

# Module 1

## History of Databases

# Database System

What would be **your** definition?

# Database System

A commonly accepted definition would be

a system that can handle *arbitrary* datasets

Any idea in which **decade** those were invented?

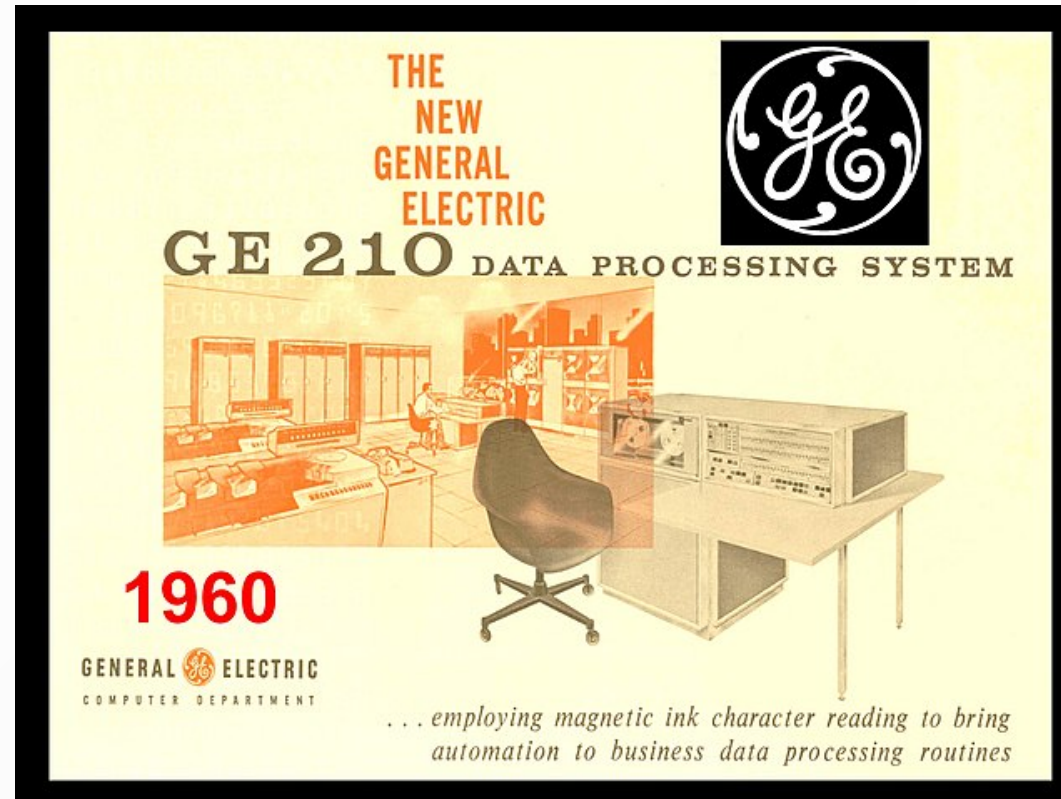
# 1960s - IDS

**Charles Bachman** joins **General Electric** to work on what is commonly accepted as the first ever **DBMS** (**D**atabase **M**anagement **S**ystem) named **Integrated Data Store** a.k.a. **IDS**



