

Annotated Bibliography on Systems Architecture

There are a number of references that will help you to understand my perspective for engagements. They are offered here for your interest. My basic approach to design is systemic and grounded in the research literature on Socio-Technical systems. My methods derive from Strategic Management, Total Quality Management, and Socio-Technical Systems Design. It is not necessary that you read any of this material, but if you wish to understand my perspective, these references will help.

Ackoff, Russell L., The Art of Problem Solving, John Wiley & Sons, New York, 1978.

Ackoff's book, while somewhat old now is still a good read and a foundation for problem solving techniques.

Adams, James L., Conceptual Blockbusting: A Guide to Better Ideas, 3rd Ed., Addison-Wesley Publishing, Reading, Ma., 1986.

Creativity is a large part of architectural design. Adams helps break your mind free.

Albrecht, Karl, The Only Thing That Matters, HarperBusiness, New York, 1992.

An older but still good book on service.

Anderson, David R., Dennis J. Sweeney, and Thomas A. Williams, An Introduction to Management Science, 6th Ed., West Publishing Company, St. Paul, Mn., 1991.

Andrews, D. C. and N. S. Leventhal (1993). Fusion: Integrating IE, CASE, and JAD. Englewood Cliffs, NJ, Prentice Hall Publishing.

Andrews, Dorine C. & Susan K. Stalick, Business Reengineering, Yourdon Press, Englewood Cliffs, NJ, 1994.

This is in my opinion, one of the very best and most understandable books on reengineering. It is far more readable than most and has very practical advice on doing the job.

Argyris, Chris and Donald A. Schon, Organizational Learning: A Theory of Action Perspective, Addison-Wesley Publishing, Reading, Ma. 1978.

Argyris, Chris, Knowledge for Action, Jossey-Bass Publishers, San Francisco, 1993.

Argyris, Chris, On Organizational Learning, Blackwell Business, Cambridge, Mass, 1992.

Argyris, Chris, Overcoming Organizational Defenses, Allyn and Bacon,

Boston, 1990.

This is an excellent book about how the people in an organization defend themselves against change. Essential reading for anyone who needs to breakdown barriers to change.

Arkin, Herbert, and Raymond R. Colton, Statistical Methods, Barnes & Noble, New York, 1966.

Asymmetrix Corporation, InfoModeler, A Guide to FORML, Asymmetrix Corporation, Bellevue, 1994.

InfoModeler is a sophisticated design tool based on the theory expounded in the book by Nijssen (see below). While the theory is not for the casual reader, the tool is actually quite simple to use and develops database specifications quickly and easily.

Babbie, Earl, The Practice of Social Research, 5th Ed., Wadsworth Publishing, Belmont, Ca., 1989.

Bair, James H. and Laura Mancuso, The Office Systems Cycle, Hewlett-Packard Company, Palo Alto, 1985.

Bales, Robert F., and Stephen P. Cohen, SYMLOG: A System for the Multiple Level Observation of Groups, The Free Press, New York, 1979.

Band, William A., Creating Value for Customers, John Wiley & Sons, New York, 1991.

The premise of this book is that customers are looking for value for their money. This book is about creating that value in customers eyes.

Barcus, Sam W. and Joseph W. Wilkinson, Handbook of Management Consulting Services, McGraw-Hill, New York, 1995.

Barr, Lee and Norma, The Leadership Equation, Eakin Press, Austin, Tx, 1989.

Bartholomew, Martin F., Successful Business Strategies Using Telecommunications Services, Artech House, Boston, 1997.

A rather expensive book that nonetheless is essential reading for any organisation that is using telecommunications as part of their fundamental strategy.

Barton, Richard F., A Primer on Simulation and Gaming, Prentice Hall, Englewood Cliffs, NJ, 1970.

Barzun, Jacques & Henry F. Graff, The Modern Researcher, 3rd Ed., Harcourt Brace Jovanovich, New York, 1977.

Bechtell, Michele L., Untangling Organizational Gridlock, ASQC Quality Press, Milwaukee, Wi., 1993.

Beck, Robert C., Applying Psychology, Prentice-Hall, Englewood Cliffs, NJ, 1992.

Bennett, Douglas, Designing Hard Software: The Essential Tasks, Manning Publications, Greenwich, Ct, 1997

Beyer, Hugh & Karen Holtzblatt, Contextual Design: Defining Customer Centered Systems, Morgan-Kaufman, San Francisco, 1998.

This book presents a complete methodology for approaching design problems. While I do not follow its prescriptions precisely, it discusses all of the points I focus on. I will bring to bear these and many other tools as needed during the engagement.

Blanchard, Ken & Sheldon M. Bowles, Raving Fans, William Morrow and Company, New York, 1993.

A small book whose premise is that you don't want customers or relationships, what you want is 'Fans.'

Block, Peter, Flawless Consulting, Pfeiffer & Company, San Diego, 1981.

This is THE book on consulting. The consultant's bible. It doesn't talk about technical areas or about business issues, but rather about how to BE a consultant.

Block, Peter, Stewardship, Berrett-Koehler Publishers, San Francisco, 1993.

Blumberg, Donald F., Managing Service as a Strategic Profit Center, McGraw-Hill, New York, 1991.

This book is focused on making service an important profit centre for a business. The insights though about how to deliver service that customers will value is useful whether or not service is considered to be a profit centre.

Boar, Bernard H., Information Technology with Business Strategies, John Wiley & Sons, New York, 1994.

Boar, Bernard H., The Art of Strategic Planning for Information Technology, John Wiley & Sons, New York, 1993.

Booch, Grady, Object Oriented Design with Applications, 2nd Ed., Benjamin-Cummings, Redwood City, 1994.

Borenstein, Nathaniel S., Programming as if People Mattered, Princeton University Press, Princeton, 1991.

Bossel, Hartmut, Modeling and Simulation, A.K. Peters Ltd, Wellesley, Ma., 1994.

Bowers, David G., Systems of Organization: Management of the Human Resource, The University of Michigan Press, Ann Arbor, Mi, 1978.

Brady, John, The Craft of Interviewing, Vintage Books, Random House, New York, 1976.

Interviewing is a craft, requiring special skills and attention to developing them. This book is primarily for reporters, but there is much that can be learned here.

Bridges, William, The Character of Organizations: Using Jungian Type in Organizational Development, Consulting Psychologist's Press, Palo Alto, Ca., 1992.

