

Building

Innovative

Business

Solutions

On A

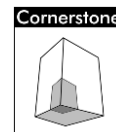
Solid

Foundation

Your Business Address

Business Phone

www.cornerstonetechgroup.com



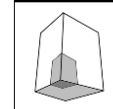
Clients Served

Equipped with software development in the latest technologies and project management experience, Cornerstone Technologies Group has been positioned to meet the information services needs of both large and small corporations. Because of our business ethics and commitment to our client’s satisfaction, we have been able to build strong, trusting partnerships.

Cornerstone began by serving businesses in Northeastern Pennsylvania, but has developed a broader geographic client base through direct marketing, referrals and subcontracting. We are proud to have supported the following organizations,* and would consider it a privilege to serve you.

- W. R. Case & Sons Cutlery Company Bradford, PA
- SuperUser Technologies, Inc. Bradford, PA
- Osram Sylvania Inc., Corporate Headquarters Danvers, MA
- Osram Sylvania Inc., General Lighting Division St. Marys, PA
- Osram Sylvania Inc., General Lighting Division Manchester, NH
- Osram Sylvania Inc., General Lighting Division Winchester, KY
- Osram Sylvania Inc., OSI Canada Drummondville, Quebec
- Osram Sylvania Inc., Chemical & Metallurgical Products Division Towanda, PA
- Databranch, Inc. Location, NY
- Micron Systems Corporation Location, PA
- Subcontracting Companies
 - Fibercel, Inc. Location, NY
 - Heritage Cutlery Location, NY
 - Bradford Travel Service Location, PA
 - Beacon Light Behavioral Health Systems Location, PA
 - City of ~, Police Department Location, PA
 - City of ~, Sanitary Department Location, PA
 - City of ~, Water Authority Location, PA
 - Dr. Widad ~, PhD Location, PA
 - McCourt Label Location, PA
 - Swanson & Sons General Contractors Location, PA
 - Mutzabaugh, Saunders, Hollenbeck & Clarke, LLP Location, PA
 - Brookville Wood Products Location, PA
 - Coudersport School District Location, PA
 - Morganite, Auto Consumer Group Location, NC
 - Allegheny Particle Board Corporation Location, PA
 - Kane Hardwood, A Division of Collins Pine Company Location, PA
 - Highlander Energy Corporation Location, PA
 - Ried's Food Barn Location, NY
 - Poppy's Video Music Books Location, NY
 - Clarion Sintered Metals, Inc. Location, PA
 - Highland Injection Molding Location, NY
 - Morgan AM&T (Pure Carbon) Location, PA
 - SGL Carbon Group Location, PA
 - Westfield Tanning Location, PA

*All clients listed above were served by Delora J. Burrow as a personal systems consultant.



Business Associates

Mrs. Staci ~
Supply Chain Manager
W. R. Case & Sons Cutlery Co.

Mr. Thomas ~
SAP Coordinator / Special Projects Manager
Osram Sylvania, Inc.
OSI Canada & GL Division

Mrs. Carolyn ~
President
SuperUser Technologies, Inc.

Mr. Michael ~
Technology Services Manager
Osram Sylvania, Inc., Towanda
Chemical & Metallurgical Products Division

Ms. Joan ~
Northeast Regional Sales Manager
Consolidated Container Company

Mr. Ted ~
Vice President
Databranch, Inc.

Mrs. Diana ~
Operations Manager
SuperUser Technologies, Inc.

Mr. Jeff ~
Quality Manager
Osram Sylvania Inc., Danvers
Corporate Headquarters

Mr. Jon ~
Technology Services Manager
Osram Sylvania Inc., St. Marys
General Lighting Division

Mrs. Michaelene ~
Controller (former)
Kane Hardwood, Inc.

