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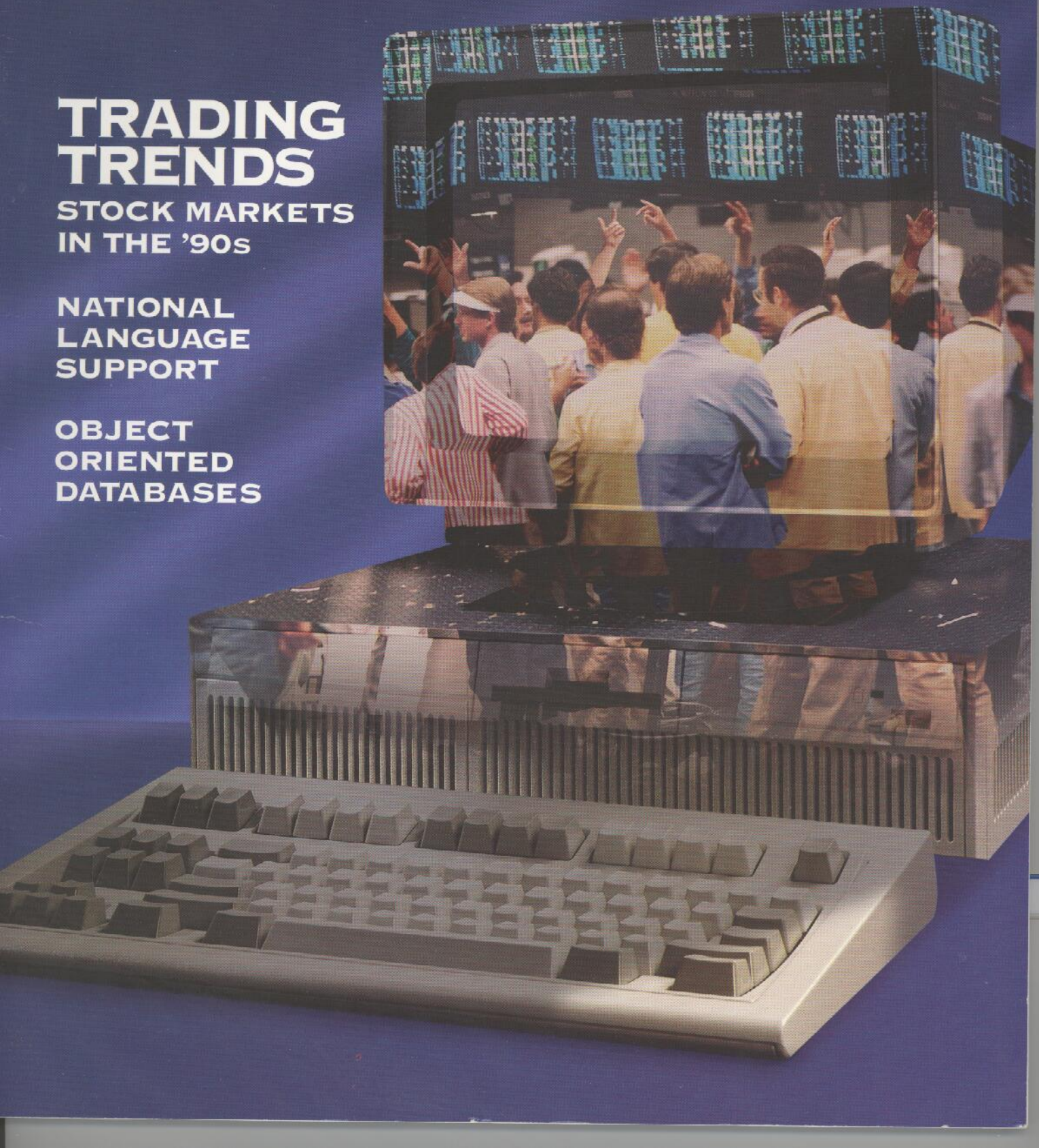
TRADING TRENDS

STOCK MARKETS IN THE '90s

NATIONAL LANGUAGE SUPPORT

OBJECT ORIENTED DATABASES



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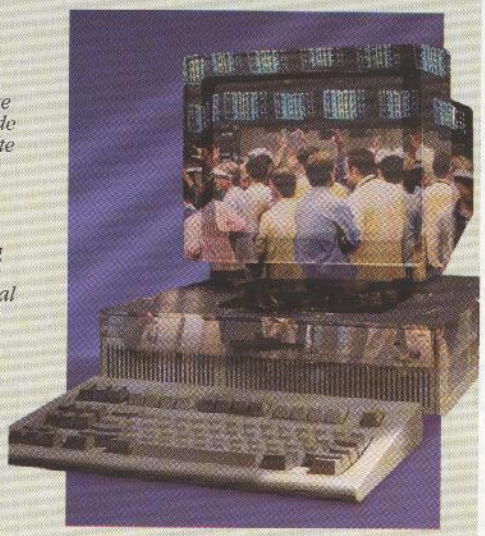
APPLICATIONS

18 Trading Trends

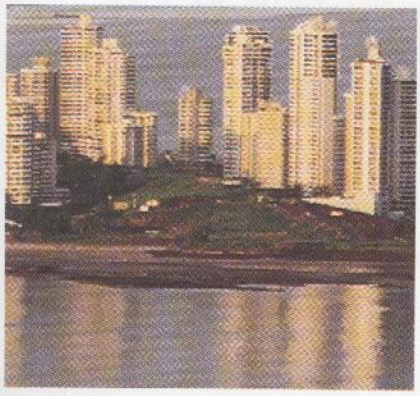
BY BOBBIE DELANEY

To the Toronto Stock Exchange, Canada's largest stock exchange and one of the top ten worldwide exchanges, the economic climate of the 1990s means facing a fiercely competitive market. To effectively compete in this environment, the TSE relies on efficient information processing systems based on diverse hardware and the ORACLE Relational Database Management System (RDBMS).



