Gavin Robinson Access Summary

00:00:00 - Interview Introduction

Gavin Clark, interviewing former employee of DEC, Gavin Robinson, as part of 60th anniversary of DEC, UK.

00:00:26 - Early Life and Education

Conversation about how Gavin's life started. He was born in London and raised in Acton. Family relocated to Reading In 1975, when mother's employer moved headquarters there. Gavin left school at 18, worked as an Assistant Scientific Officer at the National Physical Laboratory in Teddington, calibrating viscometers. Loved Maths and Physics and a bit of Chemistry. Completed A-Levels, but didn't pursue further education immediately. Had a fascination for science and electronics, influenced by his father, a production engineer, who built himself a car at 18. Working for civil service, he had to pursue further education by doing an HND in electronics and physics.

00:02:56 - Career Beginnings at the National Physical Laboratory and Road Research Laboratory

Gavin recounts his first job with the National Physical Laboratory, where he helped calibrate viscometers when the demand was huge. Viscometers measure the viscosity of oil. He enjoyed the challenge of processing increased volumes of viscometers despite the lengthy commute from Reading. Eventually got fed up with commuting and got relocated to Road Research Laboratory. He worked on computer models simulating car behavior and road congestion and assisted the developers of the software. Did not find it as interesting as the job in National Physical Laboratory. Gavin realized he needed a degree to get promoted, and there was a level of dissatisfaction. A colleague at the Road Research Laboratory doing his doctorate degree left the organisation and his minicomputer was given to Gavin. His efforts in speeding up a mini-

computer's simulation program were appreciated. Gavin was bored with the job. Knew there was no future in it. His dissatisfaction led him to volunteer in the staff kitchen to cook staff lunches.

00:06:25 - The Job Search and a Field Service Engineer Opportunity

Gavin states he found job adverts quite interesting. Stumbled upon an opening for a Field Service Engineer with Digital Equipment Corporation (DEC), while scanning job adverts in the Daily Mail. Applied because he had basic electrical knowledge and was intrigued by the prospect of receiving a company car. Field Service Engineers were responsible for fixing computers, which were unreliable at the time and some of them would break monthly. The smaller the computers, the more reliable they were. It was important that a computer had to be bought with a service contract and hundreds of pounds paid annually for an engineer to fix it if it had issues.

00:08:33 - Early Adoption of Digital Computers by Scientific Establishments

Digital computers were primarily used in scientific institutions like the National Physical Laboratory, Royal Aircraft Establishment, and nuclear establishments. Gavin recalls that many computers he serviced were in places like the Royal Aircraft Establishment. These establishments could not afford large mainframe computers but needed smaller computers for processing experimental results quickly. This created a market for smaller digital computers, which were more affordable for these organizations. Gavin states that his role was to service these computers, as many customers had limited knowledge of programming or maintaining them.

00:09:56 - Modularity and Maintenance Challenges of Early DEC Computers

Conversation about how Digital Equipment Corporation (DEC) computers were highly modular, consisting of flat printed circuit boards with pins that plugged into a backplane. While this design was cleverly done, it made the machines susceptible to issues from dust or dirt affecting connections. The early PDP models, like the PDP 1144, often required simple fixes such as wiggling the circuit boards to reestablish connections. Field Service Engineers like Gavin were responsible for hardware maintenance. Software maintenance was not part of their responsibilities during this period as it was considered a completely different realm. Gavin recalls

that tasks revolved around the physical components of the machines, dealing with bits and bytes, and being equipped with C-scope, thick manuals, and microfiche machines to magnify the microfiche images, which contained manuals in small images. The manual had circuit diagrams and guides for the engineers on how to troubleshoot the machines, such as the PDP 1110s, 1170s, and 1140s. When the newer models, like the 1104s and 1134s were released, they incorporated enhanced diagnostic capabilities. Unlike earlier models that required engineers to use oscilloscopes to analyze signals and pinpoint problems, these updated machines allowed engineers to run test programs. Programs could check memory and identify faulty modules. The technical skills required for engineers eventually decreased, leading to an increased demand for individuals like Gavin.