Mr. Thomas ~
Division Controller
Osram Sylvania, Inc., St. Marys
General Lighting Division

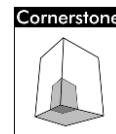
Mrs. Faye ~
Sales Assistant
Kane Hardwood, Inc.
A Division of Collins Pine

Mr. Gerry ~
Technology Services Manager
Osram Sylvania Inc., Manchester
General Lighting Division

Mr. Ronald F. ~
President
Micron Systems Corporation

Mr. Timothy ~
MRP II Project Coordinator
Osram Sylvania, Inc., Towanda
Chemical & Metallurgical Products Division

*Technical Peer



Company Profile

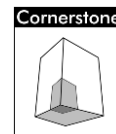
Cornerstone Technologies Group began in 1997 with system's consultant Delora J. Burrow practicing as a private consultant. The purpose of the company is to provide clients with model computer systems designed to positively effect their productivity and financial performance. Meeting the expectations of those who are depending upon our experience and customer service is a high company priority.

Cornerstone Technologies Group specializes in turn-key project solutions, fixed price project services, application development, automated forms processing techniques, and radio frequency data collection. Our focus is to provide PC client / server based technology solutions for growing organizations.

The industries we have been involved in have given us experience in the accounting, production, human resources, marketing, and quality control sectors. Our software and development expertise centers around relational database tools encompassing custom development and off-the-shelf package system integration.

The continuing presence and current growth of Cornerstone Technologies Group can be seen as a result of our attention to detail found in each of our completed engagements. Our commitment to quality in all services rendered has given us the opportunity to provided solutions to clients that have addressed the following information service areas:

- Automated Forms Processing
- Bar Code Technology
- Contact Management
- Corrective Action Reporting
- Manufacturing Performance Measurements
- Non-conformance Reporting
- Order Entry and Invoicing
- Personnel Continued Education Recording
- Personnel Recruitment
- Physical Inventory
- Product Component Defects
- Product Life Test
- Product Process & Disposal
- Product Shrinkage
- Project Management
- Production Scheduling
- Production Reporting (Machine and Labor Efficiencies)
- Quality Control
- Radio Frequency Technology
- Sales and Marketing
- SAP Interfaces
- Technical Support Requests
- Time and Attendance
- Truck Scale Weights
- United States Product Imports / Exports



Professional Support

As a growing professional services company, Cornerstone Technologies Group specializes in total project management that includes analysis, proposal, budgeting, technical design, construction, transition, implementation and support of computer systems. Assistance is also given to our clients by supplementing their project teams with an experienced business or technical consultant.

Cornerstone's methodology and technical standards have evolved to meet the growth and demands of our clients. As the hardware and software technologies have evolved, we have developed and acquired the expertise to provide the professional services to meet business demands. The following list of services indicates the capabilities that Cornerstone Technologies Group offers.

Turn-key Business Solutions

Our company is capable of performing project work at both the client site and at our office located in Smethport, PA. Cornerstone's methodology for managing and developing information systems supports a structured approach for ensuring delivery of a cost-effective, quality solution. This includes, but is not limited to, the use of CASE tools, end user interviews, the disciplines of data verification and program testing procedures, and complete system documentation.

Our approach utilizes the phases of:

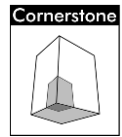
1. Planning
2. Analysis
3. Design
4. Development
5. Documentation
6. Training
7. Implementation
8. Transition
9. Support

A Senior Consultant will develop a project time line and track progress by focusing on identified critical success points. Cornerstone Technologies Group believes that Status Reports are a key ingredient to communicating effectively with our clients. Changes in project scope are addressed through a Design Change Request (DCR) form, and are only incorporated into the project after careful consideration. This procedure also requires the approval and signature of both the client and a Cornerstone representative.

