Cost Estimate data management

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RDR costing roll-up

QuickTime™ and a
TIFF (LZW) decompressor
are needed to see this picture.

John Carwardine: [date]

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Managing costing information

- Cost estimates are consolidation of a lot of information
  - **Cost estimates from each technical group**
  - **Presentation material (technical, cost)**
  - **Roll-ups by accelerator area**
  - **Roll-up to entire machine cost**
  - **Cost bases of estimates**

  EDMS

- Manage changes to cost estimates, technical scope, etc
- Manage data for easy "drill down" to the lowest level of the RDR cost estimate and correlate with the bases of estimates.

  RDB

- Parametric cost analyses, different cost 'slices', changes in scope, eg
  - **Price of copper, different inflation rates, effort rates, etc.**
  - **Make cost roll-up of all magnets across all accelerators.**
  - **Lattice changes, magnet/ps configurations, space usage, etc**

Costing roll-up

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Practical

- Costing spreadsheets are not always provided in the same format (despite attempts by Cost Engineers)
- Individual groups approached cost estimating differently.
- Partial breakdown of TS $\Rightarrow$ AS $\Rightarrow$ Roll-up

- What capabilities are most important?
  - **List of parametric analyses:**

- It will take some effort to convert existing information…
- It could take a lot of effort to build 'enterprise' tools…
  - **Could we describe to a software developer exactly what we want…?**
  - **Start with simpler tools and narrower scope, then migrate…?**

Mechanics

- Cost estimates are contained in excel spreadsheets.

- Costing / data analysis tools..
  - **Project Management tools, eg Primavera, PPT/EVM,…**
  - **Linked Excel spreadsheets using standard template.**
  - **EDMS + data mining from 'self-describing' Excel spreadsheets.**
  - **Custom relational database.**
  - **Document management using EDMS.**

- Document management
  - **Different EDMS systems at CERN, DESY,..**
  - **Ad hoc**

- Combined EDMS and costing information

- Best approach from now…