

## Carl Mountford

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### Proficiencies

- Project management
- Database design, implementation, tuning, administration
- Systems analysis & design [structured methodologies]
- Application development
- Data analysis, data modeling
- Business analysis

### Primary Experience

SDLC	Data Warehouse	Oracle	Centura Dev
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### CASE Tools

Silverrun RDM	Data Dictionary
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### Database

ORACLE	SQLBASE	IDMS/R	SQL Server
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### Hardware/OS

PC / Windows NT	Sun & HP / Unix	IBM Mainframe/Mini	Macintosh
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### Languages

SQL	COBOL	C / C++	Basic
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### Microcomputer Software

Planning:	MS Project	MacProject			
Development:	SQLWindows	MSVisualStudio:	WinAPI	C / C++	Visual Basic
Spreadsheet:	Excel	Lotus123			
Presentation:	PowerPoint	Visio	Corel		
Documentation:	MS Word	FrameMaker	WordPerfect		
Web:	Cold Fusion				

## Experience

20+ years experience in all phases of systems development; 6 years in human resource management.

Supported the full system development life cycle on several major and numerous minor projects for SBC, Pacific Bell, Syntex, the State of California, Bechtel, Bank of America, and various departments of the City and County of San Francisco:

**Consultant** *Mountford Group, Inc.*

*03/83 to present*

Provide system development consulting services to clients.

Direct company product development for a variety of applications (CASE tools, payroll, human resource, reservation systems).

- Development of requirement specifications, data models
- Logical/physical database design
- Design/prototyping/development/testing of application screens/functions
- Implementation
- Installation, user training

### Consulting services provided to outside clients:

*San Francisco Public Utilities Commission*

*02/03 to present*

Conduct full lifecycle development for a PUC-wide online employee time capture. Provide guidance to PUC staff on design and development techniques. Conduct requirements survey, document findings, develop requirements document, and present for approval. Develop data model reflecting defined requirements, implement schema in Oracle. Work with PUC staff to design/develop online client interface. Design/develop processes to interface with the P3e project management system and the Maximo work order maintenance system. Design/develop extended

features for labor adjustment and reporting.

Evaluate 'desktop' systems used by HHWP staff; identify candidates for migration to Oracle.  
Design/develop online interface to allow shared client access to data.

**SBC Services, Inc.**

**08/01 to 12/02**

Redesign of existing sales staff intranet application to improve performance, reduce maintenance. Analyzed code and database structure to identify processing requirements and performance issues. Designed structures to support load/calculation cycles; moved factors affecting calculation processes to effective dated external tables. Revised/corrected existing load processes. Developed process to pre-calculate and summarize all required display information, summarize for multiple reporting levels. Modified existing Cold Fusion code to improve functionality and eliminate maintenance; wrote new CF code to provide access to multiple levels with drill-down capability. Provided consulting services to SBC staff on technical problems. Developed online reporting application to provide timely access to sales results.

**Public Utilities Commission, San Francisco**

**01/01 to 08/01**

Developed automated data interface between PUC mainframe and vendor Oracle database on network server. Analyzed vendor database to determine processing requirements. Designed/coded/tested mainframe extract programs. Designed/coded/tested Oracle load processes (SqlLoader & PL/Sql Procs).  
Reviewed work of PUC staff to provide guidance on general techniques, specific problems.

**SBC Services, Inc.**

**05/00 to 03/01**

Provided project management and technical development services for the SAM/CIAM project, fielding two web sites supporting data submission and internal processing/control. Managed development life cycle. Developed requirement specifications for web screens and processes. Designed/developed Oracle database to support data requirements. Developed numerous Oracle procedures to provide enhanced functionality to Cold Fusion server / web pages. Coordinated development of interfaces to SBC Data Warehouse and MOCHA system.

**Telecom Eireann / Telcordia Technologies**

**03/99 to 06/99**

Designed database for decision support prototype to provide intelligence on repair activity and cable faults. Reviewed client source data and developed database structure to support information requirements. Created logic to process client data and populate database.

**Pacific Bell**

**01/95 to 12/97**

Worked on a series of projects over a three year period:

*Core Process Re-engineering:* As project manager, reviewed activities of primary contractors on PDSS project, identified problems with proposed activities/design, and recommended revisions.

*PDSS:* Provided technical direction and project management for initial effort to evaluate, acceptance test, and implement PDSS. Developed parallel data structures and query processes to allow test staff to identify errors in PDSS query application. Reviewed contractor source code to identify logic errors. Managed queue of identified problems and insufficiencies in PDSS query application and batch processes. Developed solutions to critical problems and directed activities to correct. Coordinated with PacBell management on efforts to have contractor correct problems in original deliverable.

*CFO Datamart:* Provided database design/administration services. Developed datamart database to support client information requirements pending establishment of the data warehouse. Implemented data extracts, developed processes to filter/cleanse data, populate database and provide user access.

*Control Room:* Developed prototype to demonstrate data warehouse management/analytical information retrieval capabilities. Results were displayed on 16 monitors. Process utilized IP messaging to initiate DB queries for 15 client query display processes, which independently executed individual SQL queries and formatted results for graphic display.