He received the **Turing Award** in 1973

# Yes, GE was selling this in 1964



# IDS

Network Database  
*(more on this later)*

## MULTIPLE CROSS REFERENCE

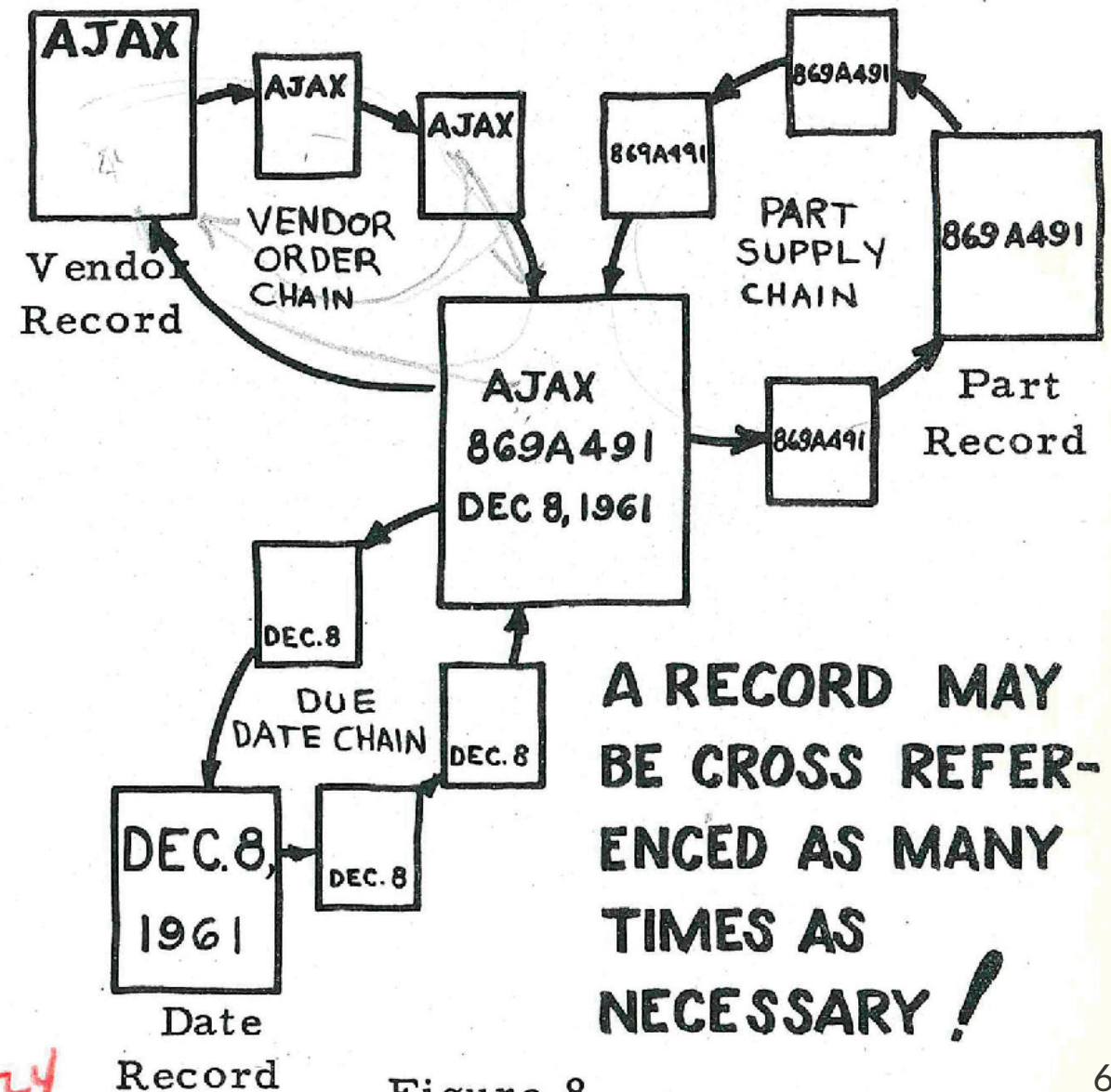


Figure 8

# CODASYL

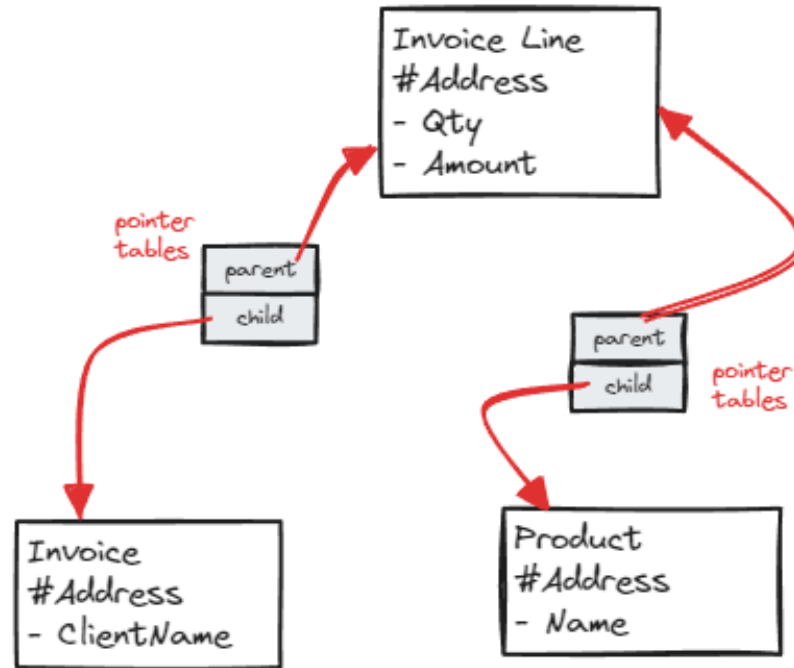
Conference **O**n **DA**ta **SY**stems **L**anguages

**COBOL** developers that wanted to come out with **APIs** for data storage and retrieval

**Charles Bachman** joins them in 1965, pushing many ideas from **IDS**

# Network model

Codasyl and IDS were both using this model





# Hierarchical model

Think of an **xml**, **json** or **yaml** file