00:13:31 - Digital Equipment Corporation's (DEC) Recruitment Process: PART ONE

Gavin remembers applying for the job but not getting a reply after a long while and thought he did not get the job. Sending a letter was the only way of applying for a job then. After a long wait, Gavin got a letter from DEC saying they received a huge response. DEC wanted 20 engineers across the UK and put them through a training course as there were not many with computer skills. DEC received about 2000 applications. DEC hosted a recruitment event in London, where candidates were assessed through a questionnaire designed to measure their logical and rational skills. DEC wanted people like their best engineers. Gavin performed well, and as the only successful candidate in the Reading area, he advanced to the next stage of the interview process. The next stage was a short interview where they ran through each applicant’s CV and asked questions. The questionnaire was filled in and DEC promised to keep in touch. Gavin says he had never experienced anything like that.

00:16:45 - Interview Experience and Insights into DEC Culture

The recruitment process in DEC was informal and relaxed compared to Gavin's experience in the civil service. While the process was competitive, Gavin found the atmosphere surprisingly enjoyable. DEC was rapidly expanding, and the company culture seemed more dynamic than his

previous workplaces. Despite not being particularly interested in DEC's technology at first, he was drawn to the organization’s need for innovation and its large-scale growth in the UK market.

00:19:56 - Digital Equipment Corporation's (DEC) Recruitment Process: PART TWO

Gavin recalls that after a long while, he received a telegram inviting him to a second interview. He remembers going to a scruffy, messy building opposite Kings Road, that felt cramped. Gavin met one of the then managers Jim Abbotts there and describes him as a laid-back, easy-going man, not his impression of a manager. Gavin states that he was nervous, but he was not grilled by Jim. They had a chat, Jim described the job role and asked Gavin if he would be interested. Shortly afterward, Gavin received a job offer via letter. Gavin recalls being happy and nervous about the role, recognizing that it was vastly different from their previous office job, not realizing what he had let himself into. He was anxious about the transition to working on customer sites, which was an unfamiliar experience compared to the comfort of the office environment.

00:22:23 - Medical Examination and First Impressions of the Office

As part of the onboarding process, Gavin underwent an extremely thorough medical examination with his General Practitioner (GP). Upon resumption at Portland Road, Gavin found the environment cluttered with computers, cramped manager spaces, and shared desks among the engineers. The environment felt chaotic, but they soon prepared for the intensive training program.

00:23:48 - Seven-Week Training Program

The seven-week training began with foundational knowledge about computers and progressed to practical tasks like bootstrapping older PDP models and working with the 1134s and 1104s. The training included learning how to use floppy disks, troubleshoot using diagnostic tools, and understanding the mechanics of disk drives like the RK07. The latter was a breakthrough due to its innovative design that allowed for easier service and troubleshooting. The RKO7 disk drives

posed significant dangers due to their high-speed operation and reliance on electromagnets, needing careful handling to avoid injury. In contrast, the revolutionary RLO1 disk drive, introduced during Gavin's training, featured a groundbreaking design with a capacity of one megabyte. This new drive utilized a pattern encoded on the disk itself, allowing it to locate data without needing precise calibration. This advancement not only simplified the operation but also enhanced safety and modularity, making it easier to service. The design story of the RLO1 included its creators enclosing the working components in a mahogany box, adding a touch of uniqueness. Gavin found the RLO1 particularly enjoyable to work on due to its user-friendly design, which aligned well with their technical expertise.

00:27:50 - Training Environment and Peer Group

The training was a mix of classroom learning and hands-on practice in a laboratory setting. Trainees worked on various computers that had been repeatedly disassembled and reassembled. The cohort consisted mostly of former British Telecom engineers from across the UK, who had worked on telephones. They had more practical experience but no more knowledge of computers than Gavin. While they bonded in the evenings at a hotel, Gavin missed out on these social opportunities as he lived locally and returned home every night. The atmosphere remained supportive and collaborative despite this. Gavin began to understand what digital meant. At 22 years old, Gavin started to feel he was getting a life.

00:30:21 - Shadowing and First Customer Job

After completing training, Gavin recalls shadowing an experienced engineer who was methodical and organized. Taught Gavin valuable lessons about how to succeed as a Field Engineer. Learned as much from him as he did the training. Told Gavin how to be customer-oriented and how to approach expectations. Provided practical advice on interacting with customers and diagnosing issues effectively. Gavin learned to ask important questions to understand whether problems were hardware-related or due to other factors, and to use judgment when requesting spare parts from logistics.

