

## Book Reviews

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Jerrold M. Grochow

### **Information Overload! Creating Value with New Information Systems Technology**

Yourdon Press, Computing Series, Prentice Hall PTR, 1997, 281 pp., ISBN 0-13-527631-4

Dr. Jerrold M. Grochow is the Chief Technology Officer and Director of the Center for Advanced Technologies at American Management Systems of Fairfax, VA. He is also a consultant to many clients in business and governments around the world, helping them to create strategic business systems utilizing the newest information technology. He is author of "SAA: Implementing IBM's System Application Architecture" (Yourdon Press, 1991) and has written for Computerworld, PC Week, CIO Magazine and Software Magazine.

"*Information Overload*" covers every hot issue related to information systems development. Two of the hottest topics in information technology circles these days are client-server systems, and object-oriented programming. Using a writing style that is both technically sophisticated and readily understandable, Jerry Grochow outlines what each means, and how each works. Then he explains why both client-server and object-orientation are part of the larger framework which will enable business to create satisfied customers with the new information technology.

As Grochow describes it, the key to these future possibilities is the concept of *systems architecture*. As more and more people, at work and home, get desk-top computers and gain access to networks, the organisational intranet and the global Internet, computer power becomes distributed through communications.

The change from mainframe centralisation connecting dumb terminals, to decentralised machines with distributed intelligence, has fundamentally altered the structural pattern of information systems.

This structural pattern is the systems architecture, and the alteration now in progress both empowers every user, and requires new principles of design and operation. Grochow, a 25-year veteran of systems design and network computing, has been tracking this kind of changes through the many successive stages of microchip evolution and network service enhancements. What he argues is, that the very dilemma which the technology has created, namely information overload, can now be managed by broadening the application of intelligence from individual nodes to the entire network.

Object-oriented programming is the software answer to the distributed computing question. As people share data and applications over the networks, the internal design of software itself faces new challenges. Monolithic relational databases and structured programs do not serve networked computers very well. As needs for distributed data entry and program customisation increase with the spread of knowledge work, the coordination of version control and extension implications can no longer be handled by the inflexibility of previous designs. Just as Grochow sees all computing as client-server based now, he forecasts that we will all become object-oriented users shortly.

And Grochow is certainly right about the speed of change in this field. In regard to system development methodologies (SDMs), an object-oriented approach has already made both the "waterfall" and the "spiral" models obsolete. But with the flexible outlook that Grochow envisions, developers will be as easily able to accommodate such a methodological change as they will any other technological advance.

This book is a complete guide to the technologies that will shape systems development for the next decade, an insightful managers' guide to the dramatic changes now impacting information system and the organisation. It explains why architecture really matters, and how a well-architected system can dramatically improve an organisation's readiness for the future. Readers will understand the importance of components, what to expect from new Internet/intranet technologies, and what has been learned about downsizing mainframe applications to date. They will discover new strategies for ensuring that the new technology introduced by their organisation actually adds value. "Information overload" really is a map of the future of the new information systems technology. And when you are heading into new territory, it's always wise to consult a map. For both students and professionals, for anyone involved in using, selecting, designing and implementing information systems in large organisations, the integration of ideas and implementation provides an overview and a big picture which is all too often missing from the writings of specialists whose outlook resembles tunnel-vision. The message in these books is "the light at the end of the tunnel".

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