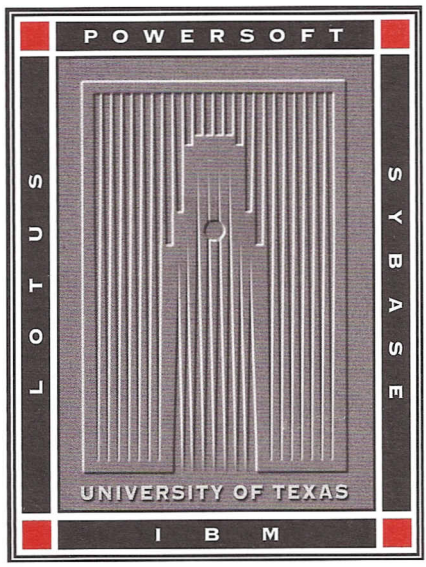

CLIENT/SERVER STRATEGIES FOR ENTERPRISE COMPUTING

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Client/Server Strategies for Enterprise Computing

Sponsored By:
Powersoft Corporation
IBM Corporation
Lotus Development Corporation
Sybase, Incorporated

Produced By:
The University of Texas at Austin, Graduate School of Business,
Information Systems Management Department
Intelligent Financial Perspectives, Inc.
Powersoft Corporation

AGENDA

Sunday

Welcome

2:00-6:00 pm	Registration, Lobby Level Foyer, The Four Seasons Hotel
7:00 pm	Welcome Dinner, The Four Seasons Hotel *Host: Powersoft Corporation*

Monday

Building Foundations for Client/Server Computing

7:00-8:00 am	Registration continued outside breakfast room at Four Seasons
7:30 am	Continental breakfast at The Four Seasons
8:30 am	Welcome - Agenda and Objectives at the University of Texas *Dr. Timothy Ruefli & Bill Reynolds*
9:30 am	Management Strategies and Frameworks for Client/Server Computing *Dr. Jay Cooprider*
11:00 am	Collaborative Computing Lab: Client/Server Transition Strategies *Sara Kelly*
12:00 pm	Luncheon
1:30 pm	Technical Frameworks and Architectures for Client/Server Computing *Bill Reynolds*
3:00 pm	Client/Server Development Lab: Information at Your Fingertips *Robert Bearden*
4:00 pm	Industry Panel: Client/Server at Work
5:30 pm	Open Lab
7:30 pm	Dinner at The Oasis on Lake Travis *Host: IBM Corporation*

Tuesday

Evaluating the Organizational Impact of Client/Server Computing

7:30 am	Continental breakfast at The Four Seasons
8:30 am	Assessing the Value of the Investment in Client/Server Technology at the University of Texas *Bill Reynolds*
9:00 am	The Economics of Information Systems Approach *Dr. Anitesh Barua*

10:00 am	The Option Pricing Approach *Bill Reynolds*
11:00 am	The Strategic Value Approach *Dr. Jay Cooprider*
12:00 pm	Luncheon
1:30 pm	Valuation Case Study: Assessing the Client/Server Investment *Kay M. Victor*
2:30 pm	Reengineering and the Client/Server Environment: Introduction *Dr. Keri Pearlson*
3:30 pm	Reengineering Case Study: Business Process Redesign for IS *Dr. Keri Pearlson*
5:00 pm	Reengineering and the Client/Server Environment: Conclusions *Dr. Keri Pearlson*
5:30 pm	Open Lab
7:30 pm	Dinner at The County Line *Host: Lotus Development Corporation*

Wednesday

Implementing Client/Server Computing

7:30 am	Continental breakfast at The Four Seasons
8:30 am	Vendor Panel: Open Systems and Client/Server Computing at the University of Texas
10:00 am	Road Map to Client/Server Products and Vendors *Bill Reynolds*
11:30 am	Planning Lab: Key Issues for the Client/Server Transition
12:00 pm	Luncheon
1:30 pm	Developing a Client/Server Transition Plan *Dr. Jay Cooprider*
2:30 pm	Conclusion
3:00 pm	Departure

Note: Shuttle vans will be available for transportation to and from seminar events. Shuttle schedule will be available upon arrival. Breaks will occur throughout the conference for personal business.

