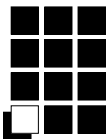


GEOGRAPHIC INFORMATION SYSTEMS MARKETS AND OPPORTUNITIES

Prospectus

Daratech's acclaimed comprehensive analysis of the fast-growing GIS industry identifies profit opportunities, high-growth markets and emerging applications, explores today's proven GIS product and marketing strategies, profiles seven high-flying companies in today's market, and provides a vital reference to 37 GIS vendors and over 175 products.

Published by



DARATECH, Inc.
255 Bent Street
Cambridge, MA 02141-2001, USA
Tel. (+1) 617.354.2339 FAX (+1) 617.354.7822
E-mail daratech@daratech.com
www.daratech.com

**GEOGRAPHIC INFORMATION SYSTEMS
MARKETS AND OPPORTUNITIES**

A Daratech Publication

TABLE OF CONTENTS

| | |
|--------------------------------|---|
| Background | 3 |
| About the Report | 4 |
| Forecast Supplement | 5 |
| Key Benefits | 5 |
| What You'll Learn | 6 |
| About Daratech, Inc. | 6 |
| Report Table of Contents | 7 |
| Subscription Form | 8 |

BACKGROUND

The geographic information systems (GIS) industry is undergoing significant and far-reaching changes. Today, GIS industry growth is being driven by rapidly spreading use of mapping and spatial data analysis technology in brand-new disciplines by customers representing new industries, markets and applications. At the same time, traditional GIS user organizations are leveraging their investments through integration of GIS with a range of corporate and departmental information systems.

Total worldwide sales of GIS software and related hardware and services now top \$6.9 billion annually, and are headed upward. Driving industry growth is a core group of some 40 companies pursuing opportunities in the dynamic market for GIS software. In addition, providers of add-on software, computer hardware, geographic and demographic data, data collection and conversion services, GIS consulting and systems integration are all reaping the rewards of this market.

An important trend fueling the industry's growth is increasing adoption of GIS by organizations previously unacquainted with GIS. These organizations are embracing the technology, often using it in ways that bear little resemblance to "traditional" GIS. Indeed, these new customer markets and applications are recasting and enlarging the very definition of GIS as geographic analysis and visualization technologies come to be embedded into databases, spreadsheets, corporate intranets, and enterprise information systems. All this activity is introducing spatial data analysis and geo-relational information technologies to potentially hundreds of thousands of new users.

The proliferation of low-cost Internet browsers and Web authoring tools, and the burgeoning use of these tools to build enterprise-wide intranets, is bound to have a profound impact on access to and dissemination of GIS technology. Far beyond using the Web as a vehicle for marketing, sales and support activities, savvy GIS vendors are scrambling to intranet- and Web-enable their products. Web technologies offer a low-cost, widely available way to integrate GIS spatial analysis, query and visualization functions into company intranets, and to facilitate spatial data and software delivery.

The data sharing and interoperation features of Microsoft's Windows environment are also key enabling technologies driving implementation of mapping functions in Windows applications. The skyrocketing growth of Windows NT and Windows 98-based GIS products offers tremendous opportunity for both desktop and high-end vendors that have correctly positioned themselves and their products to take advantage of this explosive development.

As GIS grows to occupy an increasingly important place in mainstream information technology, vendors are scrambling to position their offerings as spatial database management systems that help users derive much greater value from their corporate data assets. Indeed, some vendors have stricken "GIS" from their vocabulary, instead positioning themselves as offering "spatial data analysis" or "spatial database management" systems, and are moving to tap the broad new markets to which this positioning offers access.

Many vendors are reporting success with this new positioning, most notably among private-sector organizations. Here, affordable, user-accessible GIS is gaining wide recognition as an effective way to unlock the value of enterprise databases and information systems. As a result, sales to retailers, banks, insurance companies and a wide range other businesses are exploding as these organizations embrace GIS to analyze customer demographics, choose locations for new branches, manage their facilities, and carry out other proven, profit-building activities. Now, many of these organizations are looking to broaden the scope of their implementations.

At the same time, many large user organizations such as municipal governments and utilities are leveraging their substantial GIS investments by integrating new and existing applications with their databases. For example, gas and electric utilities have begun to expand the use of GIS beyond automated mapping and facilities management (AM/FM) functions to applications such as customer information systems, engineering design, work management, outage management, SCADA, marketing and sales, and many others. As a result, savvy vendors are now discovering a wealth of opportunity in these markets, which some had previously felt to be near saturation.

