

Dave Grainger Access Summary

00:00:00 – Interview Introduction

Gavin Clarke explains the purpose of the oral history recording for National Museum of Computing and Reading Museum, including the date, July 17th, 2024. Explains the recording is for the 60th anniversary of DEC in the UK. Asks Dave Grainger to introduce himself.

00:00:30 – Personal details and Upbringing

Dave Grainger, 81 years old, born in 1942 during the war. His Father was born in Blackheath, near Birmingham and immigrated to Canada with his parents and brother and sister. Dave born a Canadian. Mentions that Canadians between 1940 to 1969 were considered British subjects, so has always a linkage to the Old World. (England)

00:01:36 – Education

Completed a double degree in Engineering and Computer Technology at East Ontario University. Computers were a relatively new concept in 1961 -1962 and he found them very interesting. He worked for IBM during a summer internship, just doing punch card stuff.

00:02:10 – First Job/ Honeywell/ DEC

After graduation he got married and he had several job opportunities including one for Honeywell Corporation. At that time, they had a computer division, accepting that job necessitated moving to Boston, USA. Which he did and stayed with the company for 5years. In 1969, joined this very small company called Digital Equipment, concept was to make computers more accessible to individuals.

00:03.29 – Resident Engineer Princeton

Hired initially to be the resident engineer at Princeton University

00:04.16 – Dad / interests growing up.

dad was in the automotive business. During the war he was a test pilot for aircrafts, Dave's interest was high in all things mechanical and electrical.

00:05.02 – Intercom system job

Summer interesting job was installing public address systems in schools, string wires and install intercom systems.

00:05.17 – Thesis on lasers

Dave's thesis was on lasers. Lasers weren't actually invented in 1957, so there was very little information available on them, at that time they were primarily used for scientific research, people were fascinated.

00:06.40 – Installation support Honeywell

Dave is offered a job to get into the computer industry and jumped at it, and that was in 1964.

00:07.05 – Service Organisation

Honeywell was building a service organisation because they were fairly new and they were trying to compete against the likes of NCR, Burrows, IBM, CDC Computer Devices – CDC (Control Data Corporation). Dave's role was to be in the installation support as a resident engineer.

00:07.32 - Move to the United States

When Dave graduated, he got married, and moved to the United States. They asked him, "Where would you like to be located when you finish your training here in Boston?" He chose California, Boston, or New York

00:08.25 – Relocation to New Jersey

Dave is asked by the head of human resources, "Dave, you're married?" I said, "Yes, I am." He says, "Good. I have an opportunity for you, and you're going to have to relocate." I said, "Where would I be going?" He said, "Well, it's not your first choice, and it's not your second choice, but it's pretty close to your third choice." I said, "Where?" He said, "New Jersey."

00:09.07 – McGraw Hill

This was his first job. He went down to New Jersey, and became the resident engineer at McGraw Hill

00:09.19 – Installation of computers/ On call

The resident engineer was a person who oversaw the installation of computers and did this support work: the installation, the service, the maintenance. They considered him - even though he was only 21 years old - a little bit more stable. Probably more of an at-home kind of guy, and so they put him on-call, subject to being called up at any time, seven days a week. They had a very small stipend for making yourself available and you had to be able to get to the site at McGraw Hill, in New Jersey, within two hours. He was promoted to manager, but at that time they had hired more people, and they asked him to manage part of the New Jersey service operation.

00:10.53 – Looking for challenge.

Getting a little bored, didn't find the challenge that he was looking forward to, and he couldn't see himself spending another five years. He starts looking for more opportunity.

00:11.19 – talk of Digital Equipment in the trade publications.

He heard about this company called Digital Equipment. He studied the trade publications and listened to people in the business, and there was a lot of talk about a small company called Digital Equipment. They came up with the concept of a minicomputer, which was almost like a personal computer, in that only one or two people could work it at a time, but it was very specific. It was focused primarily on scientific research and educational applications because it was such a new idea. That was the logical place.

00:12.01 – January 1969, start at Princeton.

He went into and talked to the head of service in DEC, not too far from where he lived in Princeton, New Jersey. He said, “Dave, we’d like to hire you as a resident engineer for Princeton University.” They had seven of our computers, and they’re adding a lot more. That was his start, January 1969.

00:12.33 – Training program

He went to an additional training program to learn about their computers, but they didn’t have an opening for that until February, so they said for the first month, why don’t you just go, and we’ll take you over to Princeton University. We’ll introduce you, and you’ll get to know your way around.