Consulting Services

Consulting is provided by personnel who bring proven experience to the industries they seek to support. Services include:

- Business Analysis and Design
- End User Training
- Feasibility Studies
- Project Planning and Management
- System Assessments



Our development and implementation services continuously expand to meet the changing needs of our clients. Areas where we can assist include:

- Conversion Services
- Custom Application Development
- Data Analysis and Reporting
- Documentation Services
- On-going Technical Support
- Product Evaluation, Selection and Installation
- Project Implementation
- Systems Design

Product Evaluation, Selection & Installation

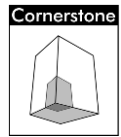
Through a combination of our services, Cornerstone has the capabilities to provide support with:

- Business Requirements
- Vendor Relations
- Software and Hardware Recommendations
- Installation and Support of Third Party Software
- Customization

Conversion Services

Conversion services are provided when appropriate. Cornerstone supports this service with its own conversion procedures. The conversion programs developed to meet the unique needs of each client are used to assist both the conversion effort and associated custom development. Services include:

- Analysis of Current System
- Planning of Conversion Methods
- Modifications to Existing Software
- Data Conversions to new Platform
- Software Conversion to New hardware & Operating Environments
- Integration of New Software Modules into Existing Systems
- Transition and Support



Documentation Services

Cornerstone personnel have had experience in several types of documentation including:

- Glossary of Terms and Indexes
- Release Notes
- Standard Operating Procedures
- Unified Modeling Language (UML) via. CASE tools
- User Manuals

Industry Experience

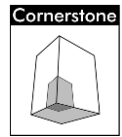
The company's experience in performing these services spans multiple industries with a focus in the following:

- Consulting Firms
- Discrete Manufacturing
- Education
- Forest Products
- Legal Services
- Municipal Government
- Process Control Industries

Technical Experience

The skills of Cornerstone personnel cover a broad spectrum of computer technology. A high-level, general list of the technologies supported are:

- Automated Forms Recognition (OCR, ICR and OMR)
- Bar Coding Technology
- Client / Server Architectures
- IBM PC's and Compatible
- Object Oriented Programming
- Radio Frequency Data Collection
- Relational Data Base Products



Engagements have included:

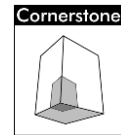
- Application Development
- Automated Data Collection
- Client / Server Projects
- Data Analysis
- Documentation
- End User Training
- Evaluation, Selection & Implementation of Software
- Requirements Definitions
- Software / Data Conversions
- Software Installation Programs
- Support for Software Vendors
- System Assessments
- System Integration
- Turn-key Project Solutions

Involving applications such as:

- Contact Management
- Financial Systems
- Inventory
- Marketing
- Production
- Quality Control
- Weights and Measurements
- Time and Attendance

Utilizing technologies in areas such as:

- Bar Coding
- Client / Server Architecture
- Object-oriented Programming
- Optical Character Recognition
- Radio Frequency Data Collection
- Relational Database Management Systems
- Touch Screen Technologies



Turn-key Project Solutions

Product Life Test

Completed a business analysis and requirements definition for a product life test system for a large manufacturing company. Designed **CASE** diagrams to show database, radio frequency, automated forms recognition, firmware interfaces, and end user interaction. Installed **radio frequency** communications server and programmed RF equipment to transfer data in real-time. Created and programmed **OCR form** to automatically scan and post hand written text and option boxes. Automatically generated **bar codes** to uniquely identify each test sample. Designed relational data structures and completed all aspects of development including data analysis reports, graphs and custom export queries. Used Microsoft **Visual Basic** to write all custom code. Compiled entity relationship diagram, wrote extensive User Guide, on-line help, and conducted training classes for personnel.

Manufacturing Performance Measurements

Planned, designed, developed and implemented a **WAN based** performance measurements system being used at nine manufacturing locations in three divisions. Designed the database to collect and analyze data on both the plant and division levels with data being rolled up into **SAP** at desired times. Created the user interface to resemble SAP in order to minimize implementation time. Structured **database security** to allow for individual plant data modification and reporting, but only division level data viewing and reporting. Designed relational database structures, forms, queries, reports and graphs. Wrote User Manual and compiled on-line help.