Course Description

"Client/Server Strategies for Enterprise Computing" is an executive seminar intended for CIOs, Information Systems Directors, and other senior IS executives responsible for developing or refining IS strategies utilizing client/server (c/s) architectures or applications. This seminar will present a holistic approach to c/s implementation by combining management frameworks and a strategic business perspective with technical frameworks and architectures. This combination will be unique in its ability to address the complete range of business and technology challenges that must be met in order to successfully utilize c/s architectures. The maze of business, organizational, technical and architectural issues facing these executives will be addressed, as well as the role of c/s technology in organizational design and business process redesign.

At the conclusion of the seminar, executives should be prepared to better align organizational strategy with c/s technologies. They should be able to initiate a technology plan for transition to a c/s architecture and identify the value and real costs of c/s to the organization.

Course Materials

Glossary
C/S and Open Systems terminology

Reference Package
A collection of key articles and papers
supporting the topics presented during the course

Bibliography
An extensive listing of articles and publications
on the topics presented during the course

Lecture Notes
Copies of slides and notes from each presentation

Case Studies
A package of case studies and background information
that will be used in the course

MONDAY: BUILDING FOUNDATIONS FOR CLIENT/SERVER COMPUTING

Management Strategies and Frameworks for C/S Computing
The choice of an information architecture for enterprise computing is a strategic decision, not simply a technical one, and must include analysis and design from a strategic management perspective. This session introduces the organizational issues of c/s computing by examining the concepts of the firm's strategic intent, core competencies, competitive advantage, and critical business practices. Key frameworks for creating strategic alignment between the firm's technology plans and its business strategy are highlighted, using a variety of management models to illustrate how to position your enterprise for maximum competitive advantage through c/s technology. *Instructor: Dr. Jay Cooprider*

Collaborative Computing Lab: Client/Server Transition Strategies
C/S technology transforms the way people work together. This lab will utilize a c/s-based tool, Lotus Notes, to facilitate a group discussion about the strategic issues that must be addressed in order to develop a c/s transition plan. This discussion will continue throughout the seminar and participants will be encouraged to use Notes regularly to communicate with faculty and other participants about seminar topics as they arise. Many course materials, documents and additional information will be made available through Notes during the seminar. *Instructor: Sara Kelly*

Technical Frameworks and Architectures for Client/Server Computing
The strategic technology initiatives that allow businesses to achieve competitive advantages must be matched with appropriate implementation frameworks and architectures. Frameworks such as layered development, the spiral life cycle, rapid prototyping and object-oriented development will be used to illustrate how to implement a c/s computing architecture. Architectures for information, data, objects, decision support, and transaction processing will be presented. Two-tier and three-tier c/s architectures will be discussed as well as the basic classifications of c/s applications such as distributed presentation, database server, transaction processing and peer-to-peer. Specific approaches like the Open Software Foundation's DCE and Apple Computer's VITAL will also be covered. *Instructor: Bill Reynolds*

Client/Server Development Lab: Information at Your Fingertips
The tools and techniques used for c/s application development are radically different than those used to develop host-terminal applications. Participants will use PowerBuilder and PowerMaker to enhance an existing c/s application that accesses a Sybase SQL Server database. This lab will illustrate the power of new c/s development concepts such as event-driven programming, set-oriented data manipulation, and object-oriented programming. The application itself will use OLE and DDE to implement the idea of "Information at Your Fingertips" through the use of the Windows graphical user interface. *Instructor: Robert Bearden*

Industry Panel: Client/Server at Work
Executives from four companies that have successfully implemented c/s computing in their organizations will present their experiences and identify the major hurdles they faced. Participants will then have an opportunity to ask questions of the panelists. The hurdles that are identified during this session will then be used throughout the remainder of the seminar to guide participants toward the development of a comprehensive c/s strategy and transition plan.