00:13.19 – Role of customer interaction

There was a lot of customer interaction. It was at the user level, not just at the management level. The computers that they had at Princeton University were primarily in a research facility where they did nuclear research. There were only a few of them in the word at that time. There was one in Chicago, one in Princeton, research engineers and scientists there. Dave’s job was to meet with them, interact with them and support them, as well as the equipment because they were always trying different things.

00:14.40 – Salesforce all engineers

The digital salesforce were all engineers at the time. They had products in the laboratory, in the physics departments, and engineering facilities. The engineering facilities of large industrial companies, but they weren’t business computers, they were primarily for research at that time, and for instrumentation, laboratory use.

00:15.23 – Communication

The salespeople had to be able to interact, as well as the servicepeople, with the client on a common language. That was one of the main roles of the resident engineer, to be able to communicate.

00: 16.06 – PDP -1

The PDP-1 computer was the first computer Digital ever manufactured, it was called the Programmed Data Processor – that’s PDP, and 1 indicated it was the first. The PDP-

1 was a fairly large computer. It probably stood six feet tall. It had four or five bays of equipment. It was maybe 10 feet wide – maybe 12 feet wide.

00:18.43 - 1 year at Princeton

Dave spent a year at Princeton University, doing that role. We added a lot of equipment and became one of our largest customers in the United States.

00.18.56 – Move to Atlanta

Asked to go to the southeast of the United States and take on a management role there. He went down to Atlanta and took on the southeastern of the United States for services. Did a lot of hiring, a lot of recruiting.

00:19.50 – Ken Senior

He is first introduced to the person who ultimately hired him, a personal friend, still to this day, his name was Ken Senior. Ken had worked for Honeywell as well, so they had an instant bond.

00:20.24 – John Barrett

A lot of people came from the Honeywell company. John Barrett was a good example in Scotland. John Barrett became head of services in the UK.

00:20.40 – Interviewing staff

Staff were interested in the technology, but they were really interested in the people, found that very satisfying much more personable. That was one of the things that attracted him, his interview with Ken Senior, and meeting a few of the people that he had Dave interview with. Much of his career at Digital, they interviewed people to death, probably had a minimum of five to 10 people interview you before you got hired.

00.22.00 – Interviews and HR

Ken interviewed Dave, then he had two supervisors that interviewed him. Then he wanted him to meet the former resident engineer at Princeton, who got promoted to a management job in New York City. Then there was the human resource manager. They only had one human resource manager, so they weren't all over it. So, one human resource manager interview, and probably three-line managers and the person who was going to hire me, at least five interviews.

00:22.54 – Getting to know interviews.

The only person that ultimately, he had to really satisfy was Ken. The philosophy was they wanted to know the people they were hiring. It wasn't really a test, so much as it was why do you want to work for this company? What are your interests? Where do you see yourself in five years? Hiring primarily people who had some experience in computers, they couldn't afford to start with the trainee that had no computer knowledge, they were just too small.

00:24.01 – Opportunity to grow.

When he went to Atlanta to cover the southeast, they had one person in South Carolina, two people in Alabama, two people in Florida, and three people in Atlanta. When Dave left Digital in 1992, there were at least a thousand servicepeople, so the growth became phenomenal. The idea was to be sure that you were hiring people that really wanted to make this their future. Dave wanted to have an opportunity to grow. Twenty-five years later, with 30,000 employees, he felt a personal sense of accomplishment.

Ken Senior actually was the first service manager in the UK, he joined Digital in about 1964/1965, a very personable individual, he was always a mentor to Dave.

00:27.06 – Making computers accessible.

With Digital, the computer industry was new, but the idea of making computers more accessible to the individual, was enthralling. The first computer ever designed was called the Whirlwind. It was developed during the war to solve problems. These things needed air conditioning systems to cool them, they were huge. They would take up an aisle of a supermarket. Just long bays of boxes. It seems very impersonal. You would have punch cards that you would do on like a typewriter, and it would punch a card, and you would write your program on these punch cards, and then you would give the batch of punch cards to the computer operator, and their only job was to load your programs. You give them to them, and they would have batches and batches of them, and you would go away. Two days later, or a few days later, they would call you and say your program ran or it didn't run, and here are the results. You had to wait two or three days to find out if your program had a defect in it, and then you had to correct it and do it. This process would go on and on.