Personnel Recruitment

Developed a **LAN based** database program that assisted law firms in the hiring process for any size law firm or legal department. LawCruit™ stored a wide range of information on applicants including multiple addresses, clerkships and applicant profiles. The software provided for interview scheduling and evaluations, mail merges, multiple security levels, customized fields, data import abilities, associate project evaluations and expense tracking. Responsibilities for development included upgrading the software from a DOS environment (a complete re-write), and planning, designing and programming three additional modules. **Software installation programs** were also produced, a User Guide written and on-line help compiled. Provided **technical support**, on site software installations and conducted formalized **training classes**.

Corrective Action Reporting

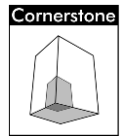
Developed a **Lotus Notes** system to manage corrective action requests for **ISO 9000** certification incorporating six disciplines:

1. Interim Action
2. Root Cause Identification
3. Permanent Action Specification
4. Verification by Initiator
5. Definition of Preventive Actions
6. Team Congratulations

Incorporated automatic E-mail capabilities from Lotus Notes to Microsoft Outlook, wrote course material, and conducted training classes.

Sales and Marketing

Researched **requirements definition** and proposed a multifaceted relational database with modules that would effectively handle the collection and storage of customer, product, sales forecast, orders and invoices, production scheduling and pricing. Designed and programmed **Visual FoxPro** system including data structures, **visual classes**, data entry forms, queries, and custom programs. Converted historical data to new platform. Programmed interfaces for daily down loading of sales files from an AS/400 and HP3000 using PC Support, IBM Query, HP Openview and Informix SQL. Wrote over 200 **data analysis** reports, charts and graphs comparing time periods, actual to forecast, pricing scenarios and reseller analysis. Wrote additional reports to provide for market-driven production schedules, market summaries, and price schedules. Created tailored presentations for large investment companies.



Turn-key Project Solutions (cont.)

Contact Management

Developed a **Microsoft Access** customer complaints and response tracking system to meet the requirements of a large manufacturer needing to handle rebates, returned products and all other retail customer correspondences. Incorporated status history to show step-by-step handling of incidents and reply histories to track all correspondences. Flagged duplicate customers during data entry process and set up **mail merges** to facilitate automatic response generation (letter or fax). Provided for engineer product analysis, cycle time analysis, and product replacement detail within database.

Automated Data Collection

Radio Frequency

Incorporated into a product life test system, radio frequency data collection was used to take physical inventories, record individual product test results and scan the **bar codes** of failed products. Real time data collection provided management with an effective tool to track product quality prior to packaging and shipping. The programming of the RF units, and the installation and setup of the RF network, was completed by Cornerstone Technologies Group in association with the client.

CTG also had the opportunity to complete the **requirements definition**, request for quote and advance **vendor relations** in a radio frequency project for a forest products company. As **project manager**, Cornerstone arranged for the site survey, networking, installation, and programming of the RF hand held units, vehicle mount terminals and access points. Data collected was used to complete automated physical inventories, track inventory movement through production, and to assist the sales department in knowing quantities in process and on hand. As product moved between accounting entities, RF was also used to assist in the debiting and crediting of accounts.

Forms Processing

Developed character recognition forms to eliminate manual data entry and automate the processing of paper forms and documents. Utilized a client / server forms processing solution that included Tri-CR® recognition technology interpreting hand print (**ICR**), machine print (**OCR**), bar code and check box (**OMR**) fields. Streamlined the collection of data from paper forms gathered using **fax machines** and **scanners**. Verification functions included, but was not limited to the following:

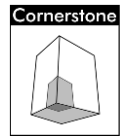
- Database validations
- User-defined dictionary look ups
- Numeric range tests
- Date, currency and character-specific formatting
- "Always review" and "Entry required" field designations
- TrueAddress™ for U.S. address validation with street-level precision

In five separate custom applications implemented by CTG, operators now spent seconds verifying questionable data rather than minutes manually keying entire forms. The time saved entering data quickly added up to produce substantial cost savings.