All of these developments raise urgent questions. To what degree will the rapid deployment of Internet/intranet tools and technologies enable greatly broadened access to GIS applications? To what extent will embedded map data objects expand the potential market for GIS technology? What new kinds of strategic alliances are likely to arise from the integration of GIS with relational and object-oriented databases and corporate information systems? How can vendors position themselves and their offerings to take advantage of these industry shifts? And what does all this mean for user organizations preparing to implement GIS technology, or those that have large existing GIS investments and a strategic requirement to protect them?

These are only the latest in a series of fast-moving industry shifts that are certain to accelerate. The dynamics of the GIS industry are becoming increasingly complex and challenging to interpret. However, there is an abundance of opportunity for astute GIS vendors, users, investors and other participants who understand the significance of these developments.

ABOUT THE REPORT

GIS Markets and Opportunities analyzes the structure and composition of the GIS market and reveals how participants can make the most of the many opportunities open to them. This is the

only up-to-date report on GIS available that examines market structure and user needs in conjunction with current and future technology trends, going beyond definitions to investigate opportunities in the context of product positioning and marketing issues.

An in-depth look at the components of the GIS industry prepares you for qualitative and quantitative analyses of opportunities in public, regulated and private markets. More than 85 charts and 35 tables of statistics detail market size, market share, market segmentation, vendor market share within segment, revenue growth forecasts and other vital market data, while other sections of the report analyze competitive strategies for product positioning, marketing, distribution and service offerings.

A vital reference for all vendors who wish to participate in the market, *GIS Markets and Opportunities* is also an information-packed resource for organizations considering a substantial investment in GIS technology, investment analysts, venture capitalists, educators — anyone who needs up-to-date information about GIS vendors and products. From market structure and strategies, the report goes on to an analytical review of current market participants and their product offerings, including a presentation of the prevailing views of the industry's leading executives. Special vendor reports based on in-depth interviews with top GIS executives present the product philosophies and marketing strategies of key GIS vendors to show you how the individuals who are shaping GIS view the technology, the industry and its future. And concise profiles of 37 GIS vendors and 175 GIS products give you valuable, hard-to-find company data including revenue, market focus, installed base, key executives, product offerings, supported platforms and more in a standardized, easy-to-use format. This reference information alone is worth the cost of the report.

GIS FORECAST SUPPLEMENT

The report also includes a *2000 Forecast Supplement* that provides detailed estimates of GIS core-business revenues, software revenues, growth, market share, market segmentation, and vendor market share within segment for 2000. This essential planning tool is provided to all subscribers at no additional charge.

KEY BENEFITS

After reading *GIS Markets and Opportunities* you'll understand the structure, size and scope of the GIS industry, be thoroughly informed about existing and emerging markets for GIS technology, know the product and marketing strategies of the leading vendors, and be on top of the activities of all current participants. Overall, you will be in a position to knowledgeably assess GIS opportunities for effective long-range business planning.

WHAT YOU'LL LEARN

Specifically, you'll discover:

- Who the major participants in each market segment are and the types of users that can profit from GIS technology.
- Profitable markets for GIS in public, regulated and private sectors, including federal, municipal, utility, transportation, educational, marketing and sales, AEC, cartographic, earth resources and other markets.
- The different types of proven products currently being offered, what differentiates them in terms of data capture, management, analysis and display capabilities, current trends in product design, and the results that trends in database design, hardware and related technologies will have upon the GIS industry.
- Proven strategies regarding database and overall product design, platform choice, distribution alternatives and service offerings which take into consideration application needs, markets and users.
- Philosophies and perspectives of key executives at the leading GIS vendors and desktop GIS developers, as well as in-depth looks at their product and marketing strategies.
- Vital market, company and product data on the GIS vendors that collectively make up the GIS core business including revenues, business focus, market focus, installed base, product offerings, supported platforms, key personnel and more.
- Types of product and service vendors who participate in the GIS market, the niche that each occupies, and their prospects for success in the context of current industry trends.
- Major issues confronting vendors and users in today's industry including market positioning, partnering opportunities, strategic alliances, platform issues, data issues and implementation issues.

With *GIS Markets and Opportunities* you'll discover how the GIS market works and how you as a vendor, user or investor can profit from its many opportunities.

ABOUT DARATECH, INC.

Daratech, Inc. is a market research and technology assessment firm that has specialized in GIS, plant design/plant management automation, CAD/CAM, CAE, EDM/PDM and computer graphics markets since 1979. Daratech's GIS industry projections and statistics are cited by business and trade publications including *The New York Times*, *The Wall Street Journal*, *The Financial Times* (London), *Business Week*, *Forbes*, *Fortune*, *Computerworld*, *Information Week*, *Geodetical Info*, *GIS World*, *Geo Info Systems*, *GPS World*, *Engineering News-Record*, *PC Week* and others.