00:28.55 – First Desktop computer

Here was a computer that you actually could sit at, and write the program, and see the results, and interact with it, like a personal computer today. It's the same concept. It was a minicomputer in a box. Ultimately, it was no bigger than a desktop. The first ones were a little larger, and that had cabinets. They didn't throw up a lot of heat. They didn't require a lot of maintenance activity, the future.

00:29.34 – Ability to share the same computer.

That machine, ultimately, also had another capability, where you could plug in additional typewriters: teletypes they were at the time. You could use the same computer and share that computer. You could put one person on it, you can put two people on it, you can put, maybe, up to four people. Eventually, computers were designed, as we know today, in the cloud, and you can access any of them using the internet, through a communications line or device. If you think about that, how far we've come from that. Digital was a leader in the concepts of distributed computing. Ultimately, the network, which is the ethernet, as we know it today. It was called DECnet at the time. Digital was a founder, along with Intel of the ethernet. A lot of people don't know that.

00:31.34 – Servicepeople

One of the reasons that the service organisation was absolutely critical to Digital, was the very simple fact that when they were small, they needed to have people interact with customers, so they had to hire servicepeople. They had salespeople, but really needed the servicepeople. The service organisation and the individuals – the technicians and the resident engineers – have more interaction than any other person in the company. Four or five times as much interaction than the salesperson, and so it was critical.

00:32.53 – Growth

Digital were growing so fast, he needed to transition to the UK.

00:32.56 – Risk of career

When Dave joined Digital in 1969, it wasn't quite a \$100-million company, about £120 million. Weren't a super large company, and he was taking a risk, going from a big company to going to a smaller one, but that was a risk he was willing to take for the opportunity. By the time he left Digital in 1992, the company had grown 150 times that, a \$12-million company, the second largest computer company in the world, only behind IBM, larger than HP.

00:33.53 – Dave Lawrence and relocation to the UK

Then a call from Ken Senior. Ken said, "Dave, there is an individual that I want you to meet. He is flying from the UK, his name is Dave Lawrence, and he is going to come over and he wants to meet you in Atlanta." Dave Lawrence came down, and Senior came down. Dave said we've grown very fast in the UK, but we have a very small service organisation, and we really need to bring in some leadership. Some people who have experience at hiring people, knowing the Digital way. He said you're going to the north of what's called the north of the UK, and I'd like you to be the manager there. We have a supervisor in Scotland, his name is John Barratt, with two supervisors in Manchester. Manchester would be your home. Carl McCane, Kirk McCoy, Brian Prince, they were great supervisors. He moved over with his family as soon as school was out in the summer.

00:36.32 – Set up Service operation.

At that time maybe 20 engineers in the north of the UK. Some in Scotland, some were resident engineers. Edinburgh University maybe had an engineer Yorkshire engineer Peter Waldron in York. He worked out of his home. Most worked out of our homes, except where there was a branch office, Dave was in a branch office. The organisation was 20 to 30 employees, including probably five salespeople, a couple of administrators. they had 20 open job positions and had to double the organisation. If you didn't have some experience of recruiting or knowing how to go about that process, it would be difficult, and they just didn't have the bandwidth. The supervisors were excellent, they knew the equipment, they knew the customers, they cared. They worked hard as heck. They were fun to be around.

00:38.34 – Move to Reading

Dave Lawrence told Dave that they asked him to be the plant manager Ayr, Scotland, a perfect person to open a new plant in the UK – Dave Lawrence, who had all of this knowledge of the technology, all of the knowledge of the people and the customers, to go open a plant to hire a lot of people in Scotland to start the first plant in the UK. Asked Dave to move to Reading and replace him.

00:40.03 – John Barrett relocates to Manchester.

Who could replace Dave in Manchester, he called up John Barrett, as he knew that he was the person to come to handle the north of the UK. Marjory says to this day because she didn't want to move, it was the biggest decision they ever made, and it was a very important one, and a happy one. They had opportunity, took a lot of risk, knew our stuff, but had fun too.

00:42.13 – Highest paid secretary in the UK

Wendy called me up in Manchester, and she said, "David, I heard you hired another secretary." I said, "Yes." She said, I heard you pay her – whatever it was - £3,000, you can't do that, she'll be the highest paid secretary in the UK."

