

A BIG MACHINE FOR BIG BUSINESS

In the years following World War II, factories pressed into service during the War returned to commercial use. Similarly, the computers that were developed for military use were adapted for peacetime activities in government, business and education. By the end of the 1950s, thousands of computers were in use by business and government alike.

The first machines to make the jump from government and scientific applications to practical uses in business were the UNIVAC I (short for UNIVersal Automatic Computer) in the U.S. and the LEO I (short for the Lyons Electronic Office) in England.

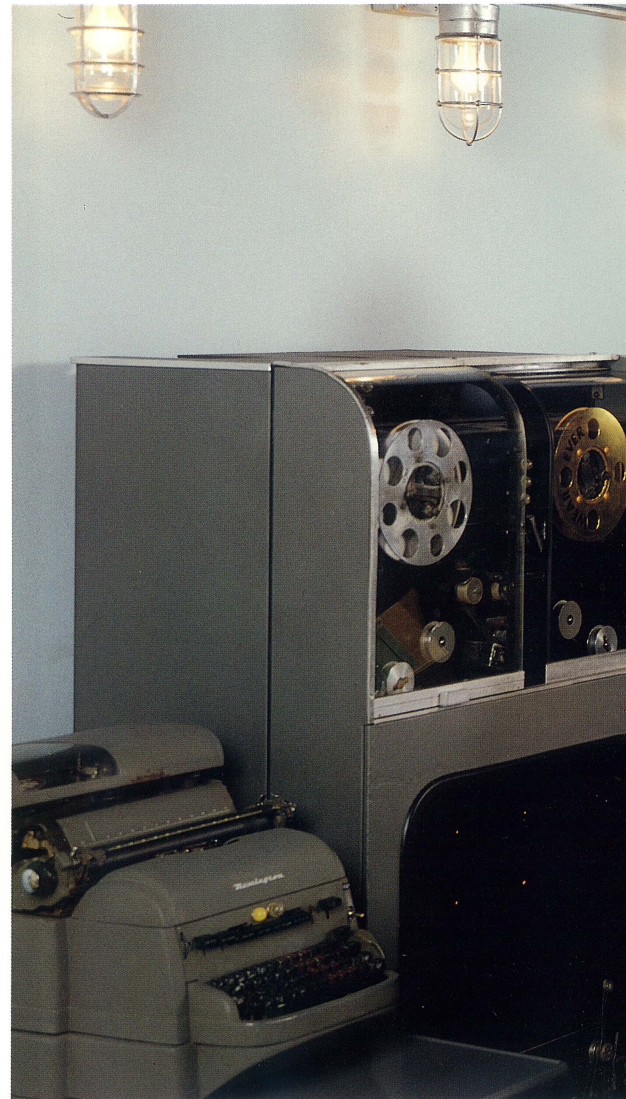
UNIVAC sprang directly from ENIAC, a pioneering computer developed for the U. S. Army during the War by John W. Mauchly and J. Presper Eckert, Jr. While most people still saw the computer as a tool for science and engineering, Eckert and Mauchly recognized its potential for business data processing. Inspired by their vision, they founded a company to produce the UNIVAC I, a computer specifically designed to meet the needs of business. Early customers for the million-dollar UNIVACs included General Electric, Metropolitan Life, and the U.S. Census Bureau.

G.E. purchased their UNIVAC in 1952 when they consolidated all their major appliance manufacturing into a single factory in Louisville, Kentucky. Post-war demand had increased sales of stoves, refrigerators, and washing machines. Meeting this demand meant keeping track of all the wire, plastic, steel, springs, and other materials that went into the appliances and paying a growing

workforce. In addition to the \$1 million price tag, G.E. had to provide specially climate controlled conditions and a large team of technicians and consultants to install the machine and keep it running. G.E. also retained the services of Arthur Anderson, a large accounting firm, to assist them in getting the UNIVAC up and running for the first time.

Since this was one of the first commercial applications of a computer, no off-the-shelf software, operating systems or databases were available. Only after months of work, did the team of G.E. and Arthur Anderson experts succeed in completing programs that instructed UNIVAC I to perform its giant task: keeping track of the millions of parts in the factory's inventory and calculating paychecks for the plant's 12,000 employees, with their own tax deductions, Social Security payments, wages, overtime, and health benefits.

In England, LEO I was patterned after the Cambridge University EDSAC, one of the world's first stored program computers. In this case, the Lyons Tea Company faced the daunting task of supplying hundreds of tea shops with tea, biscuits, and cakes according to ever changing demand. To assist them in processing thousands of orders every day, Lyons decided to build their own computer. After the first machine was installed and working successfully, Lyons went into the business of manufacturing computers to meet the growing need of other businesses for data processing systems.



By the mid-1950s, managers around the world saw the computer as a symbol of a thriving, modern enterprise—the latest tool for scientific business administration. Orders for computers soared to the thousands. The UNIVAC I and LEO I had broken open the market for business computers.

Using computers in business was part of a larger trend: automation. Machines that seemed to think and work tirelessly were viewed with great expectation and trepidation. Some people claimed this technology would free humans from boring, repetitive labor; others feared it would put people out of work.