Brown, Stephen J. and Mark P. Kritzman, Quantitative Methods for Financial Analysis, 2nd Ed., Dow Jones-Irwin, Homewood, Il., 1990.

Bucciarelli, Louis L., Designing Engineers, MIT Press, Cambridge, Ma, 1994.

Buchanan, B.G. & E.H. Shortliffe, eds., Rule Based Expert Systems, Addison Wesley, Reading Ma, 1984.

Buffa, Elwood S. and James S. Dyer, Management Science/Operations Research, John Wiley & Sons, Santa Barbara, Ca., 1977.

Buhr, R. J. A. and R. S. Casselman (1996). Use Case Maps for Object Oriented Systems. Upper Saddle River, New Jersey, Prentice Hall.

Burke, W. Warner, Organization Development, Addison-Wesley Publishing, Reading, Ma., 1994.

Buschmann, Frank, et.al., A System of Patterns: Pattern Oriented Software Architecture, John Wiley & Sons, New York, 1996.

Bushe, Gervase R. and A. B. Shani, Parallel Learning Structures, Addison-Wesley Publishing, Reading, Ma., 1991.

Cammarano, Roy F., Entrepreneurial Transitions, Griffin Publishing, Glendale, Ca., 1993.

Capezio, Peter & Debra Morehouse, Taking the Mystery out of TQM, Career Press, Hawthorne, NJ, 1993.

Carroll, John M., Editor, Scenario-Based Design: Envisioning Work and Technology in System Development, John Wiley & Sons, New York, 1995.

Scenario development is a very important part of the visioning process to ground systems design in the real world. I use scenarios extensively to help communicate how the system will work.

Chawla, Sarita and John Renesch, Learning Organizations: Developing Cultures for Tomorrow's Workplace, Productivity Press, Portland, Or., 1995.

Checkland, Peter & Jim Scholes, Soft Systems Methodology in Action, John Wiley and Sons, Chichester, England, 1990.

Checkland, Peter, Systems Thinking, Systems Practice, John Wiley & Sons, Chichester, 1981.

Checkland is one of the pioneers in Soft Systems work. His is still one of the best statements of the systems approach and forms a foundation for my work with organisational systems.

Churchill, Gilbert A. Jr., Marketing Research: Methodological Foundations, 5th Ed., Harcourt Brace Jovanovich College Publishers, Fort Worth, Tx., 1991.

Coad, P. & E. Yourdon, Object Oriented Analysis, 2nd Ed., Yourdon Press, New York, 1991.

Cohen, Lou, Quality Function Deployment, Addison-Wesley Publishing Company, Reading, Ma., 1995.

Cohen, William A., How to Make it Big as a Consultant, American Management Association, New York, 1991.

Coleman, Derek, Patrick Arnold, Stephanie Bodoff, Chris Dollin, Helena Gilchrist, Fiona Hayes, and Paul Jeremaes, Object-Oriented Development: The Fusion Method, Prentice Hall, Englewood Cliffs, NJ, 1994.

Collier, John Jr. and Malcolm Collier, Visual Anthropology: Photography as a Research Method, University of Mexico Press, Albuquerque, 1986.

Some of the most important material for a person expecting to learn about culture comes from the Anthropology literature. This book in particular is focused on using photography as a research tool. Taking pictures while researching a site can aid significantly in making your analysis clear and your report compelling.

Cooper, Alan, The Inmates are Running the Asylum.: Why High Tech Products Drive Us Crazy and How to Restore the Sanity, Sams, Indianapolis, 1999.

This is primarily a book about software development with the author espousing his own method for User Interface design. I have borrowed extensively from here in my own work concepts such as 'personas' to help ground the design to specific persons.

Cooper, Harris and Larry V. Hedges, Eds., The Handbook of Research Synthesis, Russell Sage Foundation, New York, 1994.

Cox, Earl, The Fuzzy Systems Handbook, Academic Press, Cambridge, Ma., 1994.

Crosby, Philip B., Quality is Free, Mentor Books, New York, 1979.

Cross, Kelvin F., John J. Feather, & Richard L. Lynch, Corporate Renaissance, Blackwell Business, Cambridge, Ma., 1994.

- Crow, Edwin L, Frances A. Davis, and Margaret W. Maxfield, Statistics Manual, Dover Publications, New York, 1960.
- Daetz, Doug, Bill Barnard, and Rick Norman, Customer Integration: The Quality Function Deployment (QFD) Leader's Guide for Decision Making, John Wiley & Sons, New York, 1995.
- Daft, Richard L., Organisation Theory and Design, West Publishing Company, St. Paul, Mn., 1989.
- A textbook on the background theory behind modern organisational theory and organisational design. Highly recommended for the excellent presentation of theoretical issues. Useful if you want to delve into the background issues.
- Davenport, Thomas H. and Laurence Prusak, Working Knowledge: How Organisations Manage What They Know, Harvard Business School Press, Boston, 1998.
- Knowledge has always been important to work, but lately its been getting a lot of press as the next, 'big thing' for business. I have always believed that knowledge needs to be managed, This book makes the case very effectively.
- Davenport, Thomas H., Process Innovation, Harvard Business School Press, Boston, Ma., 1993.
- Davis, Duane & Robert M. Cosenza, Business Research for Decision Making, Wadsworth Publishing, Belmont, Ca. 1988.
- DeBono, Edward, Serious Creativity, HarperBusiness, New York, 1992.
- DeMarco, T., Structured Analysis and System Specification, Yourdon Press, New York, 1978.
- Denison, Daniel R., Corporate Culture and Organizational Effectiveness, John Wiley & Sons, New York, 1990.
- Denzin, Norman K. and Yvonna S. Lincoln, Editors, Handbook of Qualitative Research, Sage Publications, Thousands Oaks, Ca., 1994.
- Derfler, Frank J., Guide to Connectivity, Ziff-Davis Press, Emeryville, Ca. 1991.
- Dillon, J.T., The Practice of Questioning, Routledge, New York, 1990.
- Dillon, Tharam and Poh Lee Tan, Object Oriented Conceptual Modeling, Prentice Hall, Australia, 1993.
- Donovan, John J., Business Reengineering with Technology, Cambridge Technology Group, Cambridge, Ma, 1993.
- Douglas, Evan J., Managerial Economics, Prentice-Hall, Englewood Cliffs, NJ, 1991.