Tuesday: Evaluating the Organizational Impact of Client/Server Computing

Assessing the Value of the Investment in Client/Server Technology: The Economics of Information Systems Approach
Assessing the bottom line impact of any information technology investment is a significant challenge confronting senior information systems managers. Information economics expands the idea of cost into the concept of value based on improved business performance as a result of information technology. This session will focus on the measurement of information technology business value using various micro-economic and process oriented approaches. After a survey of state-of-the art techniques for assessing information technology contribution, the emphasis of the session will shift to specific measurement issues in c/s environments. This will involve the development and operationalization of relevant c/s performance constructs. Examples include the reduction of network performance (negative externalities), enhanced coordination (positive externalities), system responsiveness, flexibility and other customer oriented measures. Techniques for assessing information technology impacts on the above performance measures will also be discussed.
Instructor: Dr. Anitesh Barua

Assessing the Value of the Investment in Client/Server Technology: The Option Pricing Approach
Information systems investments can provide companies with real options that allow them to exercise strategies for future growth or cost savings. These options are similar to traditional call options on securities and represent a real value to the firm. Managers can better align the business, information technology and financial strategies of the company by including the value of these options in any evaluation and justification of information technology investments. Traditional option pricing theory and techniques will be applied to an investment in c/s technology. This approach will then be discussed in the context of corporate strategy and c/s investments.
Instructor: Bill Reynolds

Assessing the Value of the Investment in Client/Server Technology: The Strategic Value Approach
The ability to value c/s's perceived contribution to corporate goals requires going beyond the traditional methods of evaluating information systems that are typically based on the return-on-investment capital budgeting model. Other dimensions of value which explicitly consider such issues as the corporate mission and culture and the management decision-making processes of the firm may have tremendous long-term value to the business, yet they are usually ignored by the traditional processes of valuation. The strategic

value approach to valuation adapts traditional cost-benefit analysis by expanding the concept of benefit to classes of technology value and explicitly considering risk rather than just cost, all within the context of the firm's value chain. *Instructor: Dr. Jay Cooprider*

Valuation Case Study: Assessing the Client/Server Investment
A case study will be presented that contains many of the elements and issues that have been discussed during the seminar. The company presented in the case will be in the process of evaluating several technology investments, including c/s. Spreadsheet templates and valuation frameworks will be used to value these investment opportunities. The results from the three different valuation techniques will be discussed and compared. *Instructor: Kay M. Victor*

Reengineering and the Client/Server Environment: Introduction
A business enterprise can either be positioned for failure through rigidity or for success through continuous reaction and adaptability to the dynamics of customers, suppliers, and competitors. C/S computing can enable the enterprise to position itself for immediate competitive advantage and to be adaptable for future advantage. This session will address key issues in reengineering and the role of the information systems organization. The core concepts of reengineering will be reviewed and then extended to the information systems organization through two perspectives. First, the role of the IS organization in corporate-wide reengineering will be examined. Second, reengineering the IS organization to manage the c/s environment will be discussed. *Instructor: Dr. Keri Pearlson*

Reengineering Case Study: Business Process Redesign for IS
A case study will be presented that contains many of the elements and issues that have been discussed during the seminar. The company presented in the case will be in the process of reinventing the information systems function. The focus of this discussion will be to design an Information Systems Department that meets the needs of the organization and to identify how and where c/s technology can enable these changes. *Instructor: Dr. Keri Pearlson*

Reengineering and the Client/Server Environment: Conclusions
The issues that have been identified and the recommendations that have been made during the previous three sessions will be summarized. The focus will be on the vision of a new information systems organization, the cross-functional demands of this new organization, the role of c/s in the implementation of the vision, and measurement processes for identifying when or if the vision has been reached. *Instructor: Dr. Keri Pearlson*

WEDNESDAY: IMPLEMENTING CLIENT/SERVER COMPUTING

Vendor Panel: Open Systems and Client/Server Computing
Executives from Powersoft, Lotus, IBM, and Sybase will present their company's strategic direction with respect to the growing emphasis on the relationship between open systems and c/s technology. Participants will then have an opportunity to ask questions of the panelists. Participants should focus on outstanding issues that have been identified during the course of the seminar in order to complete the development of a comprehensive c/s strategy and transition plan.

