Problem Statements for DTGen

Problems with data keys:
- Changing natural key data is difficult because of dependencies on other data.
- Surrogate Keys are not intuitive and are difficult to lookup.
- Indexes on keys must be manually created.
- Temporal foreign key constraints cannot be enforced.
- Hierarchical data (self-referencing foreign key) is difficult to enter and report.

Problems with changing data:
- Audit data is difficult to use (because it is always an after-thought).
- Can't undo the last DML on an entity.
- No undo DML audit on an entity.
- Point-in-time (ASOF) data can't be undone.

Problems with sustainment:
- GUI based maintenance forms must be manually created for each entity.
- Can't transport point-in-time (ASOF) data to another database.
- Small discrete domains are difficult to implement as entities
- No common method for handling database debug messages.
- No common method for handling database error messages.
- No common method for handling generic name-value pairs.
- No common method for handling single threaded logic.

Problems with data integrity:
- Can't enforce cross-tuple constraints on all DML.
- Can't enforce cross-entity constraints on all DML.
- Can't enforce character case across all DML.
- Can't enforce whitespace reduction across all DML.
- Can't enforce US ASCII across all DML.

Problems with repetitive tasks:
- Standard DML APIs must be manually created for each entity.
- Subtypes must be manually managed for each entity.
- PCTFREE must be manually calculated.
- Documentation must be manually created for each entity.