We developed the software that makes the Public Switched Telephone Network (PSTN) run.

Our customers range from the largest telecom service providers (ILEC) to the smallest garage shops (CLEC).

The largest CMM Level 5 company in the world.
Each step of the solution development can be treated as a step of spiral:
- High reuse rates
- Stable architectures
- Continual refinement
- Statistically meaningful measurements
  - Artifacts are persistent
  - Testing occurs at every point
  - Longitudinal metrics

Within each release apply:
- The Spiral model for Prototype products
- A Spiral/Waterfall Hybrid for Evolving products
- The Waterfall model for Legacy products
Some current testing systems require the tester to check a daunting number of variables.

For example:
In a hypothetical Message & Interoperability test, if there are 13 fields with 3 inputs per field, the total number of possible tests would be 1,594,323.
Dynamic/static analysis, visualization, and understanding of programs using slicing

Uses: test coverage, management, regression testing, maintenance

Language-based technology: C/C++, JAVA, SDL
  - Platforms: Unix/Windows/NT, etc

Commercially available, industrial strength
  - Distributed by Telcordia and other partners
  - Used on very large products (e.g., IBM’s DB2)
  - http://suds.argreenhouse.com contains demos, documentation, papers, etc.
The EDA process, in place at Telcordia for the past five years provides several advantages over existing systems which have produced several measurable results.

The advantages are...

- Basically a web based system for root cause analysis
- Based on initial work done at IBM, then customized and enhanced at Telcordia
- Asks questions that can be answered unambiguously
- Uses orthogonal categories for maximum impact
- Makes questions generic across products
- Covers all lifecycle stages and makes classes consistent when possible
- Provides data mining capability for detecting comparative anomalies
The EDA Process works across all phases of development and for all products, thereby helping to set target rates.
Telcordia has modified the Spiral Development process and made it workable in large scale applications. Real progress in the process has come through research integration throughout the process:
- Coherent organizing principles
- Superb instrumentation
- Statistical basis
- Optimizing process
These models of Spiral Development really do work and have been proven effective in real world applications.