A Road Map to Client/Server Products and Vendors
C/S system development requires the use of a "suite" of software tools including systems analysis and design, software development, data management, organizational and process reengineering, and end-user reporting. C/S development tools also address the needs of several audiences including IS developers, business analysts, expert end-user developers, and traditional end-users. These tools must support the strategic direction of the organization as well as the development efforts of the IS department and other users. A framework will be presented for organizing the various tool categories into a comprehensive c/s toolbox. A selection of popular tools will then be discussed, categorized and placed into the toolbox.
Instructor: Bill Reynolds

Planning Lab: Key Issues for the Client/Server Transition
This seminar has presented frameworks and architectures to be used in the planning and implementation of c/s technology, as well as organizational and financial implications of the technology. A large number of critical issues have been identified at this point and will need to be prioritized for the development of a transition plan. This session will use a c/s groupware product called VisionQuest to brainstorm on these issues, rate them as to importance and develop a ranking, and then come to a group consensus on the critical success factors for c/s implementation. The result of this session will be used to begin the development of a c/s transition or implementation plan.

Developing a Client/Server Transition Plan
The details of a transition or implementation plan for c/s computing are highly organization dependent, but there are major issues that transcend specific organizations. The technology shift to c/s is the simplest change. This session will organize many of the technical issues that have been discussed and place them into a list of action items that can then be adjusted to each participants organization as they develop individual plans. The greatest challenge is the realignment of the strategic business areas of the firm with the new c/s paradigm. Using the issues that have been identified during the seminar, the participants will draft an initial list of action items for repositioning the organization to take advantage of c/s technology.
Instructor: Dr. Jay Cooprider

Anitesh Barua, PhD

Dr. Anitesh Barua is an Assistant Professor in the Management Science and Information Systems department of the Graduate School of Business at the University of Texas at Austin. Dr. Barua received his M.S. and Ph.D. in Information Systems from Carnegie-Mellon University in 1991. His research interests include business value of IT, strategic IT investments, and computing issues in team based organizations. Dr. Barua has received several awards for his research and teaching, including the William W. Cooper Doctoral Dissertation award in Management and Management Science from Carnegie-Mellon University.

Robert L. Bearden

Mr. Bearden is a Certified Public Accountant and spent several years with the accounting firm of Coopers and Lybrand in Dallas, Texas. He was involved in traditional audit activities and was also involved in the development and implementation of various computer systems. These systems were used to analyze loan packages being sold to the RTC, to analyze information used in conjunction with feasibility studies, and to evaluate information systems for control weaknesses. Bob has developed c/s applications using PowerBuilder and Sybase for large organizations, including most recently 3M. Mr. Bearden received his B.B.A. in Accounting with a minor in French from the University of Oklahoma and is currently working toward his M.B.A. in Information Systems Management at the University of Texas at Austin.

Jay G. Cooprider, PhD

Dr. Jay G. Cooprider is an Associate Director of the Information Systems Management program and research center, and an Assistant Professor in the Management Science and Information Systems department at the Graduate School of Business at the University of Texas at Austin. He earned his B.S. in Computer Science and Electrical Engineering at Massachusetts Institute of Technology and his Ph. D. in Management with a specialization in Information Technology from the MIT Sloan School of Management. Dr. Cooprider has extensive computer industry experience, and has consulted with many leading technology firms in the world on the use of organizational partnerships as a management strategy, CASE technology, and high performance systems development teams.

Sara M. Kelly

Ms. Kelly spent several years with the accounting firm of Price Waterhouse in Houston, Texas. During her tenure at Price Waterhouse she gained experience in various industries such as retail, construction, oil and gas, and not-for-profit. Representative client engagements include Exxon USA, Specialty Retailers, Inc., and M. W. Kellogg. Sara has developed c/s applications using Lotus Notes for various organizations. Ms. Kelly received her B.B.A. in Accounting from Southern Methodist University and is currently working toward her M.B.A. in Information Systems Management at the University of Texas at Austin.