00:33:43 - Specialization in Products and First Solo Customer Job at Caversham Laundry

Gavin states his specialization in DEC's smaller machines, like the 1104s and 1134s, which were primarily sold to research and government laboratories. While these machines were relatively small, DEC also manufactured much larger machines used in critical functions, such as air traffic control. Gavin's first independent assignment was at Caversham Laundry, which was using a computer for payroll, a unique and rare commercial application at the time. The customers at Caversham Laundry were nice. The job went smoothly. Gavin successfully diagnosed a memory error, ordered the necessary part, and fixed the machine. Gavin recalls always enjoying going to Caversham Laundry.

00:36:06 - The British Gas Mapping Project and Early Career at DEC

Gavin recalls being in field service for three to four years and tasked to help with organizing engineers because of his proficiency in organizational and methodical skills. DEC offered management training as part of career progression. While Gavin excelled in his roles, he eventually realized that management was not for him due to stress. Gavin participated in various activities designed to enhance his management skills during the training. Gavin's discomfort with management responsibilities was later realized and he decided not to pursue that path further.

00:37:41 - Supportive Management at DEC

Gavin describes DEC's supportive management culture, which provided training opportunities once a year. Field engineers received regular technical training, and management training was designed to challenge and develop leadership skills through practical exercises, followed by real-life management assignments in unfamiliar settings. Gavin found this stressful. Gavin recalls being chosen for the management training because of his organizational skills and working in multiple customer sites in a day. Reflects on how DEC provided regular feedback through meetings and assessments. A senior manager sponsored Gavin, showing belief in his abilities. However, the supportive nature of DEC's culture allowed Gavin to step away from the management track when he realized it wasn't a good fit, without any negative consequences.

Gavin states how DEC wanted managers who understood the business, and wanting to recruit from the organization, hence the training.

00:41:49 - Staff Development and a Supportive Work Environment

Conversation about how DEC pushed employees into challenging situations, and under pressure to test their capabilities but they were also conscious of not pushing too hard. Gavin felt universally supported by both management and peers. The culture at DEC was one of mutual support, where engineers and administrative staff alike encouraged each other. There was a sense of enjoyment in the work, and many employees took advantage of opportunities like overtime to achieve financial goals, sometimes allowing early retirement.

00:44:28 - Management Culture and Avoiding Burnout

Despite the heavy workloads and long hours, burnout was not a significant issue, likely because the workforce was relatively young. Gavin notes that even senior managers were often in their early thirties, contributing to the energetic work environment.

00:44:53 - DEC's Flexible and Positive Management Style

Gavin compares DEC's management approach to previous experience in the civil service. At DEC, management was more relaxed and flexible, giving employees the freedom to explore new ideas and approaches. This flexibility allowed for innovation, as employees were encouraged to propose new ways of doing things in response to the rapidly changing technological landscape. Gavin discusses how DEC in the UK operated with a great deal of autonomy from the US headquarters. The UK branch had the freedom to develop its own practices, sometimes differing from those in the US. This independence allowed the UK office to become a springboard for DEC's expansion into Europe.

00:46:48 - Flexibility and Responsibility in the Job

Gavin describes having a great deal of flexibility in the job role, with the culture at DEC being forgiving of mistakes as long as they were learned from. DEC had enough financial stability to absorb these errors, creating an environment where employees were encouraged to take ownership of their work.

00:47:35 - DEC's Engineering Culture

Gavin notes that DEC had an engineering-driven culture where engineers were given time and space to develop their ideas without tight deadlines. They worked alongside engineers in DEC Park, including those in Computer Special Systems (CSS), and observed the commitment and enthusiasm of the technical staff. There was a transition from working in different locations to DEC Park, and later, the move to a larger site in Southampton.

00:49:29 - Computer Special Systems (CSS) Group and British Gas Project Overview

Gavin recalls that the CSS group provided custom flexibility for customers, particularly in specialized hardware and computing environments. An example project for British Gas involved digitizing large paper maps of gas pipelines across the UK. This required specialized hardware like motorized digitizers and color plotters, which were not in DEC's standard range, leading to CSS sourcing them externally and integrating them into a custom solution for British Gas. Gavin's job in CSS involved ensuring that the service engineers were properly trained and equipped to maintain the custom hardware provided to clients like British Gas. They coordinated training, sourcing of spare parts, and creating documentation to help engineers service the new equipment. The project had numerous technical challenges, requiring continuous training and maintenance so the Field Service Engineers were not overwhelmed. The British Gas project lasted between 18 months and two years, getting more complicated as it progressed.

00:57:12 - Project Significance and Costs

The British Gas project was prestigious for Computer Special Systems (CSS), as it was a large commercial undertaking rather than defense-related work that could not be publicly discussed.