Doyle, Michael and David Straus, How to Make Meetings Work, Jove Books, New York, 1976.

This is a classic reference which should be read by every consultant and architect. It helps you make meetings do what you want them to do.

Durr, William, Building A World-Class Inbound Call Center, TeleProfessional, Inc..

An excellent, very readable manual to constructing a world-class call centre organisation. It is written from the viewpoint of the call centre manager.

Dutka, Alan, AMA Handbook for Customer Satisfaction, NTC Business Books, Lincolnwood, Il., 1994.

The focus of this book is measuring customer satisfaction.

Dyer, William G., Contemporary Issues in Management and Organization Development, Addison-Wesley Publishing Company, Reading, Ma., 1986.

Dyer, William G., Team Building: Current Issues and New Alternatives, Addison-Wesley Publishing, Reading, Ma., 1995.

Emerson, Robert M., Rachel I. Fretz, and Linda L. Shaw, Writing Ethnographic Fieldnotes, University of Chicago Press, Chicago, 1995.

Note-taking is an important task and no one has paid greater attention to the skill than Anthropologists. There is much to learn about how to take notes and then turn them into useful information.

Erikson, B.H. and T. A. Nosanchuk, Understanding Data, McGraw-Hill Ryerson Ltd, Toronto, 1977.

Ernst & Young, Total Quality: An Executive's Guide for the 1990s, Business One Irwin, Homewood, Il, 1990.

Fallon, Howard, How to Implement Information Systems and Live to Tell About It, John Wiley & Sons, New York, 1995.

Implementing any system, whether an information system or an organisational system is fraught with danger. This book offers many insights into how to organise and manage the process. I use these techniques for more than technology systems.

Fast, Julius, Body Language in the Workplace, Penguin Books, New York, 1991.

Fast, Julius, Body Language, M. Evans and Company, New York, 1970.

Flowler, Floyd J., Survey Research Methods, Sage Publications, Newbury Park, London, 1993.

Ford, Kenneth M. and Jeffrey M. Bradshaw, Knowledge Acquisition as Modeling Part I., John Wiley & Sons, New York, 1993.

Forrester, Jay W., Industrial Dynamics, Productivity Press, Portland, Or., 1961.

Forrester, Jay W., Principles of Systems, Productivity Press, Cambridge, Ma., 1971.

Jay Forrester was the original inventor of System Dynamics, the basis for such tools as iThink and others. This is a powerful, yet conceptually simple system that allows you to model processes in detail and turn the models into simulations.

Forsyth, Donelson R., Group Dynamics, 2nd Ed., Brooks/Cole Publishing, Pacific Grove, Ca., 1990.

Fowler, Floyd J., Survey Research Methods, 2nd Ed., Sage Publications, Newbury Park, Ca., 1993.

Freedman, Daniel P. and Gerald M. Weinberg, Walkthroughs, Inspections, and Technical Reviews: Evaluating Programs, Projects, and Products, 3rd Ed., Little, Brown and Company, Boston, 1982.

French, Christopher W., Eileen Alt Powell, and Howard Angione, The Associated Press Stylebook and Libel Manual, Addison Wesley, Reading, Ma, 1980.

French, Wendell L. and Cecil H. Bell Jr., Organization Development: Behavioral Science Interventions for Organization Improvement, Prentice Hall, Englewood Cliffs, NJ, 1995.

Fripp, John, Learning Through Simulations, McGraw Hill, London, 1993.

Gable, Robert A., Inbound Call Centers: Design, Implementation, and Management, Artech House, Boston, 1993.

This is a more technical book on building an inbound call centre that stops short of many of the issues important to managers. An excellent read for a technologist just starting to build a call centre.

Galegher, Jolene, Robert E. Kraut, and Carmen Egido, Eds., Intellectual Teamwork: Social and Technological Foundations of Cooperative Work, Laurence Erlbaum Associates, Hillsdale, NJ, 1990.

Gane, C., & T. Sarson, Structured Systems Analysis: Tools and Techniques, Prentice Hall, Englewood Cliffs, 1979.

Gause, Donald C., and Gerald M. Weinberg, Exploring Requirements: Quality Before Design, Dorset House Publishing, New York, 1989.

This book is the best book on requirements engineering. It doesn't even talk about the engineering aspects, but focuses on how to define quality requirements. Essential reading for anyone who needs to put together a requirements document.

- Gaver, Donald P. and Gerald L. Thompson, Programming and Probability Models in Operations Research, Brooks/Cole Publishing, Monterey, Ca., 1973.
- George, Stephen and Arnold Weimerskirch, Total Quality Management, John Wiley & Sons, New York, 1994.
- Gery, Gloria J., Electronic Performance Support Systems, Ziff Communications Inc., Cambridge, Ma., 1991.
- Gilbreath, Frank B., Primer of Scientific Management, Hive Publishing Company, Easton, 1985.
- Gilley, Jerry W., Internal Consulting for HRD Professionals, Irwin Professional Publishing, Burr Ridge, Il., 1994.
- Gitlow, Howard, Shelly Gitlow, Alan Oppenheim, and Rosa Oppenheim, Tools and Methods for the Improvement of Quality, Irwin, Homewood, Il., 1989.
- Gladstone, Steve, Testing Computer Telephony Systems and Networks, Flatiron Publishing, New York, 1994.
- Goldstein, Jeffrey, The Unshackled Organization, Productivity Press, Portland, Or. 1994.
- Goodman, Michael R., Study Notes in System Dynamics, The MIT Press, Cambridge, Ma., 1974.
- More about Jay Forrester's System Dynamics.
- Gordon, Judith R., A Diagnostic Approach to Organizational Behavior, 2nd Ed., Allyn and Bacon, Boston, 1987.
- Gredler, Margaret, Designing and Evaluating Games and Simulations, Gulf Publishing, Houston, 1992.
- Green, James Harry, The IRWIN Handbook of Telecommunications Management, Irwin Professional Publishing, Burr Ridge, Ill., 1989.
- An excellent book for managers who must be responsible for telecommunications, but who are not technical experts themselves. Even a technologist will get a lot from this book unless they are very broad in their basic knowledge of telecommunications management. It includes a useful checklist that can be used to evaluate your telecommunications installation.
- Grieco, Peter L. Jr & Mel Pilachowski, Activity Based Costing: The Key to World Class Performance, PT Publications, Palm Beach Gardens, Fl., 1995.
- Griffin, Trenholme J. and W. Russel Daggatt, The Global Negotiator, HarperBusiness, New York, 1990.