REPORT TABLE OF CONTENTS

| | | |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PREFACE | North America vs. Europe vs. Far East vs. Other | 3.5.2 Integrated-Database Architectures |
| GIS REVIEW AND OUTLOOK | Hardware vs. Software vs. Services | 3.6 Service Offerings 3.7 Distribution Channels |
| 1. GIS INDUSTRY OVERVIEW | Market Segments Summary | 4. VENDOR SPECIAL REPORTS |
| 1.1 What is GIS? | Public vs. Regulated vs. Private | 4.1 Autodesk, Inc. 4.2 ESRI 4.3 ERDAS, Inc. 4.4 GeoGraphix Inc. 4.5 Intergraph Corporation 4.6 MapInfo Corporation 4.7 Smallworld plc. |
| 1.2 Vendors, Products and Services | Public Segments Summary Regulated Segments Summary Utilities Transportation Education Telecommunications | 5. VENDOR AND PRODUCT PROFILES |
| 1.2.1 Vendors | Private Segments Summary | 5.1 Vendor Profiles 5.2 Product Profiles |
| 1.2.2 GIS Software Products | Marketing and Sales | 2000 FORECAST SUPPLEMENT |
| 1.2.3 Hardware and General-Purpose Software Products | AEC Cartographic Earth Resources | Overall Core Business Market Polarization North America vs. Europe vs. Far East vs. Other Hardware vs. Software vs. Services Market Segments Summary Public vs. Regulated vs. Private Public Segments Summary Regulated Segments Summary Utilities Transportation Education Telecommunications Private Segments Summary Marketing and Sales AEC Cartographic Earth Resources |
| 1.2.4 Services | 3. MARKETING AND PRODUCTIZATION ISSUES | |
| 1.3 Markets and Opportunities | 3.1 Applications | |
| 1.3.1 Market Model | 3.1.1 Resource Information Analysis and Modeling | |
| 1.3.2 Market Stratification Large User Organizations Mid-Size User Organizations Mass-Market Users Users Within Organizations | 3.1.2 Asset and Facilities Management 3.1.3 Engineering and Technical Mapping 3.1.4 Cartographic Conversion and Production | |
| 1.3.3 Market Segments Public Sector Regulated Sector Private Sector | 3.2 Packaging | |
| 1.4 Issues Confronting the Industry | 3.2.1 Full-Function Multiple- Market Packages 3.2.2 Full-Function Niche- Market Packages 3.2.3 Function-Specific Packages 3.2.4 Data Capture and Conversion Utility Packages | |
| 1.4.1 Industry Evolution | 3.3 Marketing Strategies | |
| 1.4.2 Platform Issues Hardware Operating Systems Distributed Processing Graphics Performance Software Pricing | 3.3.1 Positioning for Full Market Coverage 3.3.2 Niche-Market Positioning | |
| 1.4.3 Data Issues Data Availability Data Accessibility Data Accuracy | 3.4 Platform Issues | |
| 1.4.4 Technology Issues | 3.4.1 Platform Support 3.4.2 Hardware Sales | |
| 1.4.5 User Issues GIS Education and Training Ease of Use Management and Implementation Issues | 3.5 Database Issues 3.5.1 Dual-Database Architectures | |
| 2. GIS INDUSTRY STATISTICS — 1999 Worldwide Core Business Market Polarization | | |

SUBSCRIPTION FORM

To order, just fill out this form and mail it to:
DARATECH, Inc., 255 Bent Street, Cambridge, MA 02141-2001, USA.
For immediate service, phone (+1) 617.354.2339 or
FAX your order to us at (+1) 617.354.7822.

YES! Please enter my subscription to *GIS Markets and Opportunities* for **\$4950**. [*In Massachusetts please add 5% sales tax.*] I understand I will receive the core report plus a *2000 Forecast Supplement*. I understand that due to the nature of this publication, my subscription is noncancellable and nonrefundable.

SIGNATURE: _____

PRINT NAME: _____

TITLE: _____

ORGANIZATION: _____

ADDRESS: _____

PHONE: _____ FAX: _____ E-MAIL: _____

International air mail shipment is available. For shipping rates, please phone (+1) 617.354.2339 or FAX your inquiry to us at (+1) 617.354.7822.

Check enclosed. (Please make check payable to DARATECH, Inc.)

Charge my card: VISA MasterCard American Express EuroCard Diner's Club

Card Number

Exp.

Signature