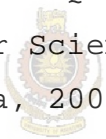


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Appendix-A

Interviews and discussions

This research project was aimed at exploring feasible solutions to address the problems of database schema changes in business information systems. Since it was well known that this is a real and a significant issue in system maintenance, there was no need to establish this fact via a statistical technique. However, it was decided that some amount of feedback gathering from real life database technicians might help in giving some guidance and direction to the research project. As such a series of interviews were carried out with local IT personnel who were involved in database related work in business information systems.

MTN Networks Private Limited, SriLogic Private Limited, Sri Lanka Institute of Information Technology, Janashakthi Insurance, Alpha Thermal Systems Private Limited are some of the organisations that participated in the interviews.

Interview & Discussion framework

For these interviews and discussions the following aspects were covered. However, the extent to which a discussion could be taken was heavily dependent on the expertise and awareness of the persons interviewed. A similar framework was used to drive the discussions conducted online via discussion forums and direct email collaboration.

- Understanding of system maintenance costs
 - Whether database changes are a significant contributor system maintenance cost
 - How frequent were the schema changes
 - Current strategies to minimize the problem of schema changes
- Identify the extent of the problem of schema evolution
 - Whether the organisations have had problems in the past
 - The level of apprehension to changing the database schema
- Awareness of any techniques to address the problem
 - Awareness on data models
 - Awareness on Schema evolution
 - Awareness on schema versioning and related techniques

General conclusions

- The frequency of database changes is relatively low compared to changes in new applications
- Changes to the schema are done only if there is no other external fix to the problem.

- Often database schema changes are postponed to until the next major replacement cycle.
- There is no/little documentation to predict the implications of a schema change
- Good schema designs can minimize the need for changes
- Little or no awareness on any available solution



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