Guengerich, Steven and George Schussel, Rightsizing Information Systems, SAMS Publishing, Indianapolis, In, 1994.

Haberman, Richard, Mathematical Models, Prentice Hall, Englewood Cliffs, NJ, 1977.

Hackman, J. Richard and Greg R. Oldham, Work Redesign, Addison-Wesley Publishing Company, Reading, Ma., 1980.

This is the classic book in Work Redesign and well worth consulting when jobs are being redesigned for a new work environment. Any system that you design will involve some amount of Work Redesign. It pays to do it carefully.

Hackos, JoAnn T. & Janice C. Redish, User and Task Analysis for Interface Design, John Wiley & Sons, New York, 1998.

A proper analysis of users needs and tasks is essential to success of the call centre. This book has already become one of the major references on this important topic.

Hall, Richard H., Organizations: Structures, Processes, & Outcomes, Prentice-Hall, Englewood Cliffs, NJ, 1991.

Hammersley, Martyn and Paul Atkinson, Ethnography: Principles in Practice, 2nd Ed., Routledge, London, 1995.

Hanna, David P., Designing Organisations for High Performance, Addison-Wesley Publishing Company, Reading, Ma., 1988.

One of the better books in the Socio-technical systems literature. High performance organisations (including call centres) need to look at themselves differently from other, more mundane organisations.

Harrington, H. James, Business Process Improvement, McGraw-Hill, New York, 1991.

My favorite book on process improvement including a six-stage model for moving from where most organisations are to a World-Class organisation.

Harrington, H. James, Poor Quality Cost, ASQC Quality Press, Milwaukee, 1987.

Harrison, Michael I., Diagnosing Organizations: Methods, Models and Processes, 2nd Ed., Sage Publications, Thousands Oaks, Ca., 1994.

Hersey, Paul and Kenneth H. Blanchard, Management of Organizational Behavior, 6th Ed., Prentice Hall, Englewood Cliffs, NJ, 1993.

Hickman, Linda and Cliff Longman, Case Method: Business Interviewing, Addison-Wesley, Wokingham, England, 1994.

Hicks, Michael J., Problem Solving in Business and Management, Chapman & Hall, London, 1991.

This is my favorite introduction to Problem Solving techniques. It has a broad coverage and has proven very useful over the years. I highly recommend it. It is not a long book, but a very useful one.

Hillier, Frederick S., and Gerald J. Lieberman, Introduction to Operations Research, Holden-Day, San Francisco, 1967.

Hitchins, Derek K., Putting Systems to Work, John Wiley & Sons, Chichester, 1992.

Holly, Krisztina and Chris Brookins, Visual BASIC Telephony, Flatiron Publishing, New York, 1993.

Holtz, Herman, How to Succeed as an Independent Consultant, John Wiley & Sons, New York, 1993.

Hook, Kevin, An Idea A Day for Call Centre Managers, CallCraft, Newdigate, Surrey, 1998.

A collection of short ideas for the call centre manager. Well worth working through even if you only find a few you want to use.

Hook, Kevin, The Human Face of Call Centre Management, CallCraft, Newdigate, Surrey, 1998.

Call Centre management is about the people, not the technology. This book has a lot of good insight in dealing with the people issues.

Hronec, Vital Signs, AMACOM, New York, 1993.

Hronec starts from where Rummmler & Brache left off and provides a comprehensive method for determining the proper metrics for any organisation. I use a variant of this method in developing metric systems for clients.

Hupp, Toni, Craid Polak, and Odin Westgaard, Designing Work Groups, Jobs, and Work Flow, Jossey Bass, San Francisco, 1995.

Ishikawa, Kaoru, Guide to Quality Control, Quality Resources, White Plains, New York, 1982.

Ivey, Allen E., Intentional Interviewing and Counseling: Facilitating Client Development in a Multicultural Society, 3rd Ed., Brooks/Cole Publishing, Pacific Grove, Ca., 1994.

Jacobson, I., M. Christerson, et al. (1992). Object-Oriented Software Engineering: A Use Case Driven Approach. Workingham, England, Addison-Wesley.

This is the original text on Use Case Driven design. It has now largely been superseded by more recent books, but is still an excellent introduction.

Jones, Russell A., Research Methods in the Social and Behavioral Sciences, Sinauer Associates Inc., Sunderland, Ma., 1985.

Keat, Paul and Philip K.Y. Young, Managerial Economics, Macmillan Publishing Company, New York, 1992.

Keeping, E.S., Introduction to Statistical Inference, Dover Publications, New York, 1995.

Keller, Robert, The Practice of Structured Analysis, Yourdon Press, Englewood Cliffs, NJ, 1983.

Kepner, Charles H. and Benjamin B. Tregoe, The New Rational Manager, Princeton Research Press, Princeton, NJ, 1981.

For many years, this was considered to be THE book on how to solve managerial problems. Kepner & Tregoe still consult with this method, but it has lost some favor in recent years because of the move to soft systems approaches. However, it is still a valuable technique and many problems can still be solved best with this sort of approach.

Kerr, James and Richard Hunter, Inside RAD, McGraw Hill, New York, 1994.

Khandpur, Navtej (Kay) and Lori Laub, Delivering World-Class Technical Support, John Wiley & Sons, New York, 1997.

While this book is primarily about delivering technical service, it provides an excellent overview of the problems of delivering service from the call centre.

Khoshafian, Setrag, Arvola Chan, Anna Wong, and Harry K.T. Wong, Client/Server SQL Applications, Morgan Kauffman Publishers, San Mateo, Ca., 1992.

Kilne, Peter and Bernard Saunders, Ten Steps to a Learning Organization, Great Ocean Publishers, Arlington, Va., 1993.

Kim, Daniel H., Systems Archetypes I, Pegasus Communications, Cambridge, Ma., 1994.

Kim, Daniel H., Systems Archetypes II, Pegasus Communications, Cambridge, Ma., 1994.

Kim, Daniel H., Systems Thinking Tools, Pegasus Communications, Cambridge, Ma., 1994.

Kim builds on the material in Senge's book, *The Fifth Discipline*, and provides a useful reference on much of the basic thinking about systems that Senge espouses.