00:43.05 – Sue

Dave said, "You know what, she's going to be worth it." And she was. She was the secretary in Manchester. She was still the secretary in Manchester when he was running worldwide services, back in Massachusetts. She must have spent 20 years with Digital.

00:43.53 – Company paid relocation expenses.

When they moved Dave, they had an assistance program, where they would use a relocation company that would buy your house at whatever the market value was. That took one burden off. It made it easy that way. They paid for relocation expenses, which would be the cost of moving, taking the family over. Once in the UK, there is an initial period where they would pay to help setup a place. It wasn't a lot of money, but it was enough. You weren't out of pocket per se. That wasn't a negative. They were smart about that.

00:44.52 – Commonplace practice

If companies wanted to succeed, they had to have the ability to move people around and have relocation policies that made sense, particularly for management or for unique individuals: scientists, engineers, and whatnot.

00:45.23 – Mobile workforce

There were probably 20, 30 per cent of the people that had relocations within Digital over a period of time. Back in those days – back in the '50s and '60s, people were used to being relocated because coming out of the armed services, they used to hire a lot of

technicians from the military, a source of service employees for us. They had experience in radar, radios, electronics and so on. If you're in the military, your postings are all over. This experience of moving servicepeople was not unusual.

00:46.47 – 30 to 30,000 service employees

When he left Digital, there were 30,000 service employees worldwide. Probably 3,000 in the UK. He was in the north UK with 20 or 30, maybe, employees, 3,000 by the time he left the company in 1992, a big operation.

00:47.37 – National Federation/ European travel

When Dave was in university, he had an opportunity to do National Federation and Canadian University Students, for you to go to Holland. For \$300 he got a plane ticket, and the government in Amsterdam and Holland had job opportunities, and you can work, and you can travel and do whatever you want. International experience at 17, 18 years old, the opportunity to go to a foreign country and learn a little bit about the culture. He worked at Amstel Brewery, which was an interesting labouring job. Van Houten, the chocolate company, an interesting job, midnight shift. After the end of that summer, he bought a haversack, and started hitchhiking around Europe. To Germany, down the Rhine to Switzerland, over to France, up to Paris and, ultimately, back across the channel. That experience at that age probably made him more confident in his ability to do different things, travel around and experience, along with engineering and my interest in computers, but probably what drew him to the service industry.

00:50.11 – work in Manchester

Manchester is a very industrial city, the first office was in the north part of Manchester, and then they moved into a larger building, as they kept growing like crazy. Bob Thorley was the sales manager, and he ended up managing the north UK sales operation. Manchester itself was the home of the BAC One-Eleven, a British Aircraft Corporation – a One-Eleven aircraft, Dave used to go down to Reading or down to London on that plane.

00:52.06 – Football

Dave finally learned what football was because the Digital service guys were really rough and tumble, they had their own little league of players who would get together and play other teams on Saturday or Sunday. He remembers some of those experiences, learning the game, culture wise and the language. There were two things, the driving, and the language, both were a bit of a shock, he had to learn to drive on the other side of the road.

00:53.25 – Driver's license

After six months you have to get your own UK driver's licence – that's the law. You had to be able to do the hand signals. You had to be able to double park. It was a much more aggressive test than when he had got his licence in Canada. It all worked out well, never had an accident while I was in the UK or driving on the other side of the road.

00:54.44 – understanding UK accents.

Language, that was a culture shock, he didn't realise there were so many dialects. He learned a lot by the time he left England, he knew the area of the country that people came from. He could tell a person with a York accent, a person with a Scottish accent, a person with a Manchester accent, a person with a London, Reading, whatever accent. The language was a challenge, and you had to listen very closely to understand exactly what was being said.

00:55.42 – Son's English accent

His youngest son, when they moved to Manchester, was three years old. He was talking but he was just beginning to socialise with other kids. When they left England, he had an English accent. He was made fun of at the school when they moved back to the United States, because of his English accent.

00:56.34 – Butt Centre

A year in Manchester, and two years down in Reading, located in the Butts Centre, they had just moved from Arkwright Road

00:57.13 – Digital Park

The Butt Centre is down the same St. Mary Street, or Butt Centre. Very close to where the very first office was, in a corner shop on the street, but then later in Arkwright Road, and then after that the Butt Centre, and then after that Digital Park.

