

Questions

- Projects

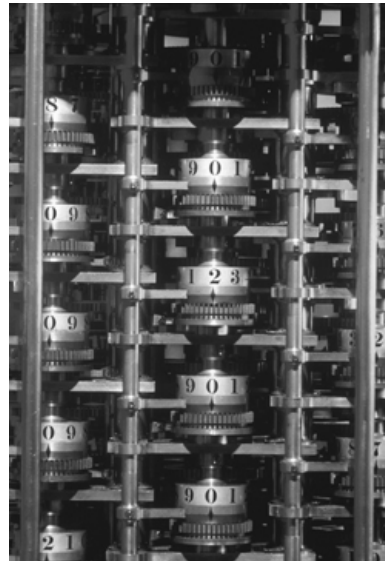
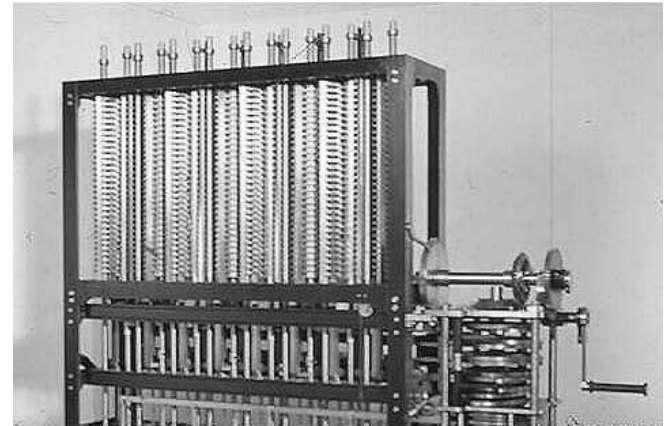
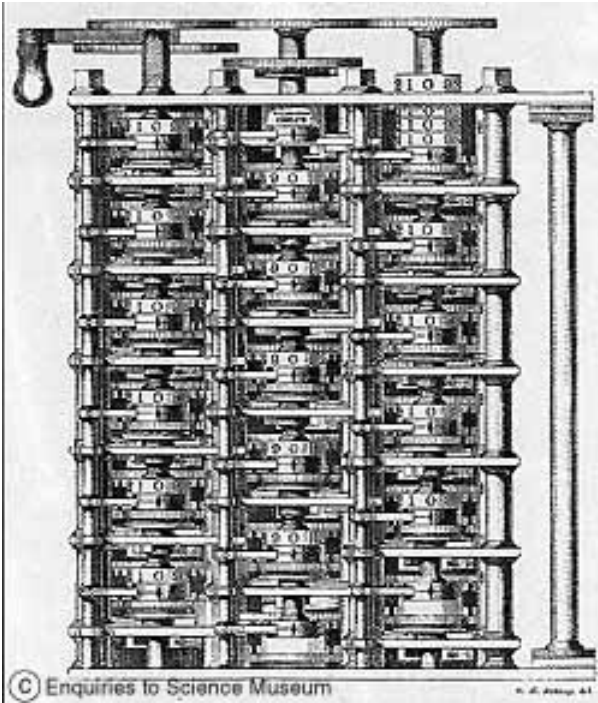
Early example: Astrolabe (Middle Age)

