1 Review 1

1.1 Slides

Problem Definition: Instead of having a list of points about the problem statement, it will be nice to separate it into sections such as Given, Find, Objective and Constraints. Having such a format makes it easy to spot the problem. Samples of such presentation slides are available from the webpage of CSCI 8715, taught by Professor Shekhar in Spring 2006.

Contributions: I feel it might be better to re-word the contributions. You may pick up some of the words from the Abstract of the actual paper. From my point of view, list of contributions include: (a) A hierarchical locking model on database resources to maintain consistency, (b) Generalization of the hierarchical model to DAG and dynamic graphs, (c) Scheduling and granting conflicting requests.

Diagrams: There are a couple of tree diagrams used in the Concepts slides. The font size of the text used in the nodes is not big enough to be readable from a distance. Changing the font size to about 16 units might be good.

Concepts: Animation of the list explaining the example looks very good. Those slides may be enhanced further by highlighting the corresponding element in the tree for each step in the example.

Assumptions: I think the concepts defined in this paper are applicable to relational databases as well. The authors define the hierarchical structure not for the records but a logical structure for the entities in a database.

Validation: In the actual paper, the authors have written about the locking system of IMS/VS system. You might want to mention it.

Minor changes: Slide 5 - there is an empty bullet; Slide 1 - you may want to put your name.

1.2 Narrative

Use of sub-tree: From the reading, it is not clear what exactly a sub-tree is. To improve it, you can probably put the picture from the actual paper and explain the context in which the tree structure is used.

Figures/Tables/Charts: The narrative is supposed to be self-contained. Please put the figures, tables, charts within the narrative and refer to it in the text.

Use of he: Since the paper is written by more than one author, it is better to avoid the use of he. Instead, you may use the authors.
"Use of article: Article is probably not the right word to refer to the paper. Section titles:
Instead of using titles such as Concepts - 1, it is better to use a keyword related to the
concept explained in the corresponding section.

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Others:
• I believe the narrative is incomplete. There are a couple of memos in the paper such as
  Explain the chart, Show the example.
• You might want to justify the text to improve the readability of the paper.

2  eview 2

2.1  General Comments

The problem statement can be reformulated to address the problem solved in the paper, the
targeted objective and the constraints under which the proposed approach/solution holds.
The slide and the narrative seem to summarize the problems that were encountered in the
systems that existed. These can be listed as the limitations of previous work.

The slides and the narrative do not include details on concepts like consistency of schedules,
dependencies among transactions and cost of degrees of consistency.

It is stated (under assumptions) that the locking discussed in the paper would work only in
hierarchical databases. It would be helpful if this can explained further.

2.2  Paper

The narrative does not talk about ‘consistency’, ‘dependency of transactions’ and ‘backups and
recovery’. These can be added to make the ‘Contributions’ section complete.

One contribution needs to be selected as the most significant and the choice has to be justified.

In the section ‘Concepts-3’, the concept of using DAGs can be stated.

There are a few mentions about figures and charts in the narrative which seem to refer to the
ones in the paper. It would be better if these are included in the narrative.

In the discussion about the validation methodology, it is suggested that the paper lacks formal
proofs; the paper seems to offer some theorems (with proof) and assertions. Does this
statement mean that the authors do not provide a rigorous treatment of some issues like
relative cost of the degrees of consistency or granularity of locks?
2.3 Slides

It would be a good idea to have a slide that shows the overview of the presentation.

Can add a slide that shows a good motivation for the work discussed in the paper.

Examples can be used to illustrate the concepts.