Kimble, Gregory A., How to Use (and misuse) Statistics, Prentice Hall, Englewood Cliffs, NJ, 1978.

Kline, Peter & Bernard Saunders, Ten Steps to a Learning Organization, Great Ocean Publishers, Arlington, Va., 1993.

Knapp, Mark L., Nonverbal Communication in Human Interaction, 2nd Ed., Holt, Rinehart and Winston, New York, 1978.

Kolb, David A., Irwin M. Rubin, and James M. McIntyre, Organizational Psychology: An Experiential Approach to Organizational Behavior, 4th Ed., Prentice Hall, Englewood Cliffs, NJ, 1984.

Kosko, Bart, Neural Networks and Fuzzy Systems, Prentice Hall, Englewood Cliffs, 1992.

Kouzes, James M. and Barry Z. Posner, Credibility, Jossey Bass Publishers, San Francisco, 1993.

As A consultant or an architect, you will live or die on your credibility. Credibility is a fragile thing that must be nurtured. This is the book to help you learn how to do it.

Ladd, Scott Robert, C++ Simulations and Cellular Automata, M&T Books, New York, 1995.

LaMarsh, Jeanenne, Changing the Way We Change: Gaining Control of Major Operational Change, Addison-Wesley Publishing, Reading, Ma., 1995.

Law, Averill M. and W. David Kelton, Simulation Modeling & Analysis, 2nd Ed. McGraw Hill, New York, 1991.

If you buy only one book on Simulation and Modeling, this is the reference to have. Not an easy book to read, but it covers all the important problems.

Lawson, Bryan, How Designers Think: The Design Process Demystified, Architectural Press, Oxford, 1997.

Systems and Software designers tend to ignore the design literature in other fields. This is a major mistake. Lawson's book provides deep insights into the design process that are applicable whether designing buildings or software systems.

Leavitt, Harold J. and Louis P. Pondy, Readings in Managerial Psychology, The University of Chicago Press, Chicago, Il., 1964.

Leavitt, Harold J., Managerial Psychology, 4th Ed., The University of Chicago Press, Chicago, Il., 1978.

Levine, Robert I., Diane E. Drang, and Barry Edelson, AI and Expert Systems, 2nd Ed., McGraw Hill, New York, 1990.

Linchitz, Joel, The Complete Guide to Telemarketing Management, American Management Association, New York, 1990.

Lorenz, Mark, Object-Oriented Software Development, Prentice Hall, Englewood Cliffs, 1993.

Lynch, Richard L. and Kelvin F. Gross, Measure Up!: Yardsticks for Continuous Improvement, Blackwell Business, Cambridge, Ma., 1994.

Lyneis, James M., Corporate Planning and Policy Design: A System Dynamics Approach, Pugh-Roberts Associates, Cambridge, Ma., 1980.

This is the reference work for applying system dynamics to strategic issues. A deep book and a rather hard read, but important if you're going to focus on strategic applications.

Madron, Thomas W., Enterprise-Wide Computing, John Wiley & Sons, New York, 1994.

Mager, Robert F. & Peter Pipe, Analyzing Performance Problems, Lake Publishing, Belmont, Ca., 1984.

Mandel, John, The Statistical Analysis of Experimental Data, Dover Publications, New York, 1984.

Mansfield, Edwin, Managerial Economics and Operations Research, W.W. Norton & Company, New York, 1980.

Mansfield, Edwin, Managerial Economics, W.W. Norton & Company, New York, 1990.

Margules, Edwin, Client Server Computer Telephony, Flatiron Publishing, New York, 1994.

Martin, James, Diagramming Standards for Analysts and Programmers, Prentice Hall, Englewood Cliffs, 1987.

Martin, James, Information Engineering, Book I Introduction, Prentice Hall, Englewood Cliffs, 1989.

Martin, James, Information Engineering, Book II Planning & Analysis, Prentice Hall, Englewood Cliffs, 1990.

Martin, James, Information Engineering, Book III Design & Construction, Prentice Hall, Englewood Cliffs, 1990.

You might consider these to be the bible for many IT shops around the world. Martin is famous as a teacher and writer and he is extremely influential. These books lay out his particular view of Information Engineering. Not everyone does it this way and there are other ways which are incompatible such as Object Oriented methods. However, these are a useful reference if you work with IT departments that espouse the methods.

McCafferty, Thomas A., In-House Telemarketing, Probus Publishing, Chicago, 1994.

McCallister, Linda, "I Wish I'd Said That", John Wiley & Sons, New York, 1994.

My favorite book on communication styles. McCallister not only helps you identify a person's style, but gives sound advice on how to

communicate with that person depending on your own style. Essential reading when you have to sell your recommendations to a corporate executive.

- McConnell, S. (1996). Rapid Development: Taming Wild Software Schedules. Redmond, Wa., Microsoft Press.
- McHugh, Patrick, Giorgio Merli, and William A. Wheeler III, Beyond Business Reengineering: Towards the Holonic Enterprise, John Wiley & Sons, New York, 1995.
- McInnis, Raymond G. & James W. Scott, Social Science Research Handbook, Barnes & Noble, New York, 1974.
- McMenamin, Stephen M. and John F. Palmer, Essential Systems Analysis, Prentice Hall, Englewood Cliffs, 1984.
- Mears, Peter, Quality Improvement Tools & Techniques, McGraw-Hill, New York, 1995.
- Quality has to be built into everything that the call centre does. Every process and job must have quality at its root. However, you will not have quality without some way to manage it. These tools and techniques provide the sort of toolkit you need to manage quality into the system.
- Menday, Janette, Call Centre Management, Call Craft, Newdigate, Surrey, 1996.
- A small book loaded with good, basic information about how to manage a call centre.
- Metzler, Ken, Creative Interviewing, Prentice-Hall, Englewood Cliffs, NJ, 1977.
- Miller, David W. and Martin K. Starr, Executive Decisions and Operations Research, Prentice-Hall, Englewood Cliffs, NJ, 1969.
- Mishler, Elliot G., Research Interviewing, Harvard University Press, Cambridge, Ma., 1986.
- Moore, Brooke Noel and Richard Parker, Critical Thinking, 3rd Ed., Mayfield Publishing Co., Mountain View, Ca., 1992.
- Morecroft, John D.W. and John D. Sterman, Eds., Modeling for Learning Organizations, Productivity Press, Portland, Or., 1994.
- Morse, Philip M. and George E. Kimball, Methods of Operations Research, MIT Press, Cambridge, Ma., 1963.
- Murdick, Robert G., Business Research: Concept and Practice, Harper & Row, New York, 1969.
- Naumann, Earl and Kathleen Giel, Customer Satisfaction Measurement and Management, Thomson Executive Press, Cincinnati, Oh, 1995.