- Convenient interface to complex computation

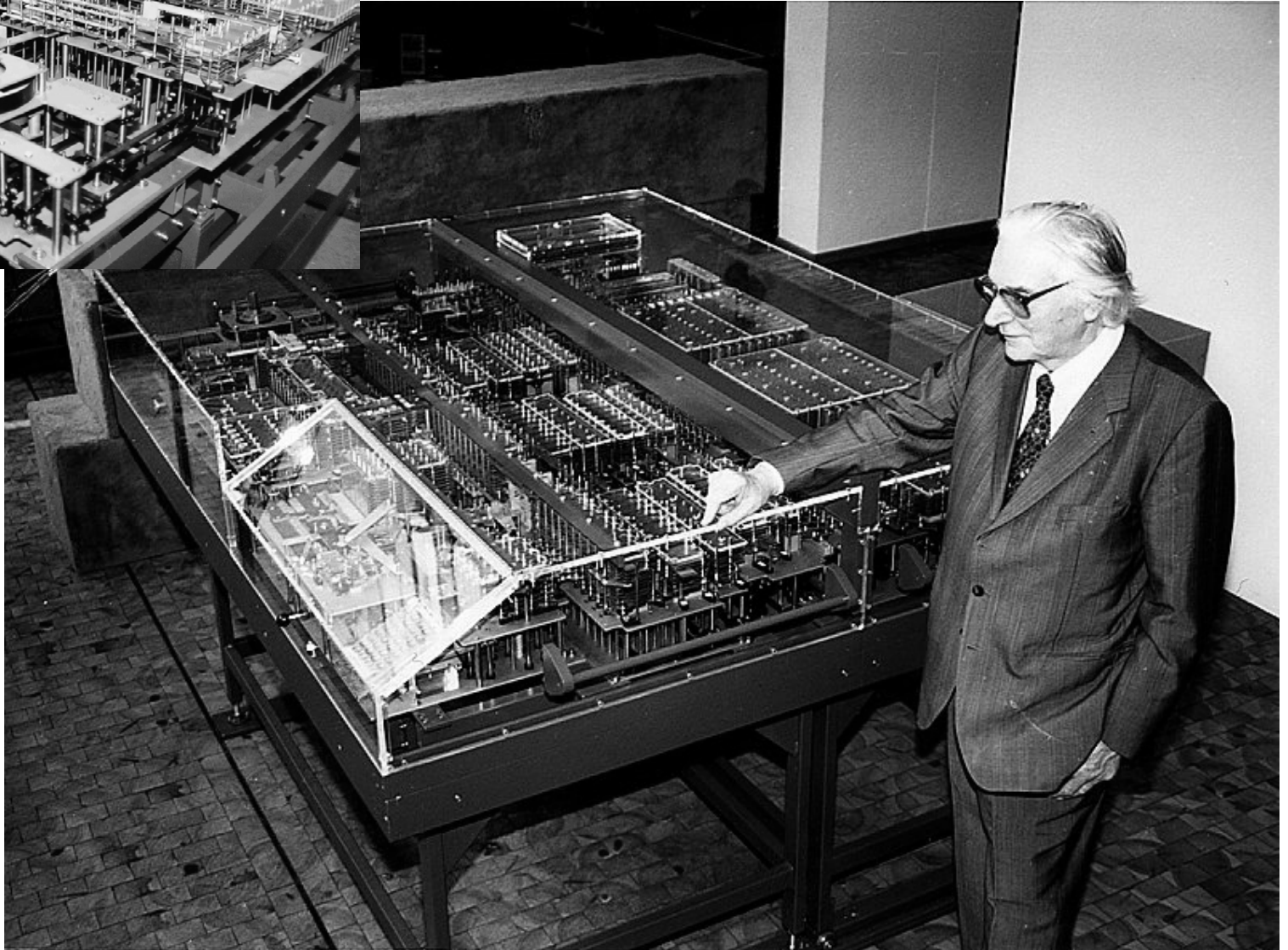
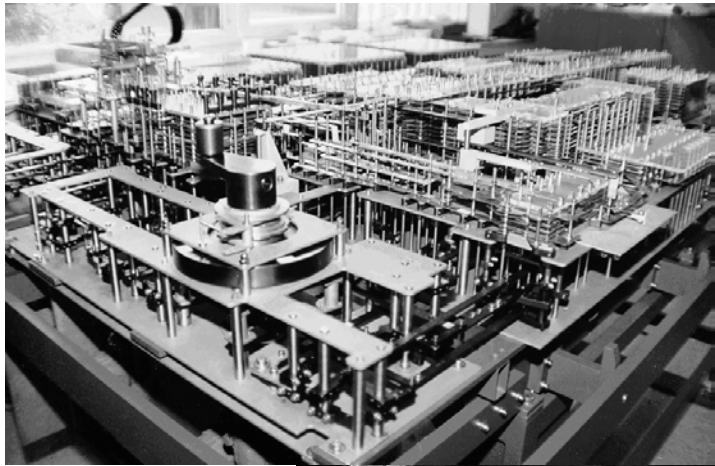


