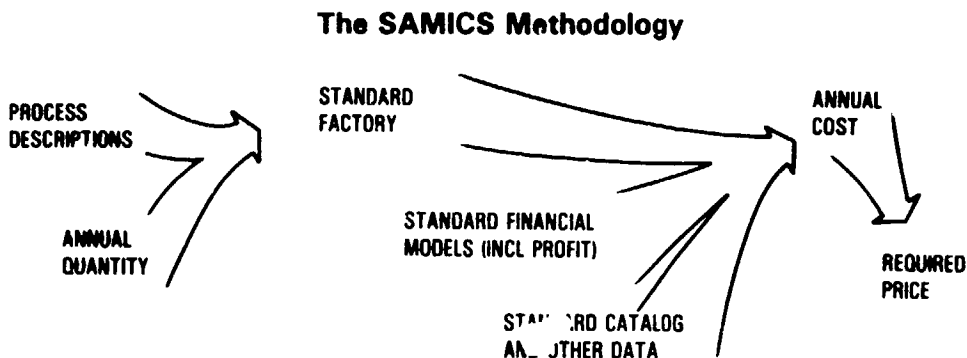# SAMICS ON THE IBM PC

JET PROPULSION LABORATORY

R. Chamberlain

SAMICS

Solar Array Manufacturing Industry Costing Standards consist of

- Std catalog of input prices
- Std process description format
- Std factory design & staffing
- Std financial parameters
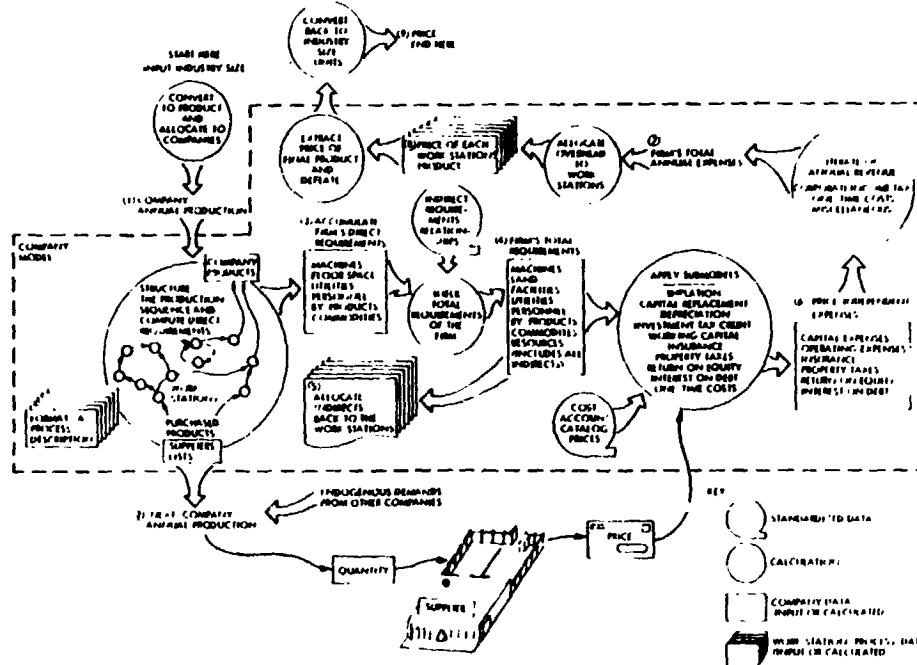- Std methodology for computing required product price

The SAMICS Methodology

SAMIS and IPEG both implement this methodology

SAMIS

Standard Assembly-Line Manufacturing Industry Simulation

Complete implementation of all SAMICS non-linearities

Calibrates IPEG assumptions

Does catalog look-ups and interpolations and all bookkeeping

Can vary anything

IPEG

Improved price estimation guidelines

PRICE × QUAN =

$$C_1 \times EQPT + C_2 \times SQFT + C_3 \times DLAB + C_4 \times (MATS + UTIL)$$

Kinds and relative proportions of indirect requirements are fixed
(by a calibrating SAMIS run)

Coefficients provide rules of thumb but are derived from financial
parameters, not input

Bookkeeping needed to get EQPT, SQFT, DLAB, MATS, UTIL
from process descriptions; IPEG does not read process
design changes

IPEG2 = "Back of the envelop"

PC-IPEG responds immediately — can vary financial parameters