00:51:25 - Why Reading?

Ken's theory is that John and Clare knew Harwell and were interested in opening an office near there. Heathrow was on the other side, so Reading may have been in the middle. So, the association of John with Harwell and Heathrow made Reading an obvious place, wouldn't have been surprised if some alternatives were considered, such as Oxford. Not sure if they thought about workforce availability or universities.

Probably weren't thinking that they would necessarily be there for that long, the lease for the building may have been only a year.

00:52:50 - Description of John Leng.

A quiet man, a bit stoic. Can still see that in the photos of them. Bit fatherly type sort of man. Clare seemed to be more of a live wire. John was a very smart man, and insofar as work was concerned he was a very supportive person. John was an excellent guy and fit for what DEC wanted. Already well connected with big customers in the UK, was a big DEC fan himself, was just overall a great fit for what DEC needed.

00:54:17 - Meeting Geoff Shingles

You also met with Geoff Shingles, another of DEC UK's managers, a man who became synonymous with the company. Do you have any recollections of him. He came in around 1970s. Draw a picture of him.

There were two Geoffs in the office, Shingles and Finch. They may have had a bit of a rivalry as they were both senior sales managers. Ken knew them for most of his time working in DEC.

Shingles was a rather wise man. He was not frivolous, he was a good serious guy, (a bit older than Ken), though he never worked with him, Ken saw him as a bit of a mentor (something that others who knew him also would say about him).

His appearance changed a lot over the years. Would have last seen him about 30 years ago too.

He greatly shaped the culture of DEC in the UK. The DEC culture was hard to describe, but whatever the company did, it found people like Geoff who would propogate this set of values wherever they went.

Ken can say this about a lot of people, but Geoff especially.

00:57:17 - 'The DEC Way'

What was this DEC way that you've mentioned? First of all, the president of the company was a religious man, he did have puritan values and his expectation was that we would all do the right thing in every business circumstance. So this notion of "do the right thing" was very common to see in the company. Of course you can ask what does this actually mean? But you have to say in any discussion about ethics, these discussions may become interesting about what the right thing really is. But usually, life's problems don't get so academic and it's somewhat easier to tell what's right from wrong. This was always approached in a case by case basis, there wasn't a top down edict for what the right thing was in all situations.

Obviously, you would do well if you looked after the customer.

00:59:18 - Doing the Right Thing

What did "do the right thing" mean in terms of the customer and for the company at the same time (as they may ofc be clashes here and there). Is there a tension there?

In the service business Ken made a ton of money and profit. We were a very analytical bunch in how to handle all this stuff. However, if the customer was happy, Ken and his colleagues had a much better chance at succeeding at their business goals, because customers whose "bacon we

saved" would be far more likely to make more purchases at DEC in future. So Ken and others had a very good relationship with customers in the service business.

At some point they started a large survey once a year. In those days it wasn't so common. Their customers took those surveys very seriously and DEC responded to every single one. They would receive thousands and they ranked their offices in accordance with those.

Ken finished his work as field service manager in 1979, and for years after that Ken did top ten award dinners (he did maybe 30+ of these things), and this was based on them being a top branch in the opinion of their customers. It worked by Ken and Audrey arranged a celebration dinner for a local branch out in the branch's locale.

1:01:00 – National Security Agency

One of these branches in the USA for North America did work for the NSA (National Security Agency) and this office had a sub-branch in Leeds (UK) and another one in Germany. So, Ken visited the UK, this being long after his long-term stint in Europe, and he did award dinners there and in a bunker in Germany.

1:02:15 - Customer satisfaction

Customers' satisfaction was a big deal. No matter what else you did, if you weren't pleasing the customers, you weren't doing a good job, you weren't a good guy.

1:02:25 - Culture of responsibility.

"You had the freedom to do something, but you had the responsibility to see it through. Was that part of the DEC Way?"

Very much so. Being a field engineer, you're out in the woods, you have a customer with a problem, and you need to figure it out and fix it by yourself. DEC always counted on people like that in the earlier days to get things done. And this attitude applied to anyone in the company with significant responsibility, sales, engineering, logistics and so forth. Very healthy in the company throughout its life. This was also motivating for people working there, certainly Ken liked it.

1:03:40 - Reflections on the UK

"You've spent a year or so in the UK. What was your reflection on Britain? Sad to leave it?"

The year Ken was in the UK was a very busy time and physically demanding from all the travel (as previously mentioned). While he was in the UK, Ken knew what was going on over in the US with the PDP6, development of the field service organisation, hiring of droves of people, Ken knew that was what he would be facing when he went back to the USA.