Client / Server Projects

Sales Forecasting

Designed and developed a **Microsoft SQL v7** (back end) and **Microsoft Access Project 2000** (front end) database used to conduct detailed historical sales analysis and to record future sales forecasts. In order to maximize performance and minimize **Oracle**-based ERP software network traffic, provided for database links to Oracle and wrote upload routines for periodic data updates / appends. Programmed all aspects of custom software, trained personnel and provided complete documentation.



Client Server Projects (cont.)

Forest Products

Implemented the installation of a an fully integrated system involving radio frequency data collection, bar coding and **touch screen technology** utilizing **Visual Basic** and **Microsoft SQL** for a forest products company. Created SQL entity relationship documentation and converted Btrieve 5.x data to SQL data structures. Programmed radio frequency equipment to collect and post data to SQL on a **real time** basis.

Time and Attendance

Facilitated vendor relations between a large manufacturer and a time and attendance software provider. Provided extensive support of vendor's product (**Microsoft Visual FoxPro** and **SQL Server**), including system and parallel testing, program error deciphering, and **Kronos** interface. Converted over 200K records from the AS400 to SQL Server, and created backdoor access (links, data entry forms and reports) to SQL Server through **Microsoft Access**.

Requirements Definitions

Production Reporting, Order Entry, Invoicing, Inventory Tracking

Conducted a thorough **business assessment** for a forest products company seeking to replace their core software package and automate data collection. Performed complete **system evaluation** of their current hardware, software and firmware. Researched and compiled data collection specifications, product flow charts, information flow diagrams, **network requirements**, bar code samples and **firmware interface prerequisites**. Identified business requirements, evaluated software and firmware solutions, and made viable recommendations.

Product Life Test

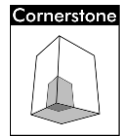
Identified present business practices, data collection, and storage methods for an existing life test system being used by a company annually manufacturing 450 to 500 million finished products. Listened to end users and management to understand current individual frustrations and to identify over-all goals and expectations. Collected and analyzed forms being used for data recording, specific report samples, and Excel spreadsheets being manually maintained. Designed **data flow model** to show existing setup contrasting it to proposed new technologies of a Windows based relational database, radio frequency, optical character recognition (OCR) and firmware interface. Completed written project specifications, **cost estimates**, and tentative **project time line** presenting findings to upper management.

Sales and Marketing

For a process control industry, determined management expectations for an information system needed to make educated business decisions on a daily basis based on market fluctuations. Worked with multiple departments and off-site sales staff to compile a list of **system input and output requirements**. Proposed a multifaceted relational database with modules that would effectively handle the collection and storage of customer, products, sales forecasts, orders and invoices, production schedules and pricing. Included sample forms and reports, software and hardware recommendations.

System Assessments

Performed system assessments encompassing hardware, software and firmware for multiple organizations. Wrote **inventory management system** used to take a complete physical inventory of each department's hardware, software and firmware. When appropriate, researched **Year 2000 readiness** for inventoried products and provided a written analysis. Completed **percent of compatibility** studies when evaluating current and proposed systems. Formulated **remediation plans** making multi-media presentations to management.



Evaluation / Selection / Implementation of Software

After devising a requirements definition, reviewed multiple software alternatives for a forest products company. Attended vendor presentations to determine local support options for client, software tools used in development, structural soundness, product maturity and percent of compatibility. Identified **critical success points** and completed a proposed **project time line**. Assisted in new hardware and software installations, personnel training, and final software implementation.

Assisted a manufacturing company to implement a time and attendance system. **Facilitated vendor relations** and worked directly with end users to transition to new procedures. Converted legacy AS400 data to new **Microsoft SQL** tables. Worked with vendor to configure **Kronos** interface.

Development Assignments

Contact Management

Developed a customer complaints and response tracking system to meet the requirements of a manufacturer needing to handle rebates, returned products and all other retail customer correspondences. Incorporated **status history** to show step-by-step handling of incidents and **reply histories** to track all correspondences. Flagged duplicate customers during data entry process and set up mail merges to assist in **automatic response generation**. Provided for engineer product analysis and product replacement detail within database.