00:57.49 – Large Modern office

Physically, it was a six-storey office building. Very modern. Underground parking. He remembers getting in and out of the parking garage was a major disaster because they used an American design for the building, and because you're driving on the other side of the road, they had a lot of problems getting cars in and out of the car park ramps. A modern office, but it had a shopping plaza on the first floor, and some shops. The other floors were all offices, they had the top two storeys of that building, about a third of the building.

00:59.34 – Networking

Networking with just the people that you worked with primarily. He did a lot of travelling, socialisation at that time was with the DEC people, interesting experiences, he met a lot of people.

00:59.59 – Belfast Telegraph

Dave responsible for Northern Ireland for services. A big customer was the Belfast Telegraph. At that time, in 1972-1974 timeframe, there was a civil war going on in Northern Ireland, and it was seeping into even the London area. It was very hard to support customers there, but Belfast Telegraph was a big customer, and it being the media company they were, they had to get their newspapers out. Dave needed to hire an engineer, and always sent engineers from Scotland. During this time of crisis in the

UK, with the Northern Ireland problem, he had to hire some people, they advertised in the newspapers, got interviews lined up, and then John Barrett and he went over. John came over from Manchester because Dave was going to assign Northern Ireland to the north UK, to John Barrett, they had to hire an engineer. They hired the first Irish employee, who was Gerry Tierney, a great guy. Gerry said, "I only have one problem. I don't have a car. If I get a car, the insurance is crazy because cars are being stolen." Dave said, "Gerry, we'll find a way to solve that problem if you'll take this job." He went back to the office and got on the phone with the United States. He said, "I know that you have been talking about a company car policy for field service people, but I really need a car for our first employee in Ireland because this is a problem. That's when the company car policy for field service began worldwide – actually, for the company. That was the first hire in Northern Ireland. equipment

00:63.01 – Northern Island unrest

Gerry's car is stolen but his oscilloscope, which is worth thousands of dollars, which is one of the test instruments the engineers needed at that time, and his tool case, and some of his spare parts were still in the boot when the car was found.

00:64.48 - DEC Sales

Switch from service and talk about sales, Dave ran not only worldwide services, but at one point he had the US sales organisation – the United States sales organisation. DEC salespeople were never on commission, not in any place in the world. No commission. It came from a culture. The first employees in sales were engineers. They had to be able to relate to the client. They had to know the technology. They had to know what these laboratory instruments were all about. They hired people with that experience as engineers. The idea was to pay them as engineers, and pay them for what they could accomplish, not for how much they sold because the main objective was to always take care of the customer first. That culture in sales emanated throughout the organisation, but it came from the top. It came from Ken Olsen himself, the founder of the company. Always take care of the customer. If you take care of the customer, they'll come back again and again and again.

00:66.26 – Customer surveys

People say why did Digital fail. Why is Digital no longer? They say it's because they didn't pay the salesforce commission. As soon as they took those companies on, they started paying the salespeople commission you had to pay your people well, which they did. You had to recognise individuals, teamwork There was no such thing as recognise the salesperson for an account without acknowledging the service people that supported him. DEC cared so much about the customer experience that they started doing customer surveys. Nobody did customer surveys in the 1980s. You never asked the customer how happy, how satisfied they were, what disappointed them, and so on. They did surveys and measured the offices and people the top 10 in the world were recognised in the celebration once a year.

00:69.49 – Worker Motivation

Throwing money at people didn't motivate people. Recognising them, awarding them, and praising them, both as management but also from the customers

00:70.30 – Customer care

If a customer called and was very dissatisfied, and had a legitimate claim, Dave would apologise, solve the problem, and tell them that they're not going to pay for their service for the rest of the year. The first time he did that, people thought he was crazy. "Why are you doing it?" I'm doing it because the customer is right, and the customer needs to be taken care of. And, by the way, that's a penalty against your office and your management for not having taken care of this customer, and not listening to them because they gave you a chance and you didn't take care of it properly, so that's why I'm taking care of it properly.'

00:71.39 – Revenue from services

Service was really crucial, in the UK, service was not a cost of doing business, it was a way of doing business. We all know today that computing services really is a subscription-based thing. We don't pay thousands of dollars for something; we pay by the month. That's the way they looked at service at Digital. Service was a moneymaker. It was the most profitable part of the company. Thirty per cent of revenue came from services, and half of the profits of the company came from services. It wasn't just a break-fix mentality or maintenance services, it was consulting service, it was resident engineers – clients needed that. It was, in later years, systems integration, where they brought together technologies, interfaced the software, the application and so on. Hardware, sometimes mixed, multi-vendor hardware, put it all together. Consulting. Those were businesses in the '70s and '80s. The consulting business was very small, in any country, there were probably a small number of consulting firms.