Babbage Difference Engine (~1840)

- Original design
- Replica (British Museum)

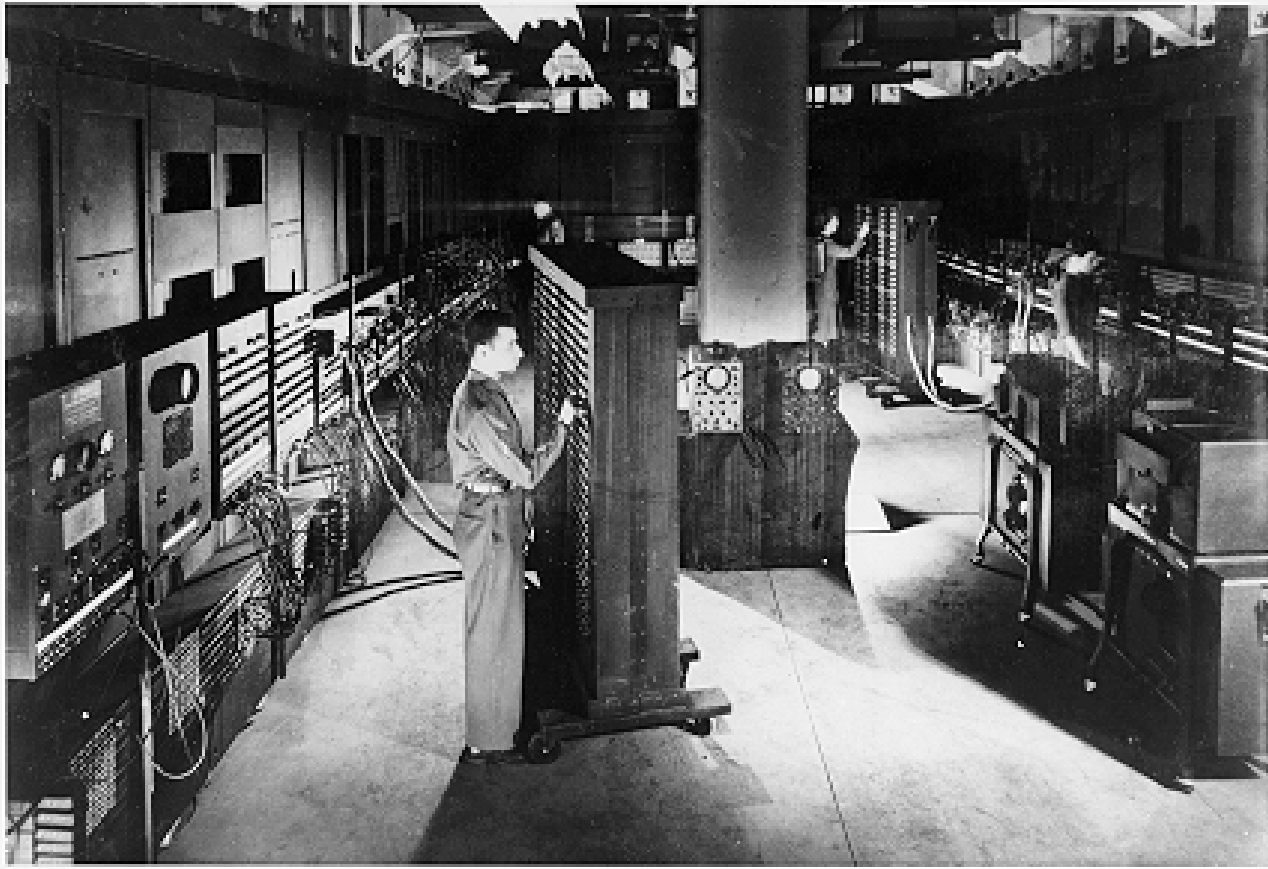


Z1(1936)



