USING COCOMO TO EVALUATE COSTS OF DATA RIGHTS & SOFTWARE LICENSES

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PRESENTATION TO
SECOND COCOMO/WICOMO USER'S GROUP MEETING
SCOPE OF THE PROBLEM …

- TANGIBLE
  - HARDWARE

- INTANGIBLE
  - RIGHT TO USE-LICENSES
  - RIGHT TO MODIFY-DATA RIGHTS
DEFINITION OF THE PROBLEM

HOW DO WE ESTIMATE THE COST OF...

- DATA RIGHTS FOR HARDWARE
- LICENSES FOR SOFTWARE
- WARRANTIES
- SOFTWARE DOCUMENTATION
THE BASIC PREMISE...

GIVING RIGHTS OR LICENSES GIVES A SECOND OR THIRD PARTY THE ABILITY TO PERFORM MAINTENANCE OR MODIFICATIONS WHICH WOULD OTHERWISE BE PURCHASED FROM THE ORIGINAL SOURCE.

...TO PROVIDE SUPPORT OR CAPABILITY
LOGIC FOR METHODOLOGY

COST ELEMENTS WHICH MAY APPLY

- DIRECT
- OVERHEAD
- GENERAL & ADMINISTRATIVE
- PROFIT

PROFIT MOTIVE IS PRIMARY FACTOR
METHODOLOGY

ESTIMATING ALGORITHM

COST IS A FUNCTION OF...

- RELIABILITY... FAILURE RATE
- OPERATING LIFE
- REPAIR COST
- PROFIT
METHODOLOGY

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MODELING WITH COCOMO

• ANNUAL CHANGE TRAFFIC
• ECONOMIC LIFE OF SYSTEM
• PROFIT
METHODOLOGY

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EXAMPLE

- HYPOTHETICAL SOFTWARE
- COCOMO ESTIMATE OF DEVELOPMENT COSTS
- ANNUAL COST OF SOFTWARE SUPPORT
- SENSITIVITY ANALYSIS
# METHODOLOGY

## EXAMPLE

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<thead>
<tr>
<th>Description</th>
<th>Profit</th>
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<tr>
<td>INITIAL CONDITIONS</td>
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<td>VARIED CHANGE RATE</td>
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<td>VARIED ECONOMIC LIFE</td>
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<td>VARIED PROFIT RATE</td>
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