1:04:34 - Field engineers

Ken hired a lot of field engineers, and he liked it. Ken spent a week in the Paddington hotel hiring people day-after-day, ascertaining whether people could fix computers on their own and be trustworthy. Ken could spend a week hiring a person. He would be thinking 'what else could I do in one week that would yield another employee' because that new employee might stay with the company for 20 years (and they often did). Ken's approach was very much "hire good people, it's the best thing I can be doing", since whilst he could be fighting fires on all sorts of fronts in-between all of that, hiring good people is something that would help.]

1:06:50 - Career after Reading

"You left Reading, where did your career take you after that?". Ken became the regional field service manager for the North-East Region, which was a relatively easy job (the area included New England). He took care of that business; it was already well-established by the time Ken went to work there. But what Ken really did with his time was running around the US hiring people instead of fixing machines. A lot of Ken's cohort's disliked hiring people and thought it was a terrible duty (boring, had to talk to a lot of people you had to say no to), but Ken really enjoyed it. As a result, Ken was the hiring manager for a lot of people who wouldn't even necessarily work for him straightaway, but they knew him. So, this helped Ken get along in the company rather well with all the extra connections this made for him.

1:07:20 - Assignment to mid-Atlantic region

After the North-East, they assigned him to the Mid-Atlantic Region, which was from New York to Florida, where Ken did more of the same. By this time three years had gone by since leaving England and DEC asked if he would go back to Europe again, this time to Geneva, for the same job as he had in England but much bigger. By this time Ken and his wife had two children, and they went to Geneva for three years. After this stint Ken went back to the US and became the US-in-total field service manager. He attended a business management course at Harvard Business School and did that until about 1980. Then Ken became responsible for strategic planning for sales and service for the whole company under the Sales Manager.

1:08:30 Sabbatical, study and move to strategic planning.

At that point Ken saw an opportunity and took a sabbatical from the company to go to MIT and got a master's degree. This was an unusual jump, given that Ken went from High School into the Navy directly, so he didn't have an undergraduate. Nonetheless, he got into MIT and got a degree in Management. Ken still considered himself a technical guy, but he had learned a lot about management.

After coming out of that, Ken spent the rest of his career always being involved in strategic planning, which he liked also. Of course, with that sort of role you end up with a plan, but the way Ken handled it in sales and service was by making his planning service as an integrating function in the company. Ken achieved this by including the product teams, marketing teams,

others who may have had a planning title, in his planning. Ken's office would give them the process to all jointly work with and this fostered good communication between different parts of the company, which helped ensure they were all on the same page with strategic planning.

1:10:00 - Board activity towards the end of DEC

"You had something of a Front Row Seat towards the end of DEC, you were secretary to the board? What's going on at DEC at this point?"

In about 1988 or 89, Ken's boss, the head of sales and marketing for the company, abruptly left. This was a particularly traumatic event for the company, and all of Ken's boss's prior functions were parcelled out to other guys at the top. Ken would have been effectively chief-of-staff for this person and Ken thought that he was probably going to go as well. For several months after this Ken had one remanent group still working for him (called Management Science) which was an internal consulting group of maybe 50 people. Ken figured he would probably get a polite phone-call one day letting him go. A phone call did come, but it was an invitation to become secretary to the company's executive committee & the board. Ken was somewhat baffled by this initially, "why me?", and the answer was "because you know everyone in the company, you understand how it works and we need somebody".

1:12:00 Move to Corporate Headquarters

-Ken moved over to the corporate headquarters near the president's office. Ken had always known Ken Olson and vice versa in a reasonably cordial way (they had never crossed swords in anyway). Consequently, Olson trusted Ken right away. Ken's job was creating the agendas for the executive committee meetings and the then monthly board meetings. By this point the company was already falling into trouble, and Olson just accepted the agendas that Ken was making for him (Ken was unsure if his post was secure given the predicament the company was in, so he took the approach of "whilst I'm here, I may as well do the best job I possibly can"). Ken had about as powerful job as any employee since he was creating the agendas for the boards and committees to discuss. So Ken put everything on there that was current business which had to be dealt with, and Olson would look at the draft and mostly just agree which surprised Ken. Occasionally Olson would refuse for a certain topic or point to be addressed completely, but sometimes once they got into the meeting, (Ken recalls a particular time where there was a meeting with some treasury people, and they had to let the board know what was happening with cash as they were burning cash really fast, so Ken put it on the agenda. And another thing Ken would do for these meetings was to make sure everyone had a chance to tell Ken what they were going to talk about in the meeting so Ken could advise them about what to do. Sometimes they paid attention, sometimes they didn't.

1:14:25 – Treasury example about cash flow

Olson had approved the agenda. Then they got to the day of the meeting, (Ken remembered he always wore a dark blue suit with a red tie). Olson always sat next to Ken during such meetings, and Ken would nudge the meetings as and when required to get through all the salient points. Olson was really shifting in his chair so much that Ken thought that it might be the end for him.