ENIAC (1943)

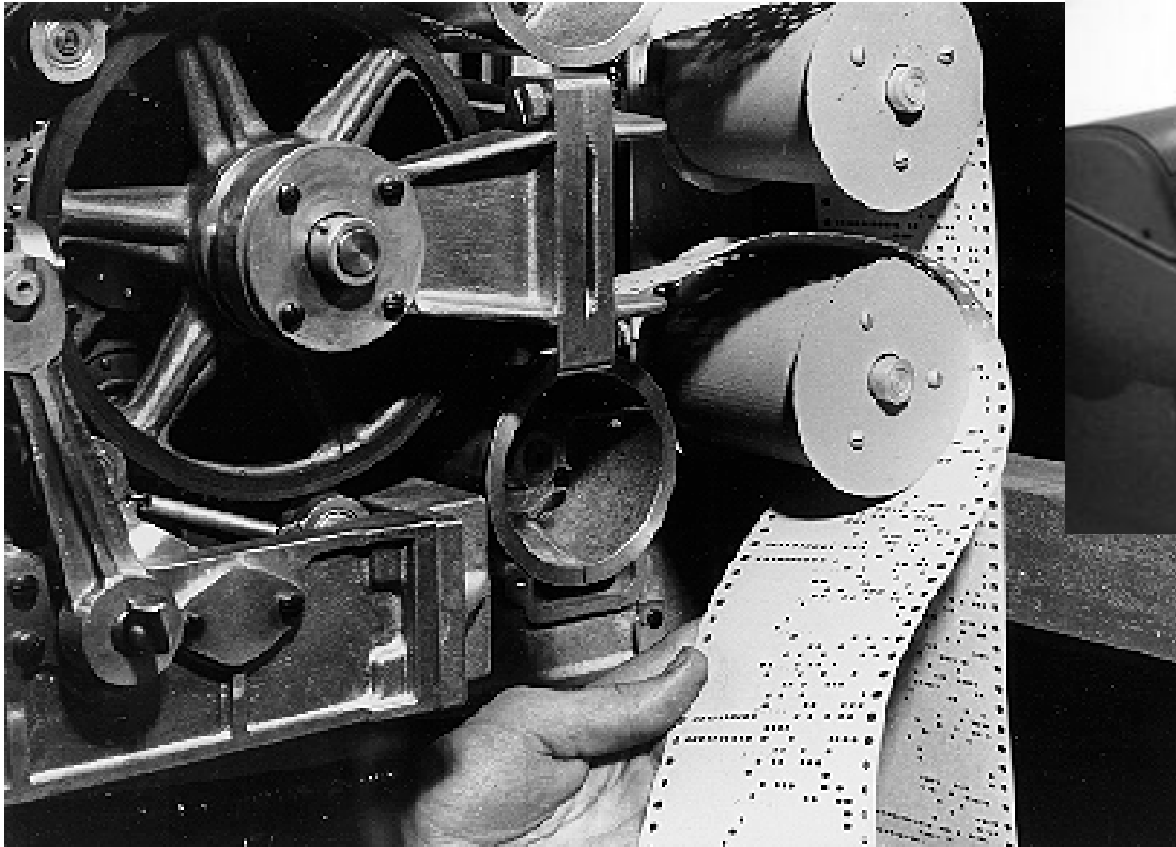
- A general view of the ENIAC, the world's first all electronic numerical integrator and computer.



From IBM Archives.

Mark I (1944)

- The Mark I paper tape readers.



