Designs over the years

Electric Sorting Machine

Exposed components
1908

Queen Anne legs
1921

Wheels
1940s & 50s

The last 80 column
card punch 1970

IBM 0129 Card Punch

The last punch card redesign

General Systems Division (GSD) announced
the smaller format, 96 column card for the
IBM System/3 in 1969.

96 Column Card
1969

IBM 5496 Data Recorder

The beginning of the end

Alternative technologies

Magnetic tape
1968
IBM 050

8" Floppy
1973
IBM 3741

Mainframe processing
1960s

Typewriter terminals
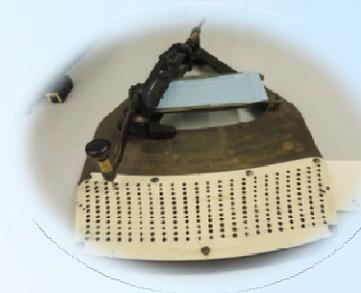1965

Display Terminals
1971

Punch Card Process

IBM Hursley Museum

Data Processing with the Punch Card

From the 1890 U.S. Census until into
the 1990s the Punch Card played
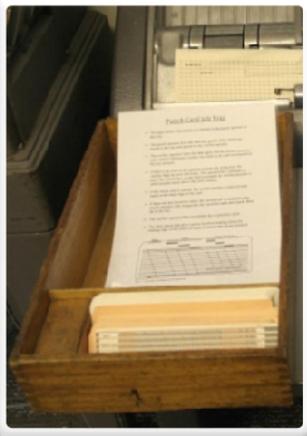a significant role in the processing of
data.

1889 Pantograph
Punch

The first ever card
punch for data
processing

From exposed mechanical and electrical
components, through heavy cast iron
machines with Queen Anne legs, to
smooth lines and wheels, punch card
hardware developed in sophistication.
Known collectively as Unit Record
Equipment, these pieces of hardware
formed the cornerstone of data
processing even into the 1990s.

The chart overleaf shows a typical
workflow, illustrated with the machines
of the 1940s and 1950s. These were the
last line of Unit Record machines that
were developed by IBM.

Prepare job

Job Tray

Send job to punch room
Punch and verify cards

IBM 024 Punch & 056 Verifier

Print card contents
along top of cards

IBM 557 Interpreter

Sort cards by customer

IBM 082 Sorter

All of the hardware shown here, apart from the mainframe, can be found on display in the museum.

Visit the museum website for a description of these processes.
https://slx-online.biz//hursley/pcprocess.asp

In the 1960s the mainframe begins to take over some of these steps. Sorting & collating are done electronically. Backups are made to disk or tape.

Process Job

System/360 Mainframe

Make Backup

IBM 519 Reproducing Punch

Collate / Merge
Card Decks

IBM 077 Collator

IBM 416 Tabulator