Corrective Action Reporting

Developed a **Lotus Notes** system to manage corrective action requests incorporating six disciplines:

1. Interim Action
2. Root Cause Identification
3. Permanent Action Specification
4. Verification by Initiator
5. Definition of Preventive Actions
6. Team congratulations

Incorporated automatic E-mail capabilities from Lotus Notes to Microsoft Outlook, wrote course material, and conducted training classes.

Non Conformance Reporting

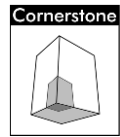
Designed a system to assist a manufacturer in recording non-conforming finished product samples. Provided for the recording of product detail information, defect codes, manufacturing center, inspector id, rejected quantity and lot number. Related non-conformance report to production detail and recorded remedial action.

Personnel Continuing Education Recording

Wrote an application to expedite the data collection and storage of employee course attendance. Used **optical character recognition** to read and post class attendance sign-in sheets. Produced the necessary forms for data modification, and output data for Corporate reporting requirements. Converted historical **FoxPro** data to new platform.

Personnel Recruitment

Developed a **LAN based** database program that assisted law firms in the hiring process for any size law firm or legal department. LawCruit™ stored a wide range of information on applicants including multiple addresses, clerkships and applicant profiles. The software provided for interview scheduling and evaluations, mail merges, multiple security levels, customized fields, data import abilities, associate project evaluations and expense tracking. Responsibilities for development included upgrading the software from a DOS environment (a complete re-write), and planning, designing and programming three additional modules. **Software installation programs** were also produced, a User Guide written and on-line help compiled. Provided **technical support**, on site software installations and conducted formalized **training classes**.



Development Assignments (cont.)

Physical Inventory

Wrote complete firmware / software / hardware inventory system utilizing **Microsoft Access**. Designed the user interface to show at a glance each employee's product list including operating system, software versions and hardware components. Maintained a **Y2K readiness** table classifying each product inventoried as:

- Does not contain a real time clock
- Compliancy status has not been determined
- Manufacturer has not responded
- Not selected for evaluation
- Not being tested by the manufacturer
- Not compliant
- Fully compliant
- Compliant with issues

Coded all programs in **Microsoft Visual Basic**. Created custom reports for each client.

Product Component Rejections

Wrote a **Microsoft Access** based application to meet the need of an engineering department wanting to record the defects found in product *components*. During the manufacturing process, the database was populated with records that were then analyzed by work center, machine operator, and an index of defect codes. Resulting data was used to remove defective components from production prior to being placed in a finished product, and to correct machine deficiencies.

Product Imports and Exports

Planned, designed and developed a **FoxPro 2.6** database to record all wax imports to and from the United States for a process control industry. Programmed all aspects of the system including forms, reports and programs. Analysis reports were used to analyze competitor activity and market fluctuations.

Product Inventory

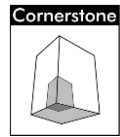
Wrote an **Inventaire Physique** database for a Canadian manufacturer. Created automated import routine from SAP output files and provided for the data collection of tickets used to record physical warehouse inventories. Wrote analysis reports to show first pass success, missing tickets, unmatched tickets and missing products. Produced all end user text (forms, reports, and error messages) in **French**.

Product Life Test

Completed a business analysis and requirements definition for a product life test system for a large manufacturing company. Designed **CASE** diagrams to show database, radio frequency, automated forms recognition, firmware interfaces, and end user interaction. Installed **radio frequency** communications server and programmed RF equipment to transfer data in real-time. Created and programmed **OCR form** to automatically scan and post hand written text and option boxes. Automatically generated **bar codes** to uniquely identify each test sample. Designed relational data structures and completed all aspects of development including data analysis reports, graphs and custom export queries. Used **Microsoft Visual Basic** to write all custom code. Compiled entity relationship diagram, wrote extensive User Guide, on-line help, and conducted training classes for personnel.