Teletype circa 1969 (NWS)

From Harvard University Cruft Photo Laboratory.

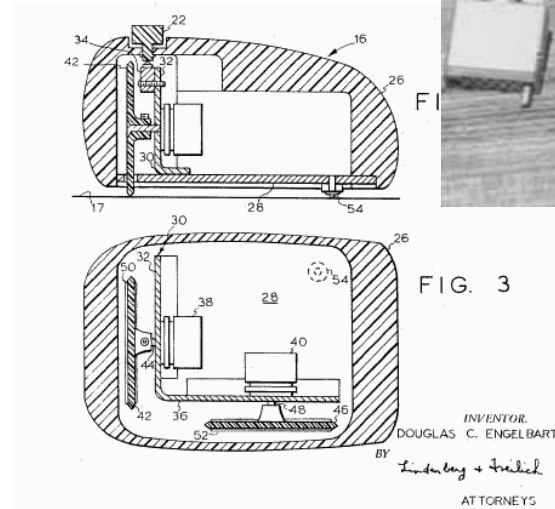
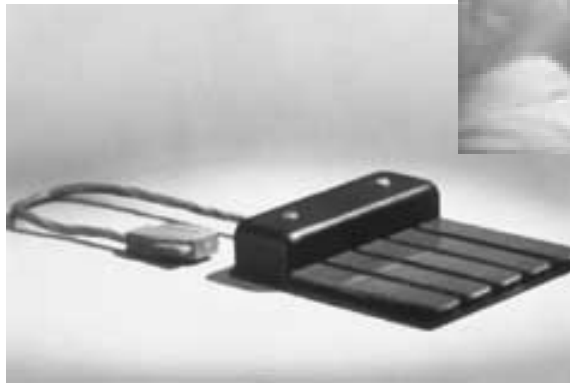
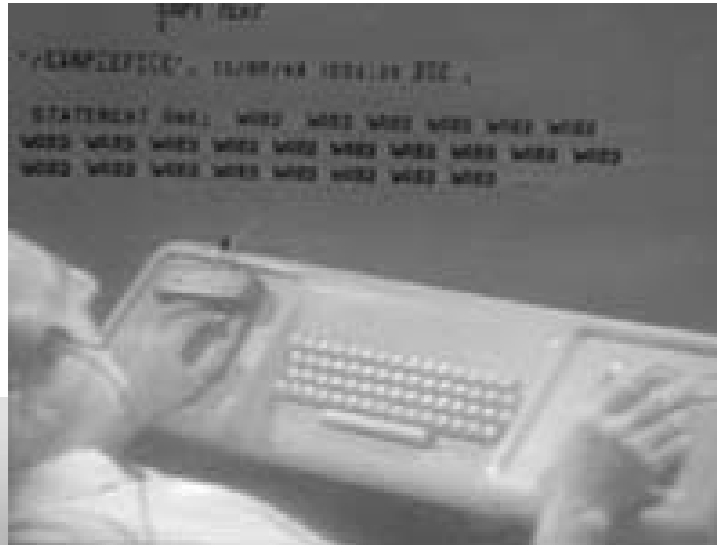
Sketchpad (1963?)

- Ivan E Sutherland's PhD thesis



NLS (Engelbart 1968)

<http://sloan.stanford.edu/mousesite/1968Demo.html>



Alto (mid-70's) & Star (1982)