The financial investment was substantial, with British Gas spending tens of thousands of pounds on digitizers.

00:58:27 - Transition to CSSE and Increasing Financial Scrutiny at DEC

Gavin was originally employed by Customer Services Systems Engineering (CSSE), then customer services. Financial pressures within the company increased. Computer Special Systems (CSS) began to operate on a more business-like model, where every task and resource had to be accounted for, and time was billed directly to the customer. This represented a shift in DEC's operations towards a more cost-conscious approach, where time and resources were meticulously tracked and billed to customers. Customers were charged for any additional work or changes requested.

01:01:19 - Customer Relationship Changes

With DEC's tighter financial controls, customers faced stricter billing and less flexibility in receiving extra services or support. This shift, along with increased competition in the market, led to a more transactional relationship between DEC and its customers.

01:02:25 - Competitive Pressure and DEC's Market Position

In the past, DEC had little competition for its high-quality products, but later, competition intensified. Customers were more price-conscious and had alternatives available, making it harder for DEC to justify higher prices, even if its products were considered superior.

01:03:42 - Leaving DEC after 15 Years

The interviewee left DEC due to the company's downsizing efforts as it struggled to maintain its previous growth. DEC reduced staff because it could not bring in enough business, partly due to advancements in technology making the company's smaller computers less competitive. Over time, Gavin's role became less focused on hardware, his area of expertise, and shifted more

towards software, which he did not enjoy. This led to the decision to take a voluntary redundancy offer.

01:06:45 - Personal and Family Considerations for Leaving

The decision to leave DEC was influenced by personal life circumstances. Gavin wanted to pursue their passion for conservation and countryside management, while his wife, who was struggling with being a stay-at-home parent, wanted to return to work. The redundancy package helped with payment of mortgage, which made the transition easier. Gavin and his family moved to Essex, and he pursued a degree in countryside management, marking a significant career shift. Gavin felt relieved to be out of the office environment. He would have found another role within DEC if the organisation grew.

01:08:25 - DEC's Support During Redundancy

DEC was generous during the redundancy process, offering good financial packages. The atmosphere at DEC had shifted from a culture of growth to one focused on cost-cutting and downsizing. The company had excess funds but struggled to find new business opportunities, leading to layoffs.

01:09:13 - Changing Workplace Atmosphere at DEC

Conversation about how initially, DEC was an exciting place to work, with constant innovation and growth. As the company began downsizing, the atmosphere became more about cutting costs and increasing efficiency. This led to reduced job satisfaction, as employees were forced to complete tasks in less optimal ways due to time and resource constraints.

01:10:10 - The CSS Computer Room Fire Incident and Impact on DEC

Gavin recalls the CSS computer room fire incident when he was a service engineer. The fire damaged many machines, requiring them to be deinstalled, cleaned, and reinstalled over the course of several months. Despite the disruption, CSS was able to continue its operations due to

spare capacity. Gavin was not part of the CSS when it happened. The CSS was able to work around it. Three projects were important on the computer, and they had to be deinstalled quickly.

01:13:03 - Description of DEC Campus in Reading

DEC had offices spread throughout Reading before consolidating into DEC Park, which was a large office complex. The environment was characterized by open-plan offices with social spaces, a massive canteen and free coffee, encouraging interaction and collaboration. Gavin recalls a Dentist being brought in to talk about dental health. There was also a strong sense of community, with many employees' families working for DEC. The company offered various opportunities for personal development and training, contributing to a family-like atmosphere among employees. After a few years, a smaller cozier DEC Part Two was built.

01:17:05 - DEC's Role in the Reading Community

DEC was a major employer in the Reading area, with many residents working for the company. It had a significant presence in the area and was integrated into the local community. However, Gavin lived outside Reading and had limited knowledge of the company's broader impact on the city itself.

01:17:58 - DEC's Legacy in the IT Industry and Reading

DEC's most lasting contribution to the Reading area was establishing it as a hub for IT. Many former DEC employees went on to start their own tech companies, helping to shape the technology sector in the Thames Valley region.

01:19:03 - Personal Legacy of DEC on the Interviewee

Gavin credits DEC with teaching them a wide range of skills, particularly in management and computer literacy. These skills later helped Gavin secure a job with the Landmark Trust, where he applied his familiarity with computers. DEC's legacy for Gavin was the lifelong expertise and comfort with technology it provided, even though he initially doubted the future of computers.