Keri Pearlson, PhD

Dr. Keri E. Pearlson is an Assistant Professor in the Department of Management Science and Information Systems at the Graduate School of Business at the University of Texas at Austin where she teaches management information systems, business reengineering, and creativity management courses to MBAs and executives. Her research activities involve topics in reengineering, personal portable technologies (PPTs), and customer service support systems. Dr. Pearlson has held various positions in academia and industry. She performed research for faculty at the Harvard Business School and for CSC/Index's Prism Group. Dr. Pearlson worked for AT&T designing and selling telecommunications and computer systems for national accounts and as an instructor and member of the technical staff at AT&T's corporate training center in Cambridge, Massachusetts. She has also worked for Hughes Aircraft Company as an industrial engineer. Dr. Pearlson earned her Bachelors Degree in Applied Mathematics and Masters Degree in Industrial Engineering from Stanford University, and her Doctorate in Business Administration (DBA) in Management Information Systems from the Harvard Business School.

D. William Reynolds Jr.

Mr. Reynolds is the founder and President of Intelligent Financial Perspectives, Inc. ("IFP") in Austin, Texas. IFP was started in 1989 as a software development and technology consulting firm specializing in financial applications. IFP was formed with the goal of helping organizations apply information technology in order to achieve competitive advantages, to help organizations understand the financial and organizational implications of information technology projects, and to improve the contribution of computer systems to bottom line financial results. Prior to starting IFP, Mr. Reynolds spent 8 years as a management consultant with two nationwide consulting firms who specialize in the financial services industry. As a consultant, he has designed and implemented financial reporting systems and computerized modeling systems for financial institutions and other corporate clients. He has conducted seminars in financial management, object-oriented analysis and design, and c/s development. Mr. Reynolds holds a B.S. degree in Finance from the University of California at Berkeley and an M.B.A. in Information Systems Management from the University of Texas at Austin. He is currently on the MSIS Steering Committee in the Graduate School of Business at the University of Texas at Austin and will be a Lecturer on c/s technology beginning in the 1993/1994 academic year.

Timothy W. Ruefli, PhD

Dr. Timothy W. Ruefli is the Daniel B. Stewart Centennial Professor in Business, Director of the Information Systems Management Program of the Graduate School of Business, and is the Frank C. Erwin Jr. Centennial Research Fellow of the IC^2 Institute of the University of Texas at Austin. He has published numerous articles, which have appeared in leading academic and practitioner journals in the U.S., Europe, and Japan. He is author of the book Ordinal Time Series Analysis: Methodology and Applications in Management Strategy and Policy. His areas of research, teaching and consulting include corporate strategy, systems theory, management science, and microeconomics. Dr. Ruefli has taught at the Carnegie Institute of Technology, the University of British Columbia, as well as the University of Texas. He has been a consultant on strategic management to such companies

as RAND, McDonnell-Douglas, IBM, and the Texas Association of Oil Marketers. He is also an Associate Faculty Member of the Instituto Technologico y de Estudios Superiores de Monterrey of Monterrey, Mexico. He holds a B.A. from Wesleyan University, a M.S. from Carnegie Institute of Technology and a Ph.D. from Carnegie-Mellon University.

Kay M. Victor

Ms. Victor has both domestic and international experience in the fields of information systems and engineering management. She began her career as a process engineer with the Procter and Gamble Paper Products Company. From P&G she moved on to Apple Computer, where she was in charge of facilities engineering for the Carrollton, Texas plant. Combing her technical management and personal computing experience, she then co-founded Centurion Management Services in 1986. Centurion specializes in complete small business personal computer and network installations, matching business domain needs to computing. Ms. Victor served on the NATO Frigate Replacement project as assistant chief engineer from 1988-1989. In addition she has worked as a graphics consultant and trainer to the NATO general briefing staffs. She holds a B.A. in Environmental Science and Communications from the University of Wisconsin, Green Bay. She also holds a Master of Science in Management from Hampton University. She is currently a doctoral candidate at the University of Texas at Austin in Management Information Systems. Ms. Victor's current research and consulting interests include the measurement of software quality and flexibility, the role of advanced technologies in reengineering and the use of information systems for strategic communications and coordination. She also conducts training in Windows applications and graphics at major corporations in Austin.

AIR TRANSPORTATION

Attendees will receive a 10% discount on American Airlines seven day advance purchase flights to Austin for this program. To make reservations, contact Kelly, Linda, or Catherine at American Express Travel by calling 1-800-828-9296. To obtain your flight discount, please identify yourself as a participant in the *Client/Server Strategies for Enterprise Computing* program. We encourage you to make reservations as soon as possible to secure the flight of your choice.