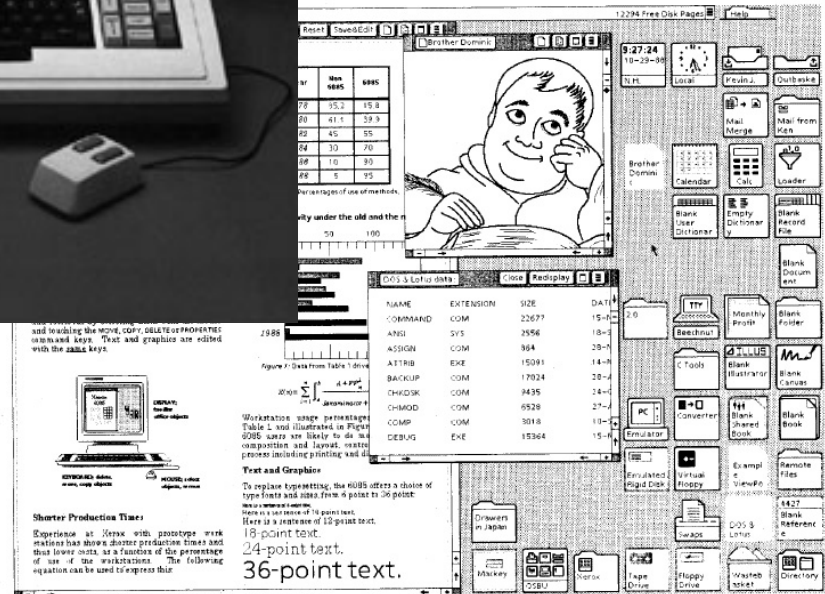
- Xerox PARC



Alto



Star

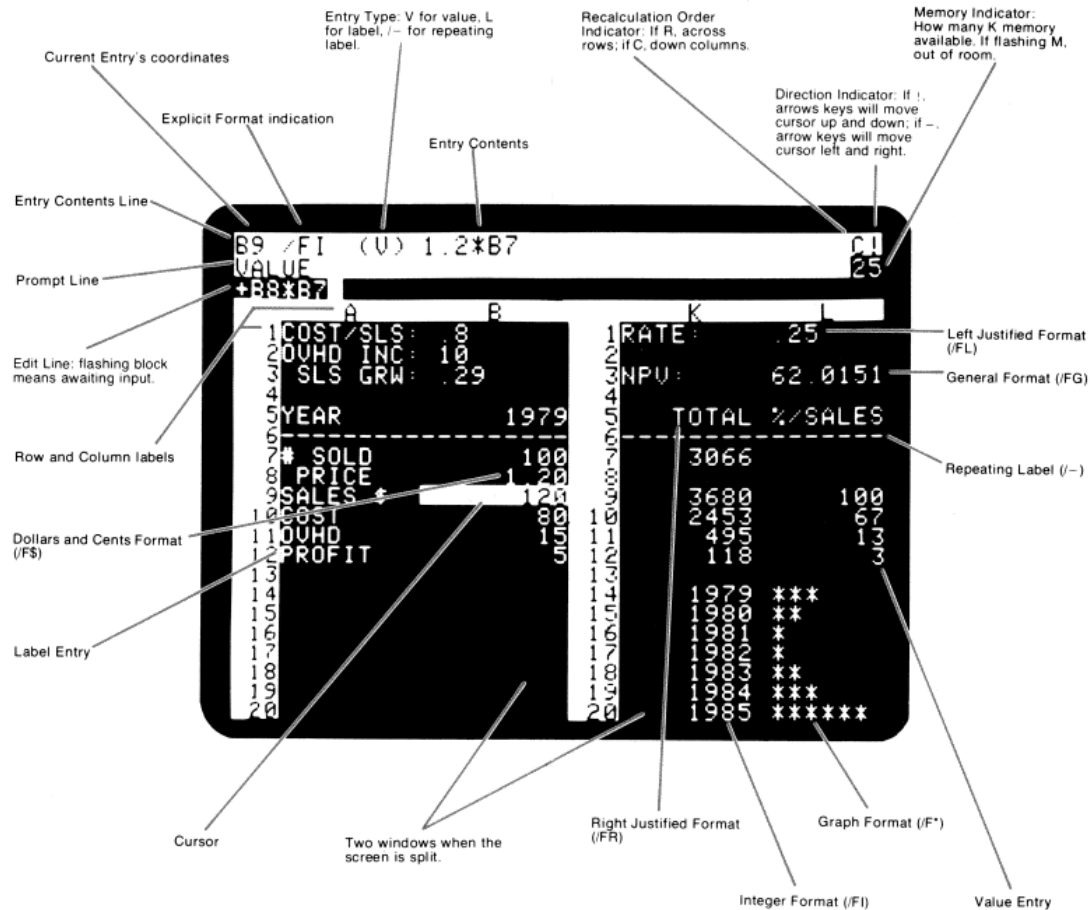


VisiCalc (D. Bricklin, 1979)