*Activity Based Costing:* Served as technical lead for ABC phase of CFO datamart. Directed activities of technical support staff in sourcing/processing data required for ABC processes. (Source systems included GL, ICMS, SORD, MTAS and others.) Developed database structures to store detailed source data, and processes to cleanse, summarize, and attribute base data. Developed data structures and processes to provide user access to information using DSS Agent.

[ Oracle 7.3.3, HP T500, 300gb data storage ]

**Syntex Laboratories**

**01/94 to 12/94**

Developed requirements definition, designed, developed, and implemented Information Warehouse client-server system to support Market Intelligence and Strategic Sales Analysis functions. Designed and developed custom ad hoc query application to provide decision support within constraints of data warehouse environment. Client applications developed using Centura SQLWindows. [ Oracle 7.1, Sun Sparcstation 1000, 80gb database ]

**Varian**

**11/93 to 12/93**

Provided consulting services and application development support for client-server order entry system using SQLWindows front end and Sybase SqlServer back end.

**State of California, Office of Statewide Health Planning & Development** **08/92 to 09/93**

Managed full life cycle for development of a client-server based system to support the annual hospital auditing requirements of OSHPD. The system used Gupta's SQLWindows for applications accessing SQLBase Server(OS/2) and exchanged data with the existing DB2 system on the 3090.

Responsible for:

- Data, functional, and process analysis: normalized logical data model, decomposition diagrams, and entity/process matrices.
- Application design: application requirements, organization structure, screen functions, batch specifications, physical DB design, and prototype applications.
- Application development: SQLWindow applications per design requirements.
- Testing and documentation: system/user test plans, documentation, on-line help.
- Training development: training plan/program for each application.

**Public Utilities Commission, Bureau of Management Information Svcs** **03/91 to 12/92**

Designed and implemented database and application changes to the SF Water Billing system to add functionality not supported by original design.

**City & County of San Francisco, Information Services Division** **01/90 to 05/91**

Defined requirements and designed a database application to provide property related information for all City departments, with a primary focus on supporting the business functions of the Assessor, Controller and Tax Collector.

As the project Senior System Designer:

- Provided technical guidance to project members on development methodologies.
- Developed a normalized Logical Data Model documenting data requirements and relationships. Trained project staff in data modeling techniques. Led modeling sessions to define data requirements and business functions.
- Designed relational database (Oracle) to support City-wide property requirements.
- Designed application screens and processes to support functional requirements. Developed prototype applications in SQLWindows to demonstrate processes and validate system design.

**Public Utilities Commission, Bureau of Management Information Svcs** **03/86 to 01/90**

Developed and implemented a major portion of the Water & Sewer Customer Billing System for the San Francisco Water Department. Part of a team of consultants assembled to complete the system after the previous contractor defaulted.

- Designed and implemented batch processing logic for voucher processing, payment processing, meter reading; enhanced billing, and completed lien-shutoff processing. Reviewed work already done to correct design and programming errors. Developed design, specifications, and programs for areas where the previous work was unacceptable.
- Reviewed, revised, and developed on-line processes for Meter Reading, Auditing, Refund processing and other functions.

Developed and implemented the Vehicle Maintenance System (VMS) for MUNI (all city public transit).

- Reviewed existing functional requirements. Developed screen and processing requirements, and the external specification for the two major sections of the system (work activity processing and scheduling). Reviewed design and specifications for other sections of the system.
- Developed logical data model and worked with DBA to implement physical database design.
- Programmed dialogs for work activity processing; set up application menus.
- Provided guidance to BMIS employees.

*Bechtel Power Corporation*

03/83 to 05/86

Provided consulting services to Bechtel on financial applications development.

- Designed and implemented Bechtel's domestic jobsite payroll system to run on IBM PC/S36/S38. Developed a system design to meet Bechtel's US-wide jobsite requirements. Wrote requirements statements, external/internal specifications. Maintained project plan, directed team of 4 to 6 analysts and programmers during system development and implementation.
- Designed and developed a screen driven report writer allowing users to create custom reports and transfer payroll data to other applications.
- Developed an enhanced payroll system to accommodate both Bechtel's domestic permanent office requirements and London office requirements. Provided technical direction to US and London staff during programming and system implementation. Developed interface to support transfer of jobsite labor distribution to the mainframe.

**Prior Employment:**

**Product  
Manager**

*Bank of America, Product Management, Personnel Systems*

07/81 to 02/83

Product Manager for Payroll, Human Resource Information Reporting Systems.

Managed salary program monitoring and modeling systems for BofA. Responsible for total development cycle from inception through implementation.

- Managed a variety of projects through the product development cycle. Assigned priorities, estimated and scheduled resources, and controlled and monitored progress to implementation.
- Evaluated user requests. Conducted preliminary analysis and cost/benefit evaluations.
- Developed solutions to user information requirements. Wrote specifications, developed test criteria and test plans, and conducted systems and acceptance testing.
- Developed numerous reporting and analysis systems for Personnel Research in on-line environment using PL/I, NOMAD and MarkIV. Designed and developed a prototype budget planning system on a microcomputer in Pascal, then implemented it on-line using PL/I.
- Participated in data analysis and development of data model for integrating existing personnel systems.

**EDUCATION**    *University of Kansas (BA 1974)*

1971 - 1975