1:15:18 - Taking early retirement.

Ken thought he did all he could in the 2-3 years he had as secretary. The company was going to offer a first-early retirement program for its employees because it was in such trouble. Ken knew it was going to be a one-off because of his insider info being in all the meetings (Ken could just drop in any meeting he wanted because everyone knew him). Consequently, Ken figured he might as well take the early retirement. When that was announced to the board in April of 1992, the board forcefully told him that "this is not for you". Ken thanked them for their high regard for him, but he decided to leave anyway. While he was leaving, Ken decided to have a look at some of the small companies that DEC had bought (he knew about them because he had shepherded them in front of the board and so on). Ken said that if he could be of any help with some of these companies he'd be glad to.

1:17:12 - Moving on

Ken chose Basis Automation Systems in Langley, next to Slough. Ken became Chairman of that company, and his job was to integrate them with their parent company (DEC). The first day he showed up there in Langley was the day he heard that the Board had fired Ken Olson. Now Ken knew that DEC was in big trouble, but he always thought that there had to be some sort of intervention.

About Ken Olson

[digression about Ken Olson as a manager. He was considered a genius in some quarters, in 1986 Olson was named entrepreneur of the century (and Ken thought this was probably right]. Ken's own opinion about why managers fail or their companies fail is that they became far too attached to the status quo, and the genius of Olson was that he was not attached to the status quo. He had all these things going in engineering with lots of different people, all of which would think of Olson as their friend. However, Ken Williams had the opportunity to observe this pattern over the years, and Olson had the habit of occasionally going into these workplaces, and changing things up. Discontinuing one product and picking up another, having one group report to a new boss, but never firing anyone. (Great thing about DEC was that people rarely got fired). Consequently, Olson would make sure the company got off one track and got onto another when he thought the time was right.

1:19:55 – Olson's policy of encouraging competition

Example: Olsen had two large major engineering projects, but they were both spending large sums of money on development of their follow-on products (and they were both successful products). Ken remembers that he went to some of these to see what was going on, and he asked the manager of one of these projects "who are your customers?". The manager replied "they'll be the upgrade customers of the other project". Ken thus knew the company was doomed since the other project had already identified an alternative major engineering investment for his upgrade customers. This demonstrated Olson encouraging competition, and this was possible in the early days of the company (say the 70s) where the best products would pay for all the other lesser ones that had been constructed. But as time went on and computers became more commoditised, this became an untenable framework. You had to pick and choose projects more carefully. Olson did not intervene in that situation between the two companies mentioned, and a few others. As a result, the company continued to deteriorate, and Ken thought the either Olson would intervene, the board would intervene, or perhaps even the stockholders would intervene. Eventually they told Olson that he had the option to resign, but he refused and said he would only leave if he was fired, so they fired him.

1:22:10 - DEC's legacy

"So what was the legacy of DEC, looking back on it".

Ken still grieves for the loss of DEC. He didn't want the company to fail. Ken expected it to continue forever. After Olson was fired, another person was put in charge, who wound up selling off the company to *Compaq*. By the time this happened Ken had long since left.

Now *Compaq* was a company that made laptops, DEC had previously made FAX machines, big computers, with revenues of \$14 billion dollars a year, 110,000 thousand employees at one point. Later *Compaq* was sold to Hewlett-Packett (HP), which ironically makes Ken Williams a retiree from HP in a very roundabout way (since his retirement package presumably comes from them now).

When they broke the company up the service business was the greatest valued asset in Ken's estimation which HP inherited. Some of the service people Ken knew went to HP to work for them. Of course, this was all at least 20-30 years ago now, and those people have retired, and the service business has changed substantially.

1:23:50 – "Is there a technology impact, or a cultural impact from DEC in the world?"

Ken thinks that if there is an impact in the world from DEC its invisible, at the very least to him even though he has been watching for it. Mostly a historical tale now, great while it lasted (though Ken thought it would last forever).

In his last role Ken told Olson that he needed to get business reviews on every agenda so they could figure out what was winning and change what was losing.

One other odd thing Ken remembers from this last job was that Olson would periodically grab him and ask him to find out what's going on with "X, Y & Z" in manufacturing or something else and Ken would do that usually, but sometimes he refused when Ken knew that Olson was just trying to get him to badger someone. One of these times, Olson said "when you get it, find me wherever I am and let me know", so Ken did and when he did Olson was in a meeting, so he went to his desk plopped down what he had found and said "are you happy now?" and Olson replied "I'm not meant to be happy". And Ken thought that very accurately described Olson, he was the kind of guy that felt good when he was in the soup, solving problems, and had something to chew on.