9

10

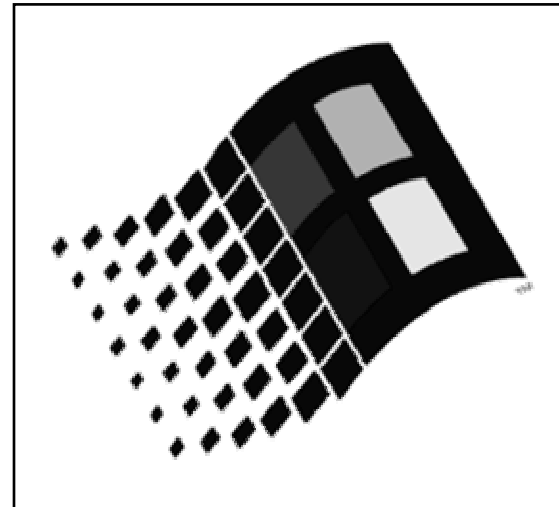
A VISICALC™ Screen:



Graphical User Interface for the mass



Apple Macintosh

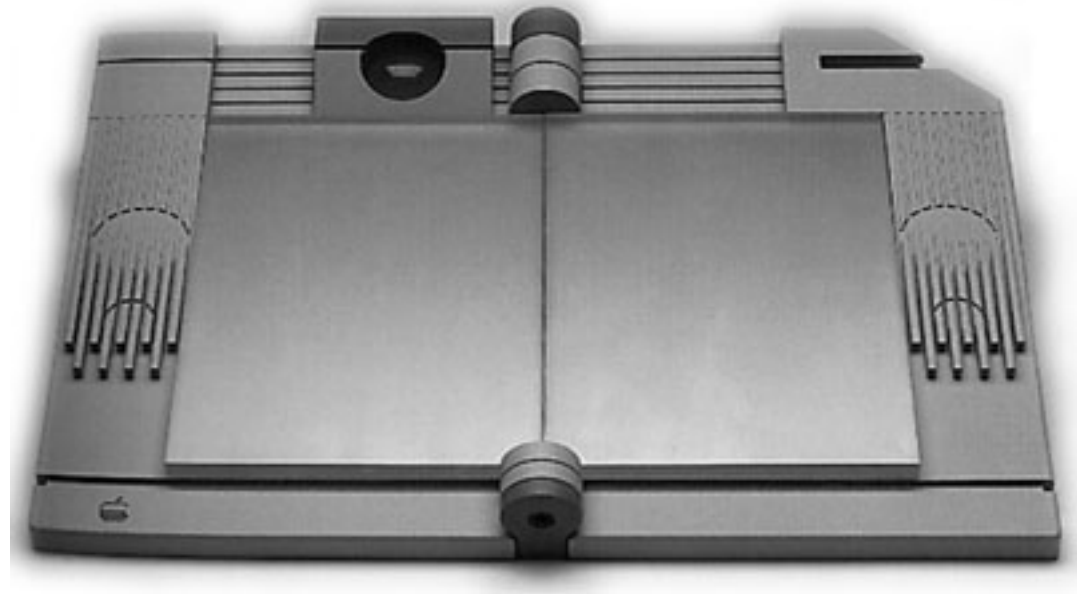


Microsoft Windows

Visions of the future (I)



Star Fire (Sun's vision in '92)



Knowledge Navigator (Apple's vision in '87)

Vision of the future (II)



Connected products (IDEO vision in '00)