Nijssen, G.M. and T.A. Halpin, Conceptual Schema and Relational Database Design, Prentice Hall, Australia, 1989.

Asymmetrix based their InfoModeler tool on this approach to relational database design. This is an excellent book, but only for someone with a firm grounding in database theory.

Norman, Donald A., The Psychology of Everyday Things, Basic Books, 1988.

The fundamental book on the psychology of human interfaces. While it is not about software user interfaces primarily, the lessons learned here in discussing video recorders and even doors are applicable to any user interface design.

Nystrom, Paul C. and William H. Starbuck, Handbook of Organizational Design, Vol 1: Adapting Organizations to their Environments, Oxford University Press, London, 1984.

Nystrom, Paul C. and William H. Starbuck, Handbook of Organizational Design, Vol 2: Remodeling Organizations and their Environments, Oxford University Press, London, 1984.

O'Reilly, Kellie Wardman, Ed., Managing the Rapids: Stories from the Forefront of the Learning Organization, Pegasus Communications, Cambridge, Ma., 1995.

Ouchi, William, Theory Z: How American Business Can Meet the Japanese Challenge, Addison Wesley, Reading, Ma, 1981.

Parker, Marjorie, Creating Shared Vision, Dialog International, Ltd., Oak Park, Il., 1990.

Parl, Boris, Basic Statistics, Doubleday & Company, New York, 1967.

Pasmore, William A., Designing Effective Organisations: The Sociotechnical Systems Perspective, John Wiley & Sons, New York, 1988.

The socio-technical approach in organisational design is the basis for much of what we do. It emphasises that you must consider the design not only of the technical and process systems, but also take into account the social system, its culture and politics.

Pedersen, Ken, Expert Systems Programming, John Wiley & Sons, New York, 1989.

Pelto, Pertti J. and Gretel H. Pelto, Anthropological Research: The Structure of Inquiry, 2nd Ed., Cambridge University Press, Cambridge, England, 1978.

There is much to be learned from Anthropology about how to research organizations. Culture is a major determinant of the success of any new system we design. If we don't understand it, we run the risk of developing the world's greatest system that never gets used.

Perrow, Charles, Complex Organizations: A Critical Essay, 3rd Ed., McGraw-Hill, New York, 1986.

Pidd, Michael, Computer Simulation in Management Science, 3rd Ed., John Wiley & Sons, Chichester, England, 1992.

This is the one book I would recommend for a basic grounding in practical simulation modeling. It is very well written, easy to understand, and covers the important aspects of simulation modeling.

Polkinghorne, Donald, Methodology for the Human Sciences, State University of New York, Albany, 1983.

If you get interested in the philosophy behind various research techniques, this is the book to read. It's tough going at times and will send you off to look up lots of material on philosophy if you don't have a firm grounding. But it collects all of the essential grounding in one place. It is intended for graduate students.

Porter, Michael E., Competitive Strategy: Techniques for Analyzing Industries and Competitors, Free Press, New York, 1980.

Pugh, Stuart, Creating Innovative Products Using Total Design, Don Clausig & Ron Andrade Editors, Addison-Wesley, Reading, Ma, 1996.

Pugh, Stuart, Total Design: Integrated Methods for Successful Product Engineering, Addison-Wesley, Harlow, England, 1991.

Pugh is not about software or systems, but about Industrial Design. His aim is to create a systematic process for product engineering. However, there is much to learn from reading his thoughts about the design process. Much can be carried over into software and systems design.

Pyke, Sandra W. and Neil McK. Agnew, The Science Game: An Introduction to Research in the Social Sciences, 5th Ed., Prentice Hall, Englewood Cliffs, NJ, 1991.

Quinn, James Brian, Intelligent Enterprise, The Free Press, New York, 1992.

Randers, Jorgen, Elements of the System Dynamics Method, Productivity Press, Cambridge, Ma., 1980.

Rechtin, Eberhardt & Mark W. Maier, The Art of Systems Architecting, CRC Press, Boca Raton, 1997.

The best starting book on systems architecture, a classic. I would highly recommend that this be on your shelf, well read and heavily marked up. His basic approach is applicable to any architectural design situation.

Reece, Barry L and Rhonda Brandt, Effective Human Relations in Organizations, Houghton-Mifflin Company, Boston, 1990.

Reilly, J. P. (1996). Rapid Prototyping: Moving to Business-Centric Development. London, International Thomson Computer Press.

Renaud, Paul E., Introduction to Client/Server Systems, John Wiley & Sons, New York, 1993.

Richardson, George P. and Alexander L. Pugh, Introduction to System Dynamics Modeling with Dynamo, Productivity Press, Portland, Or., 1981.

Roberts, Edward B., Ed., Managerial Applications of System Dynamics, Productivity Press, Cambridge, Ma., 1978.

A useful book for applying system dynamics or managerial problem solving. A good reference if you intend to work in this area.

Roberts, Lon, Process Reengineering, ASQC Quality Press, Milwaukee, 1994.

Roberts, Nancy, David Andersen, Ralph Deal, Michael Garet, and William Shaffer, Introduction to Computer Simulation: A System Dynamics Modeling Approach, Productivity Press, Portland, Or., 1983.

Robinson, Dana Grimes & James C., Performance Consulting, Berrett-Koehler Publishers, San Francisco, 1995.

Primarily for training interventions, this is nonetheless a useful book and has good advice for improving an organization's performance.

Rosenbluth, Hal F. and Diane McFerrin Peters, The Customer Comes Second, William Morrow, New York, 1992.

The premise of this book is that you must FIRST make your own people happy in their jobs and they will make the customers happy.

Rumbaugh, James, Michael Blaha, William Premerlani, Frederick Eddy, & William Lorensen, Object Oriented Modeling and Design, Prentice Hall, Englewood Cliffs, 1991.

Rummler, Geary A. & Alan P. Brache, Improving Performance: How to Manage the White Space on the Organisation Chart, Jossey-Bass, San Francisco, 1990.