00:73.54 – Revenue and Profit

A big part of the DEC model was the revenue and the profit associated with it. Dave was measured on revenue and profit, but was primarily measured on customer satisfaction, which was the number one measurement. It had to be on the satisfaction of the clients, and then the rest would be financial-related things.

00:74.25 – Customer satisfaction report

DEC always highlighted the customer satisfaction reports. Ken Senior was the inventor of the customer satisfaction report. He called Dave one day and he said, "I have this idea, we're going to start something here called customer satisfaction surveys, and we're going to mail them out. We're going to get the results in, and then we're going to recognise people – the top 10 offices". He was a mentor in that regard, it was a great concept, to recognise and to take a whole office and its staff and give them a three- or four-day weekends at some place for just taking care of their customers. You wanted to be a winner of one of those. That was the goal, everybody wanted to be a winner.

00:76.19 – Woman secretary/ administrator

Sue was really the office administrator, but she was called a secretary because in the UK, that's what you call them, it was a different time, a different place. You can't pay people too much. He was breaking the rules, an American coming in and saying, 'I've just hired my office administrator – my secretary- and I paid her more than any other secretary because I wanted her, and I knew she was worth it, and I knew that's what she needed.'

00:77.36 – Low turnover of staff

The other thing is, the unions were very powerful, very strong at the time, DEC were never unionised as a company. They didn't feel they needed that. You take care of your people. There wasn't a lot of attrition, they were growing so fast. The hiring process, as difficult as it was to get a job with Digital, it was successful, and people just didn't leave, a very, very low turnover, in the UK, was maybe two per cent, and there was probably a good reason for that.

00:79.18 – Do what's right

Do what's right. It doesn't mean don't use your head, or don't be crazy, but it literally meant do what's right. He was measured on profit and loss, and customer satisfaction, he wouldn't want to pay someone who goes over the amount and loses money. That wouldn't make any sense. A business can't survive that way.

00:79.54 – Strong entrepreneurial instinct

There was a strong entrepreneurial instinct at Digital, particularly, on the service side here again. They were entrepreneurs, very creative. All these concepts that they came up with, consulting, integration, network services and resident engineer, these were things they knew customers could benefit from, knew they were a means of generating more revenue and profit, and also more resource to do a better job. They encouraged staff to be entrepreneurial, think out of the box – and they did.

00:80.49 – Frequent accolades

When he looks back now and reads some of the ex-DEC news, former employees, they often comment about the best company they ever worked for. The best job they ever had. The best manager they ever had. These accolades, it's not infrequent, it's frequent. It's just the way it was. It was a wonderful time, wonderful era. And it's not the reason the company failed.

00:81.57 – Old management culture

The culture hadn't changed, but the leadership had changed. Dec suffered because they didn't have a succession plan for Ken, and Ken hung on for too long. It's called founder's disease. Ken was a wonderful, creative entrepreneur. It was a freezing under the mentality at the top, the writing was on the wall by '91/'92. At that time, Dave had run worldwide services, run the North American sales, and were trying to mix things up, and do things differently, were just getting too many roadblocks.

00:83.22 – IBM

A lot of people will say it was the personal computer that came out. Bill Gates was a customer. Bill Gates built Microsoft using a PDPA. They were a big DEC user, and they used their computers to build their software on, ultimately, MS-DOS, and Intel had the chip. If anyone could have done it, it turned out to be IBM because IBM is so dominant. When IBM put the name on it, the IBM PC had just taken off, and it changed the world, as we know.

00:84.05 – Competition with IBM PC's

They had an opportunity to respond to that in different ways, not with more PCs, but by moving from what they were good at into more distributing computing and emphasising that. They shouldn't have tried to compete against IBM with PCs. IBM isn't in the PC business anymore, they have sold it to Lenovo, China, have IBM species now. It didn't work out for IBM either, ultimately, but it took 20-plus years for that to happen. Technology changed, just like many computers changed the world, and distributing computing changed the world. PC changed the world. Digital had to change its technology with it. Dave wanted to be more of a consulting company, and more of an integration company. That's one of the reasons he moved on, ending up leaving in '92 and went to Xerox Corporation, his time with the tech was over. It was before Digital was sold. Before Ken Olsen resigned as a founder, and Bob Palmer took over.

