

EMBARGOED UNTIL 5 NOVEMBER 2001

Contact: Lee Brooke/Sarah Richardson
Brodeur Worldwide
01753 790700
E-mail: lbroke@uk.brodeur.com

WHY BRITAIN LOST OUT IN COMPUTERS: CAMINER POINTS THE FINGER

“I know of no computer merger anywhere where there has been added value from the merger of competing forces of engineers, marketers and programmers. It is like two civilisations trying to come together,” said 86-year-old David Caminer addressing today’s 50 years of Business Computing conference in London’s Guildhall.

Caminer who led the software side of J.Lyons & Co’s LEO project, which produced the world’s first business computer applications, was reflecting on the 1963 merger of LEO Computers and English Electric, but his remarks could equally apply to the later 1968 merger of English Electric and ICT . The earlier merger, he said “wasn’t as bloody as the coming together of the Incas and conquistadors,” but sometimes seemed just as unpleasant to both parties.

At the time, the British computer industry was, by general acknowledgment, some three years ahead of the Americans when it came to business use. The Lyons venture had grown in just over a decade from one machine serving internal requirements to become a broad-based computer business encompassing manufacturing for the market with sales to a raft of blue-chip companies, as well as a “bureau” service, the forerunner of today’s “outsourcing.”

The success would continue for several more years, but in reality the writing was already on the wall for the British computer effort.

Looking back Caminer commented that it was “tempting to beat our breasts,” admitting candidly that: “Our vision was blinkered. We were too occupied with making work whatever we were occupied with. We took too much satisfaction in working on a shoe-string. We were too often arrogant about always knowing best. We had no idea, nor did anyone, of the rapid rate of technological advance.”

That said, however, there were external forces that were at work undermining the British effort.

The first, Caminer commented, was the size of the market. “There were sales in the old dominions and behind the Iron Curtain, but none at all, not even a service job, in Western Europe or the Americas,” he said.

Then there was “the failure of the UK governments over the period to play a truly constructive part.” The financial assistance that was on offer from Government he described as “pathetic” compared to what was happening in the US.

And thirdly, there was “a national malaise that made the going hard.” Describing a 1958 visit to the US, he and his colleague, the late Dr John Pinkerton, the engineer who built LEO, were, he said, “bowled over” by the difference in attitude to innovation. “In the

States, we found highly expensive machines installed in quantity. At home we were still fighting to convince big business that computers were the gateway to the future.”

The Americans had sensed that this was the way forward and were not seeking justification for expenditure at every turn.

Caminer was presenting the Pinkerton lecture alongside the conference that was being held to mark the 50th anniversary of the first real-life business application to run on an electronic stored program computer. This was a bakery valuations job for Lyons that began weekly processing on 17 November 1951.

Note for editors:

The business world's first software guru

As a young man, David Caminer was not attracted to the idea of going to university. It was the 1930s and he was into left-wing politics and, as he puts it, “university seemed an irrelevance in the days of mass unemployment and hunger marches.” The time came, however, when he had to get a job and his mother asked the next-door neighbour, who ran one of the departments at J. Lyons & Company, whether he could find an opening for her son. In this way, Caminer came to join Lyons in 1936 as a management trainee and embark on a career that is now part of the history of business computing.

Lyons, a diverse catering business employing large numbers of people handling lots of money and many thousands of small transactions daily, had a Systems Research Office (SRO) that was something of a pacesetter in the world of Organisation & Methods (O&M) and the company was constantly on the look-out for any new piece of equipment that could be applied to the business. The SRO was also alert to the possibilities of not only applying new equipment to existing processes, but using it to create new opportunities to do things differently.

Thus, when after the war news of “electronic brains” began to filter through from the US, the Lyons’ management team took note and decided to investigate them. Caminer, who had survived the war, though losing a leg, was by now managing the SRO, a small group of 20.

It’s impossible, Caminer says, to over-state the extent of the confidence that had been built up within the group, so there was no great surprise evident when Lyons decided that computers represented the future and, that, as there was no commercial machine available to match their requirements, the only solution was to build one themselves. What Caminer calls “this pervasive arrogance” was to be a feature of the whole story of Lyons Electronic Office (LEO).

LEO was to become the world’s first computer to run a business application to a regular schedule and then spawned a whole line of commercial systems that saw Lyons become a leading computer manufacturer and service bureau of its day.

Caminer led the whole systems and programming side of the LEO project from the outset, working in tandem with the late Dr John Pinkerton who drove the hardware side forward. Between them they assembled an extraordinary team of talented individuals, who were, Caminer says, the lasting legacy of LEO.

In the end, it was commercial practicalities that brought the development of the LEO computer line to a halt. LEO III and, in particular, the Leo 326, was, Caminer states, “at least three years ahead of IBM’s machine at the time.” But the strain of computer manufacture was beginning to tell on Lyons’ resources.

The Work-In-Progress of having several large systems on the shop floor and the organisation needed to sustain manufacturing, marketing and further development represented financial strains on a family concern whose core businesses were also making increasing demands. It came as a surprise to Caminer and his fellow directors within LEO, but, with hindsight, could have been expected, when the Salmon family who controlled Lyons sought a larger, joint venture partner in English Electric and not long after sold out completely.

The free-wheeling, DIY days of Lyons and LEO were at an end. English Electric, a much larger industrial group, was not prepared to support the development of a computer range other than on the back of a ready-made new-generation design.

However, the English Electric management determined that a new range was required to replace both the LEO and the existing English Electric machines and Caminer led the effort that was to result in a decision to base the new range on a US design, the IBM 360-compatible Spectra 70 developed at huge cost by RCA

The economics of big business, with a nudge from Government towards a shotgun wedding of the English Electric and ICT computer interests, henceforth were to determine the direction of the British computer industry.

David Caminer stayed with the British effort until his formal retirement in 1980 and then as a consultant. Along the way he was prominent in the introduction of the ICL New Range, the 2900 Series, that replaced both the ICL 1900 and the English Electric System 4. On his own insistence, he finished his ICL career in the field, directing the implementation of a computer communications network for the European Community, work that was recognised with the award of an OBE.

Caminer refuses to be drawn on the question whether the end-game might have been different had either LEO been given its head, or the later strategy of IBM compatibility prevailed.

It’s clear from talking to him, however, that he sees the LEO experience as the defining period in his career. Along with cricket and opera, it remains his abiding interest and he delights in showing off a newly published copy in Chinese of the book he authored, with other LEO pioneers, that tells the LEO story.*

- ends -

**LEO: The Incredible Story of the World’s First Business Computer*, published by McGraw Hill.