Product Process and Disposal

Programmed a product process and disposal system for a local **municipality**. Provided for the data collection and storage of weather and utilities, flow and chlorination, pumping, lab results, filter press results, meter station data, instrument calibration and equipment monitoring. Incorporated monthly cost table to facilitate the calculation of the costs associated with labor, transportation, utilities, and chemicals. Provided municipality with thorough **documentation** including a professional user guide, on-line help, entity relationship diagram, data dictionary specifications, reporting documentation and mathematical calculation list.



Development Assignments (cont.)

Production Reporting

Worked with manufacturing department head and end users to define, develop and implement a system to collect store and analyze production data. Utilized **optical character recognition** on the shop floor to collect and post data. Wrote **labor efficiency** and **machine efficiency** reports and graphs to show comparisons to standards and productivity trends.

Production Shrinkage

Developed **Microsoft Access** application to track product defects and quantities affected. Collected data from the production floor through **optical character recognition**. Implemented system in both primary and two outsource locations. Utilized both scanning and facsimile data transmissions to centralized database. Programmed data entry forms, queries, and reports. All custom code was written in **Microsoft Visual Basic**.

Sales and Marketing

Researched **requirements definition** and proposed a multifaceted relational database with modules that would effectively handle the collection and storage of customer, product, sales forecast, orders and invoices, production plans and pricing. Designed and programmed **Visual FoxPro** system including data structures, visual **classes**, data entry forms, queries, and custom programs. Converted historical data to new platform. Programmed interfaces for daily down loading of sales files from an AS/400 and HP3000 using PC Support, IBM Query, HP Openview and Informix SQL. Wrote over 200 data analysis reports, charts and graphs comparing time periods, actual to forecast, pricing scenarios and reseller analysis. Wrote additional reports to provide for market-driven production schedules, market summaries, and price schedules. Created tailored presentations for large investment companies.

Technical Support Requests

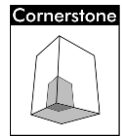
Created a **Microsoft Access** database in response to a client's need of effectively handling and following through on technical support requests. Provided for consecutive record numbering, **cycle time analysis**, management authorization, the prioritizing of requests, technician assignment, and the recording of time spent to resolve the issue. The result was a tangible means of documenting work completed, problem solving techniques, and identifying remaining open issues.

Time and Attendance ~ Human Resources

Wrote a front-end application to a **Microsoft SQL** based retail product. Diagramed relationships to facilitate report generation and created custom filtering options to allow client to print a variety of user-defined reports reflecting employee point accumulation. Carefully studied, tested and validated key fields to protect referential integrity before creating data entry screens to allow for record modification. Performed the role of intermediary between client and vendor as each sought to communicate. Upon problem resolution, removed custom front-end application, trained end users to exclusively use vendor's product, and worked to restore vendor / client relationship.

Time Tracking ~ Maintenance

Produced a time tracking application to effectively handle the data collection associated with maintenance personnel **moving between work centers**, dedicated to a particular capitol expense requisition (CER), or reporting a time exception (such as a meeting or training class). Examined resulting data to show hours worked comparison to scheduled hours, cost center, work center and department assignments, and missing entries for **SAP** input.



Development Assignments (cont.)

Time Tracking ~ Consulting

Wrote a database to handle new project engagements, and to document changes to existing assignments. Automatically generated **Design Change Requests** forms and tracked all aspects of client support requests. Generated a **Service Request** form showing project detail and technical response information broken down into the following areas:

- Class Changes
- Data Conversion
- Data Structures
- Documentation
- Forms
- Graphs
- Manual Data Entry
- Menu
- Programming
- Queries
- Reports
- Toolbar
- Training
- Verification / Testing

Tracked travel time, mileage, client site activities and billable hours.

Truck Scale Weights

Developed a **Visual FoxPro** application that collected data from a Fairbanks axlematic terminal. Designed and programmed data structures, visual **classes**, forms and reports. Programmed interface between truck scale and database receiving data through a serial port. Became friends with the company mouse who frequented the installation site.