00:85.59 - Compaq

DEC had an opportunity to buy Compaq. That's not a revelation, for anyone, a number of them went down together to talk and look at buying Compaq, but the consensus was it wasn't a good match.

00:86.35 – Trying to get into the PC business

Compaq wasn't for sale, but they had so much cash, and thought this might be a way of getting into the PC business without having to go there. They had a lot of cash at the time, profitable at the time. It was about 1989. Later, when the company was drained of cash, had a new CEO, with a different board of directors. The idea was to put the company up for sale. That's how the Compaq thing - but it didn't work out for Compaq, very quickly HP came along.

00:87.39 – HP

The HP acquisition was a good thing. A very positive thing because HP was a good company. Their founders were good people.

00:88.09 – HP technology printers

Dave knew that it had a life for the employees who were there, and that it would move on, and it would be, hopefully, successful. He hoped that they focused more on services because he felt that's where the future was moving. Digital had a great printer,

but he thinks it was too late for HP to be able to use DEC technology. They had the DECwriter, which is a great printer for personal use. But HP had good printing technology.

00:89.17 – Acquisition good for employees

The DEC acquisition as adding customers, some technology and networking, and the consulting integration business. HP had its own consulting and HP integration business; it was a good thing for the employees.

00:90.28 – DEC forgotten

He thinks the legacy of Digital is people won't remember the company. They don't remember the company, even now. Here we are, 20 years later. If you ask people, do you know who Digital Equipment was, a lot of them don't. Only a few, who are former employees, or if you had a family member that was there, they would know. That's the sad side of it.

00:91.03 – DEC legacy

The positive side of it is, that the people that were at Digital, many of them went on to do great and better things. Very experienced. Their learnings had greatly impacted the computer industry as we know it today. That's why in the computer museums of the world Digital will always have a prominent place for their early history of computing. Many of the engineers, many of the smart folks went onto found other companies, startups. To Dave, that's a legacy. It's like, if you look into it, you will find out that these people had an influence in society today in some way, shape or form. It's just a matter of looking for it, but it's there. It's embedded in who we are and what we've got today. That is the legacy.

00:92.21 – Great career

Dave had a great career, he was 49 when he left Digital, went onto work at Xerox and head their worldwide services. The goal there was to move them from a light lens mentality to information technology, so they continued to survive on their printers and their copying business. They say it takes 20 years to start an industry, 20 years to mature, and 20 years for it to go away, and he thinks that's kind of what they were looking at. You could see that, with Xerox, you could see with Digital Equipment, you could see it with IBM. All of these things evolved to move onto better things.

00:93.41 - DEC unique

Digital, to his mind was a unique place because of its people, its entrepreneurship, its creativity, not just its contribution to the information technology that they have today.

00:93.56 – Proud of involvement in technologies

He was quite proud to be involved with founding some of the new service technologies, such as remote diagnosis, things today we take for granted. He used to call it the 20-second call, with two-minute call, and the two-hour call. A really good piece of

database software, and a created a database system for customers, where you can dial into, all you had was dialup modems, so you could dial into it on a terminal into this database, and you could ask a question, and they would give you the answer. The database was built around problems that clients were experiencing. Today, we know that's embedded in today. We think of that today when we're on our phones or on our PCs, and you want to ask a question, there is a question database. All of that technology and idea of making it, that started back then. That didn't exist before. A little bit later, an outgrowth for that was a form of AI, called rule-based software, rule-based technology, where we created a remote diagnostic centre, but they had three centres in the world, and the computers could dial into these centres and be diagnosed remotely. DEC were the second computer company doing it. The first one was a very big, supercomputer company called Cray International. Nobody else did that. They did that, popularised it, made it available to every customer that had a VAX computer, by simply adding a board. Later, all the computers came with that board built into it, so that it would self-diagnose using that remote diagnostic centre, and people assisting. He is pretty proud of that accomplishment. He knows that lives on today, in see it in different forms, and there is a lot of pride therein.

00:96.43 – Personal legacy

Dave's legacy today, is his family. He has four boys, he lost one, his oldest son, a few years ago, but all boys are in technology. Unbelievable. How successful they've been, and maybe a bit of it pulled off of him.

00:100.29 – Pride in his legacy

He looks at these kids, and he says, wow, it's okay. They turned out good, and that's his legacy, and he is proud of them.