HOTEL REGISTRATION INFORMATION

The Four Seasons Hotel Austin will serve as program headquarters. Reservations must be made directly with the hotel at (512) 478-4500. Discounted rates of $96 for city view and $106 for river view for single or double rooms are available for seminar attendees. To receive the discounted rate, please inform the reservations agent that you are participating in the *Client/Server Strategies* program. Check in time is 3 pm. Check out time is 1 pm.

Four Seasons Hotel Austin 98 San Jacinto Blvd., Austin, TX 78701
Ph: 512-478-4500 Fx: 512-477-0704

GROUND TRANSPORTATION

The Four Seasons Hotel is a 10 minute ride from Robert Mueller Airport via I-35, or a $7 - $10 taxi ride. Shuttle service from The Four Seasons to the University of Texas will be provided in the mornings and evenings Monday through Wednesday. Use of the shuttle service is strongly encouraged, as parking on the UT campus is extremely limited. Transportation will also be provided to and from off-site social events.

PROGRAM REGISTRATION INFORMATION

Registration will be open on Sunday from 2 pm - 6 pm, and Monday from 7 am - 8 am in the lobby level foyer at The Four Seasons. Please register upon arrival to receive information about meals, events and transportation.

BUSINESS/HOSPITALITY SUITE

A boardroom at The Four Seasons will be open to seminar attendees throughout the session as a work, meeting and gathering space. The room is equipped with telephones, modems, fax machine and refreshments.

MEALS

All meals will be provided for session attendees. Breakfast will be served from 7 am - 8:15 am on the lobby level of The Four Seasons. Lunches will be served on campus. Dinners will be hosted by session sponsors and held at various off-site locations.

RECREATION

The Four Seasons spa will be available to guests at no charge from 6 am - 9 pm. The Four Seasons sits on the bank of Town Lake, along the Hike and Bike Trail, offering facilities for running, biking and rowing. Bicycles may be rented near the hotel for $4 - $6 per hour. Canoes or paddle boats may be rented from Capital Cruises for $10 - $20 per hour. Running maps are available from the hotel. Attendees will also receive recreation passes to the athletic facilities at UT.

GUEST PROGRAM

A limited number of guest tickets will be available for social functions. Tickets are $125 each and admit the holder to each of the evening dinner functions. Tickets for individual functions will not be sold separately. Guest tickets must be purchased through Elaine Couillard two weeks prior to each session. Due to business nature of the program, it is not appropriate for children to attend the functions.

DRESS

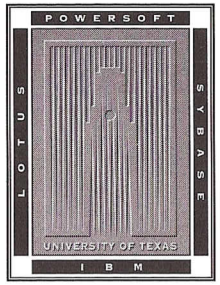
Suggested dress for the session is business casual.

CANCELLATION POLICY

To cancel registration and receive a full refund, please notify Powersoft Corporation 15 business days prior to the session. A 50% refund will be given for notification received 10 business days prior to the session. No refunds will be given for cancellations received later than 10 business days prior to the session.

Please address any questions to Elaine Couillard, at (617) 238-1115.

REGISTRATION FORM



CLIENT/SERVER

STRATEGIES

FOR

ENTERPRISE

COMPUTING

Please register me for the session indicated.
Registration deadline is 2 weeks prior to each session.

Program Date	*Registration Deadline*
❑ June 20-23	June 5
❑ July 11-14	June 26
❑ July 25-28	July 10
❑ August 8-11	July 24
❑ August 15-18	July 31
❑ August 22-25	August 7

My method of payment for the $2,000 program fee is:

❑ Check
❑ P.O. # _____
❑ Charge to my credit card.
❑ MasterCard ❑ VISA ❑ American Express

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Card Number

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Type of Business

For more information, call Elaine Couillard at (617) 238-1115.

When enclosing payment, please mail this form along with payment to Powersoft Corporation, Attn: Elaine Couillard, 70 Blanchard Road, Burlington, MA 01803. Make checks payable to Powersoft Corporation. Credit card payments can be faxed to Elaine Couillard at (617) 272-9076.

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