



06 Design

Public Art

The site analysis and research into the site's history revealed an extraordinary and unique past as the centre of operations for J Lyons and Co which has been described as "the first food empire" and also the site of construction of the world's first business computer.

To commemorate the site's past the applicant commissioned artist Kerry Lemon to create a work of public art which would be integrated into the fabric of the proposed building. During the design process the design team and applicant have been having regular meetings with the LEO Society to gain a greater understanding of the significance and unique attributes of LEO and also the history of the Lyons company. The LEO Society have been consulted upon, are fully aware and supportive of the public art proposals.

The Public Art Brief

Commissioned by Big Yellow to create a permanent artwork to celebrate and preserve the legacy of Lyons and the invention of LEO - the first Business Computer

This design celebrates the unique legacy of LEO within the context of LYONS...

THE INVENTION OF THE FIRST COMMERCIAL COMPUTER BY A CATERING COMPANY

The artwork will be highly tactile - literally embossed and permanently integrated into the very fabric of the exterior building. Designed for visual impairments with braille and opportunities for simple wax rubbings to reflect Lyons social commitment and pioneering use of blind programmers.

Research

LYONS

- In the mid 1930's J. Lyons & Co had over 250 cafes
- Lyons was Britain's largest catering company
- Almost every grocers sold their products (swiss rolls, cakes, tea, coffee, bread, icecream) they had their own printed packaging and their own tea plantations
- Lyons made their own vehicles
- At its peak Lyons employed 33,000 people
- The profit margins on their products was very low so efficiency in all areas of the business was required, it was this focus that led a bakery to create the first business computer at their London Office Cadby Hall to support the clerical work of the company



EDSAC

Electronic Delay Storage Automatic Calculator

- The University of Cambridge Mathematical Laboratory (under Maurice Wilkes) developed the EDSAC computational service for researchers
- It used delay line tubes filled with mercury as the main memory or store and electronic circuits including thermionic valves that had previously been used in wartime radar. It read programs stored on punch tape and converted them to binary for common mathematical calculations.
- The glass thermionic valve controls the flow of electric current between two electrodes in a vacuum. It was the basic component of electronica throughout the first half of the twentieth century



LEO

Lyons Electronic Office

- LEO was the first ever computer used for business applications. Before then computers had been confined to military and research use but Lyons saw their value in commercial operations for payroll, stock control and ordering.
- In 1947 Lyon's invested in a room sized calculating machine (developed by Maurice Wilkes in Cambridge) Lyons offered Wilkes much needed funding for his project and an engineer to develop EDSAC to meet the demands of Lyons
- LEO I was modelled closely on EDSAC and in 1951 it was the very first computer to support a commercial application
- LEO Computers Ltd is formed in 1954 and LEOS are installed in many British Companies and govt departments inc HM Customs and the Post Office



MARY Coombs 1929-2022

- Mary's math skills prompted her to take Lyons' 'computer appreciation course' which led to the offer of a job in the computer division working on LEO in 1952
- Mary was the first female commercial programmer, she became a supervisor and worked to locate and repair coding errors in the programs created by others