Conceptually, Rummler & Brache is the basis for how I approach organisational systems. My fundamental approach uses Rummler & Brache as a frame to help evaluate the organisation, it's processes, and the jobs within. This is all part of the overall Socio-Technical systems approach I employ to develop an overall, fully integrated, systemic approach to implementation.

Sage, Andrew P., Systems Engineering, John Wiley & Sons, New York, 1992.

As becomes clear in this book, 'Systems' are more than just pieces of technology. This is an organised approach for bringing whole systems together successfully.

Salant, Priscilla and Don A. Dillman, How to Conduct Your Own Survey, John Wiley & Sons, New York, 1994.

Sanders, Betsy, Fabled Service, Jossey-Bass, San Francisco, 1995.

One of the best books on delivering service to the consumer. A small book, but well worth reading for the focus on service.

Sayles, Jonathan S., Steve Karlen, Peter Molchan, and Gary Bilodeau, GUI-Based Design and Development for Client/Server Applications, John Wiley & Sons, New York, 1994.

Schein, Edgar H., Organizational Psychology, 2nd Ed., Prentice-Hall Inc., Englewood Cliffs, NJ, 1970.

Schein, Edgar H., Process Consultation: It's Role in Organization Development, Addison-Wesley Publishing, Reading, Ma., 1988.

Schein, Edgar H., Process Consultation: Lessons for Managers and Consultants, Addison-Wesley Publishing, Reading, Ma., 1987.

These are classics in consulting, deep books with considerable insight into the psychology of organizations. The 'process' is not about business processes though.

Schnaidt, Patricia, Enterprise-Wide Networking, SAMS Publishing, Indianapolis, In., 1992.

Schon, Donald A., The Reflective Practitioner, Basic Books, New York, 1983.

Any professional practitioner should carefully read this book. It focuses on architectural design examples, but the principle that design requires self-reflection is applicable to all.

Schwarz, Roger M., The Skilled Facilitator: Practical Wisdom for Developing Effective Groups, Jossey-Bass Publishers, San Francisco, 1994.

As consultant and/or architect, you are often in a position where you are acting as facilitator. It pays to learn the basic skills and this is the best book to work from.

Senge, Peter M., Charlotte Roberts, Richard B. Ross, Bryan J. Smith, and Art Kleiner, The Fifth Discipline Fieldbook, Doubleday, New York, 1994.

Senge, Peter M., The Fifth Discipline, Doubleday, New York, 1990.

This is the book that made 'Systems Thinking' popular in the business community. What is often missed in Senge's discussion of the other four disciplines. Most particularly, it is important to understand the idea of 'Mental Models' and their impact on creating change.

Shaw, John C., The Service Focus, Dow-Jones Irwin, Homewood, Il., 1990.

Shaw, Mary & David Garlan, Software Architecture: Perspectives on an Emerging Discipline, Prentice Hall, Upper Saddle River, NJ, 1996.

If you were designing a new building, you would certainly engage an architect to conceptualise the design for you. However, in systems involving computer and telephony technology, this has been the

exception rather than the rule. I believe in the primacy of architecture in systems design, no matter what kind of system I am creating. This book combines many insights in its focus on Software Architecture.

Shearer, Clive, Practical Continuous Improvement for Professional Services, ASQC Quality Press, Milwaukee, Wi., 1994.

Shim, Jae K. and Joel G. Siegel, Handbook of Financial Analysis, Forecasting, & Modeling, Prentice-Hall Inc., Englewood Cliffs, NJ, 1988.

Shlaer, Sally & Stephen J. Mellor, Object Oriented Systems Analysis, Yourdon Press, Englewood Cliffs, 1988.

Shooman, Martin L., Software Engineering, McGraw Hill, New York, 1983.

Siegel, Andrew F., Practical Business Statistics, Irwin, Homewood, Il., 1990.

Simmons, J. L., Social Research: The Craft of Finding Out, Macmillan Publishing Co., New York, 1985.

Slife, Brent D. and Richard N. Williams, What's Behind the Research? Discovering Hidden Assumptions in the Behavioral Sciences, Sage Publications, Thousand Oaks, Ca., 1995.

Sowa, John F., Knowledge Representation: Logical, Philosophical, and Computational Foundations, Brooks/Cole, Pacific Grove, Ca., 2000.

A VERY deep book, but if you want to learn what it really means to represent knowledge (and every technique we use is actually a knowledge representation technique), this is the book to read. It is VERY heavy going and not for the faint hearted.

Spewak, Steven H. and Steven C. Hill, Enterprise Architecture Planning, QED Publishing Group, Boston, Ma., 1993.

StatSci Division, Mathsoft Corp., S-Plus Guide to Statistical and Mathematical Analysis, Mathsoft, Seattle, 1995.

Stevens, Richard, Peter Brook, Ken Jackson, and Stuart Arnold, Systems Engineering: Coping with Complexity, Prentice Hall, London, 1998.

Real systems are complex and a focus on managing complexity is important to success. This book presents the System Engineer's view of this important topic.

Stewart, Charles J. and William B. Cash Jr., Interviewing: Principles and Practices, Wm. C. Brown Company Publishers, Dubuque, Ia, 1978.

Stone, Bob and John Wyman, Successful Telemarketing, 2nd Ed., NTC Business Books, Lincolnwood, Il., 1994.

Strunk, William Jr. and E. B. White, The Elements of Style, 3rd Ed., Macmillan Publishing Co., New York, 1979.

The classic book on writing style. It is a small book, but an important one. No one who writes should be without it.

Sviokla, John J. and Benson P. Shapiro, Keeping Customers, Harvard Business School Publishing, Cambridge, Ma., 1993.

Swanson, Richard A., Analysis for Improving Performance, Berrett-Koehler Publishers, San Francisco, 1994.

One of the best books on organizational analysis. It is full of useful tables you can fill in for an organization you are working with. I constantly make use of it during the initial phase of an engagement.

Swieringa, Joop and Andre Wierdsma, Becoming a Learning Organization, Addison-Wesley Publishing, Reading, Ma., 1992.

Szilagyi, Andrew D. Jr. and Marc J. Wallace Jr., Organizational Behavior and Performance, 5th Ed., HarperCollins Publishers, New York, 1990.

Taylor, David A., Business Engineering with Object Technology, John Wiley & Sons, New York, 1995.