COVER CREDIT

Photography and digital enhancement by John Lund Photography. The stock exchange image was "wrapped around" the computer shot using Adobe Photoshop.™ The background is an illustration also created in Photoshop.



22 Municipio de Panama

BY CHRISTOPHER RAUEN

The Municipio de Panama of Panama City, Panama's oldest municipality, has a history that dates back more than 473 years. Panama City's more than 800,000 residents rely on Municipio services that range from automobile registration to maintenance of public parks and the city zoo. Recently, the Municipio has made a technological leap to distributed processing with the help of ORACLE and its application development toolset.

26 Distributed Communication

BY REBECCA HICKMAN

Australia depends on its telecommunication systems to tie the continent together. For Telecom Australia, Australia's major telecommunications services company, improving and maintaining Australian telecommunications is the singular goal. To accomplish this, the company developed highly functional and responsive information systems—based on open systems and the ORACLE RDBMS.

30 Airtight Design

BY REBECCA HICKMAN

Heath Tecna, one of the largest makers of aircraft components in the United States, depends on quality control, production planning, and inventory control to ensure the success of its manufacturing divisions. To strengthen these capabilities, the company has worked with NET Information Systems, an Oracle Preferred Systems Integrator, to develop distributed, client-server ORACLE-based systems.

PERSPECTIVE

5 New Technologies for Ancient Challenges

BY KENNETH I. COHEN

Object management and digital image processing are usually thought of as state-of-the-art computing technologies that address the latest scientific and corporate application challenges. But there is too little emphasis on how useful such technologies are for solving problems being confronted at universities and research institutes.

88 Beyond the Relational Data Model

BY HANS DRUCKS, PRESIDENT, LOGOS GMBH

There is a growing enthusiasm among users of relational technology about object orientation. But there is also a certain confusion about the notion of "objects" and an uneasiness about the future of the relational DBMS. Expanding E.F. Codd's Relational Data Model offers a natural migration of existing databases, without requiring reinvestment on the part of users.

SQL LIBRARY

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NEW PRODUCTS

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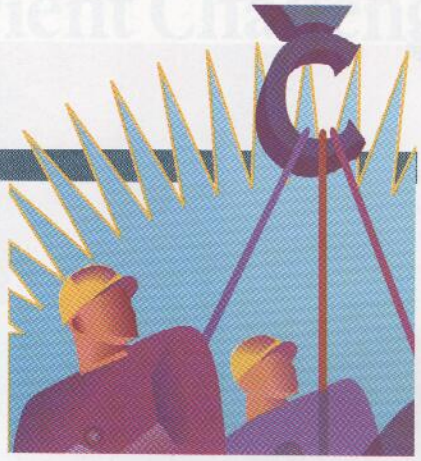


TECHNOLOGY

35 Object Oriented Databases

BY CHERYL J. GOLDBERG

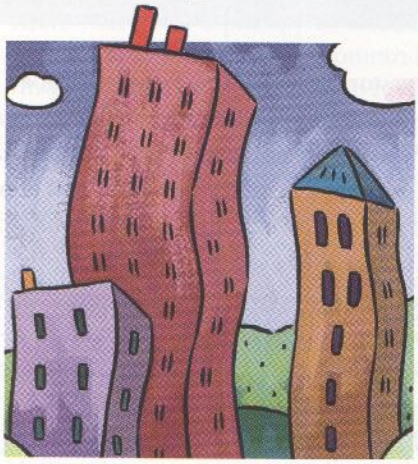
Object orientation is a chameleon-like term whose meaning changes in different situations. One thing is certain: we'll see a lot more objects in the '90s. This article provides a perspective on object orientation in the database world.

USER HELP

41 An Optimal Flexible Architecture

BY CARY V. MILLSAP, ORACLE CONSULTING

This article describes the solution that has eliminated the poor performance problems that affect many ORACLE databases. The solution is a set of specific rules guiding the database administrator to the selection of an Optimal Flexible Architecture (OFA). The OFA is a way to install ORACLE for optimal system performance that never diminishes with growth.



48 National Language Support

BY ANTON VOGELSANG, ORACLE NETHERLANDS

Today's multilingual business environment makes it increasingly important that end users in non English speaking countries can use data processing applications in their own language. Oracle's National Language Support (NLS) provides solutions to these application design requirements, enabling end users to interact with ORACLE applications in their native language.

CASE

53 Large Systems Integration with CASE*Method

BY JOHN FOSTER, ORACLE CONSULTING, AND RICK LYNCH, BROWN & ROOT, INC.

*Large systems development projects can differ significantly from small projects because techniques that work on small projects often fail miserably as projects grow in size and complexity. This article discusses how techniques presented in CASE*Method were applied on a large systems integration project.*

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