Data Analysis

Reports

System development has provided for the opportunity to write a wide range of analysis reports. Cornerstone Technologies Group firmly believes that information cannot be obtained from any database without **flexible reporting tools**. It is the goal of our company to make each client *independent* in this key area. CTG believes that data integrity is seriously jeopardized and a database often rendered ineffective if data must be exported to meet standard reporting needs. To adapt to this critical need of our clients, CTG has developed as part of its corporate standard, a “reporting requirements definition”. The result has been one custom report serving as the basis for hundreds of reports through the use of **structured query language** written from the filter selections made by an end user. This has resulted in considerable cost savings and greater end user satisfaction.

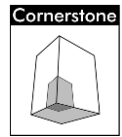
Data Transfers

Automated data transfers are written in the event that data analysis is so *complex* and *dynamic* that a report using static mathematical calculations cannot meet the needs of a client. To simplify this data transfer process, Cornerstone Technologies Group supplies a list box of available export data, then uses either a **drag and drop** technique or a series of **push buttons** to allow a user to select fields at random. All export forms written to date have also allowed for complex data filtering. **Default values** are almost always specified by our clients and incorporated into the application.

Software Installation Programs

Legal Recruiting

Created installation programs for software vendor to distribute to customers. Traveled throughout the United States completing installations for law firms and performing DOS to Windows software upgrades when necessary.



Software / Data Conversions

Completed multiple software conversions and hardware upgrades when assisting with product selection and installation, or when moving a legacy system to a new technology platform. Incorporated automated data transfers from a **SAP, AS400, Oracle** and **Informix SQL** into several applications designed to meet the more spontaneous reporting needs of clients. Worked extensively with **Btrieve, FoxPro, Access, Visual Basic** and **SQL** to accomplish necessary tasks.

Documentation

Unified Modeling Language (UML)

Although critical to proper planning and project management, **visual modeling** is also an excellent source of system documentation. Cornerstone Technologies Group uses the following diagrams when appropriate:

- Case Diagrams (flow charts of end user interaction)
- Static Structure Diagrams (entity relationship diagrams)
- Sequence Diagrams (event order)
- Collaboration Diagrams (object interaction)
- Statechart Diagrams (object reactions to events)
- Activity Diagrams (flow of software components in a business context)
- Component Diagrams (software dissection)
- Deployment Diagrams (system deployment on multiple servers)

User Manuals & On-line Help

Without reiterating the information given in the Database Development and Resume sections, professional user guides have been written for many of our custom development applications and then generated into **on-line help**. Additional manuals have been written to compliment SAP procedures, teach Microsoft Windows 95, and explain client-specific disciplines for third party software products. All user guides are equipped with a **Table of Contents** and a full **Index**. A **Glossary of Terms** is also included when necessary.

Operating Procedures

Standard Operating Procedures are frequently incorporated into our user guides along with a “How to...”, “FAQ”, and “Error Message” sections. In reviewing any of our written operating procedures, you will note screen prints for virtually every step, along with the use of auto shapes (arrows, call outs etc.). Our operating procedure documentation is tested prior to release by at least one user who has never seen the system. Their reactions, questions and points of struggle are noted and the documentation updated accordingly.

Release Notes

In working with a vendor on a retail software package, we have had the opportunity to write several release notes to accompany software upgrades. Installation instructions, upgrade precautions, “What You Should Know”, as well as other points of interest, are usually included.

End User Training

Our experience in custom software development has also given Cornerstone Technologies Group expertise in end user training. Generally conducted at the client site in a computer lab, Cornerstone is accustomed to preparing **course material**, user guides, and using **multi-media presentations**. We have trained over two hundred personnel in Microsoft Windows and have conducted formal training sessions for Personnel Recruitment around the United States. Other formalized training classes have encompassed Correct Action and Product Life Test. Small group training, or individual training has been performed on all other development projects.