Taylor, David A., Object-Oriented Information Systems, John Wiley & Sons, New York, 1992.

Taylor, David A., Object-Oriented Technology: A Manager's Guide, Addison Wesley Publishing, Reading, Ma, 1990.

I find these books to be excellent for introducing clients to the concepts of Object Oriented design. They are easy and fun to read, short, with clear diagrams. I often loan out my copies to clients to help them understand the terminology.

Taylor, Frederick W., The Principles of Scientific Management, Hive Publishing Company, Easton, 1985.

This is considered to be THE classic work on applying scientific methods to work design. Largely discredited (this is the guy who measured every movement), it is nonetheless an important work and is the foundation for many businesses that exist today. While no-one would admit to using these techniques, you can see the attitude in many managers 'of the old school' who are still in charge.

Taylor, James C., and David F. Felten, Performance by Design: Sociotechnical Systems in North America, Prentice Hall, Englewood Cliffs, NJ, 1993.

Templeton, Jane Farley, Focus Groups, Probus Publishing, Chicago, Il., 1987.

Thomsett, Michael C., Project Management, American Management Assoc., New York, 1990.

Timm, Paul R. and Rick C. Farr, Business Research, Crisp Publications, Menlo Park, Ca., 1994.

Tobin, Daniel R., Re-Educating the Corporation: Foundations for the Learning Organization, Oliver Wright Publications, Essex Junction, Vt., 1993.

Turabin, Kate L., A Manual for Writers of Term Papers, Theses, and Dissertations, 3rd Ed., University of Chicago Press, Chicago, 1967.

A standard reference for students in writing papers, but with considerable useful information for anyone who needs to write. Normally available at nearly all university bookstores.

Wagner, Harvey M., Principles of Operations Research, Prentice Hall, Englewood Cliffs, 1975.

Walters, John R. & Norman R. Nielsen, Crafting Knowledge Based Systems, John Wiley & Sons, New York, 1988.

Ward, P. & S. Mellor, Structured Development for Real Time Systems, Prentice Hall, Englewood Cliffs, 1985.

Washington Researchers, Business Researcher's Handbook: The Comprehensive Guide for Research Professionals, Washington Researchers Ltd, Washington, D.C.

Watson, Gregory H., Business Systems Engineering, John Wiley & Sons, New York, 1994.

Wax, Rosalie, Doing Fieldwork: Warnings and Advice, University of Chicago Press, Chicago, Il., 1971.

Webb, John R., Understanding & Designing Marketing Research, Academic Press, London, 1992.

Weigend, Andreas S., and Neil A. Gershenfeld, Time Series Prediction: Forecasting the Future and Understanding the Past, Addison-Wesley, Reading, Ma, 1994.

Weinberg, Gerald M., An Introduction to General Systems Thinking, John Wiley & Sons, New York, 1975.

Weinberg, Gerald M., and Daniela Weinberg, General Principles of Systems Design, Dorset House, New York, 1988.

Weinberg, Gerald M., Rethinking Systems Analysis & Design, Dorset House Publishing, New York, 1988.

Weinberg has thought deeply about systems and systems design for years. These three books proceed from extreme generality to more practical thinking. I would recommend these for followup reading rather than as basic references.

Weinberg, Gerald M., The Secrets of Consulting: A Guide to Giving and Getting Advice Successfully, Dorset House, New York, 1985.

This is one of the best books on consulting. It has a considerable amount of very good advice.

- Weisbord, Marvin R., Organizational Diagnosis, Addison Wesley, New York, 1978.
- White, Iseult, Rational Rose Essentials: Using the Booch Method, Benjamin Cummings Publishing, Redwood City, 1994.
- White, Thomas E. & Layna Fischer, eds., The Workflow Paradigm, Future Strategies, Alameda, Ca., 1994.
- Whitely, Richard C., The Customer Driven Company, Addison-Wesley, Reading, Ma., 1991.
- Wilson, E. Bright, An Introduction to Scientific Research, Dover Publications, New York, 1990.
- Winograd, Terry, ed., Bringing Design to Software, Addison-Wesley, Reading, Ma, 1996.
- Winogread, Terry & Fernando Flores, Understanding Computers and Cognition: A New Foundation for Design, Addison-Wesley, Reading, Ma, 1987.
- Wirfs-Brock, Rebecca, Brian Wilkerson, and Lauren Wiener, Designing Object-Oriented Software, Prentice Hall, Englewood Cliffs, NJ, 1990.
- Wixon, Dennis & Judith Ramey, Field Methods Casebook for Software Design, John Wiley & Sons, New York, 1996.
- My work methods onsite are derived from field methods in disciplines such as anthropology, archaeology, sociology, as well as more traditional information systems techniques. This book deals with these field methods providing important insight into the necessity for a broader based, social approach to software (and in my opinion systems) design.
- Wood, Jane and Denise Silver, Joint Application Development, John Wiley and Sons, New York, 1995.
- The is THE book about JAD, the essential reference if you plan to use JAD techniques in an engagement. I often borrow rather than implement the full process, but if you wish to go all the way, this book will answer your questions.
- Wycoff, Joyce, Mindmapping: Your Personal Guide to Exploring Creativity and Problem-Solving, Berkley Books, New York, 1991.
- Wycoff, Joyce, Transformation Thinking, Berkley Books, New York, 1995.
- When it comes to mindmapping, these are my two favorite books. Wycoff's approach, like my own, is more focused on the ends of connectors as ideas. This is quite different from Buzan's style. Either will work, but I prefer Wycoff's style and use it all the time.
- Yin, Robert K., Case Study Research: Design and Methods, 2nd Ed., Sage Publications, Thousand Oaks, Ca., 1994.

Any client you take on is a single case out of many possible. Each case is potentially unique. Yin covers all of the research methodologies as applied to single cases. It is very oriented to social research, but a valuable introduction to the complexities of case research.

Yourdon, Edward, Modern Structured Analysis, Yourdon Press, Englewood Cliffs, 1989.

This book is THE classic in basic structured techniques. When you want to know about any standard structured design technique for software, this is the essential resource. My copy is heavily used whenever I am dealing with a traditional IT department.

Yourdon, Edward, Object-Oriented Systems Design, Prentice Hall, Englewood Cliffs, 1994.

Zikmund, William G, Business Research Methods, The Dryden Press, Orlando, Fl., 1991.