Market Analysis Program (MAP)

Cross-Industry Markets 1990-1995

Other Cross-Industry Sector

Forecast Update

INPUT®

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MARCH 1991

CROSS-INDUSTRY MARKETS 1990-1995

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1990 Market Analysis Program (MAP) Industry Sector/Cross-Industry Reports

CONTENTS

Table of Contents

Exhibits

I

Introduction

A

Purpose and Methodology

The purpose of this forecast update is to provide the 1990 INPUT forecasts and forecast assumptions for the "other" cross-industry sector. "Other" consists of marketing/sales and electronic publishing. The assumptions and forecasts are based on interviews with leading vendors. INPUT's corporate library—located in Mountain View, California—was also used as a resource for this forecast update. The resources in this library include several on-line periodical data bases, subscriptions to over 50 computer and general business periodicals, and continually updated files on over 2,500 information services vendors.

Related to this cross-industry forecast update, INPUT also publishes reports on six additional cross-industry sectors. These are:

- Accounting
- Education and training
- Engineering and scientific
- Human resources
- Office systems
- Planning and analysis

B

Definitions and Scope

INPUT defines cross-industry information services as packaged functional application solutions used by more than one industry sector. In other words, these application solutions are not verticalized. For example, accounting, and planning and analysis are functions that are similar enough across all industries to be considered markets in their own right for noncustomized application solutions.

These standard or cross-industry application solutions are delivered via processing services, turnkey systems, and applications software. Management support information services—such as systems operations, systems integration and professional services, information delivery services, and systems software—are excluded from cross-industry consideration.

The "other" cross-industry sector encompasses the following applications:

1. Marketing and Sales

- List processing, form letters, contact management, tracking and forwarding leads, ranking prospects, prompting scripts for telemarketing

- Sales analysis—monthly history and sales summary files; details of each invoice; tracking of sales month-to-date or year-to-date; and sales by branch, sales territory, customer, and product

- Marketing management—reports-tailored management requirements; marketing, sales, and product strategies; designing and managing sales territories; and analyzing marketing and sales programs by market, territory, product, customer type, price, and channel. Sales and marketing management software is often closely integrated with financial planning and decision support functions

- Demographic market planning models for selecting geographic location of stores, outlets, and companies. The basic model cuts across multiple industries but requires customization for industries such as petroleum, banking, government services, restaurants, general merchandise, and supermarkets.

Unlike some of the other cross-industry sectors (such as human resources), from a functional standpoint, all marketing and sales systems are *not* alike. Except for the basic functions of storing data for mailings and list processing, additional functions and features vary widely. This variation reflects the relative immaturity of marketing and sales application solutions. Marketing and sales application solutions are typically closely integrated with accounting, inventory control, purchasing, and/or order entry software. Products range from standalone personal productivity tools to LAN-based multiuser systems.

The majority of marketing and sales software is industry-specific and is therefore not considered in user expenditure forecasts for "other." Verticals with emphasis on the selling and distribution functions—such as the wholesale distribution, retail distribution, and manufacturing industries—are where most of the marketing and sales software resides.

2. Electronic Publishing

- Composition, printing, and editing software for documents containing multiple typefaces and graphics—including charts, diagrams, computer-aided design (CAD) drawings, line art, and photographs. Electronic publishing products may also have different data formats such as text, graphs, images, voice, and video.

- Electronic publishing software and turnkey systems automating the document creation process and allowing the user to carry out tasks otherwise performed by graphic artists, typesetters, and printers. Products run on mainframes, midrange systems, and workstations.

The fundamental difference between electronic publishing and desktop publishing is that electronic publishing encompasses a method of document management and control from a single point—regardless of how many authors/locations work on a document. Desktop publishing (DTP) on the other hand, is considered a personal productivity tool and is generally a lower end product residing on a personal computer. The distinction is becoming blurred, however. DTP vendors are looking at the sort of shared document production facilities that electronic publishing packages have always had. They are also attempting to automate more of the design process.

Electronic or computer publishing systems that are sold strictly and specifically to commercial publishers, printers, and typesetters are excluded from cross-industry consideration.

II

Trends, Events, and Issues

Marketing and sales data have become more detailed, complex, and challenging to maintain, organize, and use effectively. A fundamental theme is ease of use as well as value-added analytical and tactical tools. Software flexibility is particularly important to accommodate user variation in methods of managing and tracking sales.

Because desktop publishing, word processing, and electronic publishing are all available with a diverse range of features and functions, adding features is no longer a competitive advantage. Value is therefore added in the following ways:

- By providing ways for users to share text and graphics among different, often incompatible applications as well as among heterogeneous platforms
- By integrating with software development tools so that software developers can create, revise, or refer to documentation directly from within their development environment
- By providing systems integration services as electronic publishing, which becomes companywide and collaborative publishing
- By providing accessibility to and integration with multiple data sources
- By providing document processing and printing management tools

UNIX-based electronic publishing software—primarily for technical documents—is flourishing as UNIX offers strong processing, networking, multitasking, and communications performance characteristics, all of which are important in collaborative writing.

III

Market Forecast

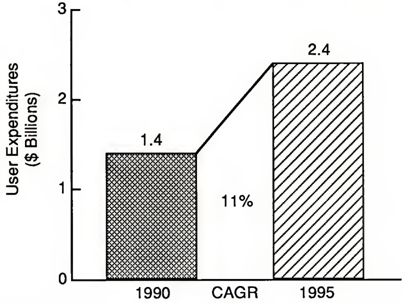
A

Overall Market Forecast

The overall "other" cross-industry sector is expected to grow at 11% compounded annually over the next five years, reaching $2.4 billion in 1995. Exhibit III-1 shows details.

EXHIBIT III-1

"Other" Cross-Industry Sector
Application Solutions Market, 1990-1995



About 25%, or $350 million in 1990, is for marketing and sales applications. Due to the ongoing increased competitiveness of the sales environment, tracking and using information about prospects and customers has become more prevalent. Several factors, however, will inhibit growth for marketing and sales tools so that these applications will remain a smaller portion of the total "other" sector.

Growth inhibitors for marketing and sales application solutions are:

- Marketing and sales is considered a front office operation rather than a back-office mission-critical operation.

- Competing products such as DEC's All-In-One integrated office system include phone message handling as well as tools so that users can build their own, albeit simplistic, marketing and sales applications.

- Marketing and sales software will continue to be increasingly integrated with vertical-specific packages and/or other more predominant cross-industry packages such as accounting, IOSs, and EISs.

- Productivity gains are difficult to prove/demonstrate.

Electronic publishing, accounting for the bulk of user expenditures, will continue to experience strong growth through the forecast period due to the following factors:

- Ongoing technical documentation requirements

- Increasing availability of distributed data that can be incorporated into documents by individual authors

- Strong growth of not only workstations but also 386- and 486-based personal computers

- Increasing need for tools to help manage not only the document creation process but also the data going into the document and the document output process

- Decreasing software and hardware costs that will continually open new market sectors for electronic publishing

The fastest growing electronic publishing product category is collaborative writing wherein large, often complex documents are written by authors in various locations. Other product sectors that do not capitalize on the need to manage a collaborative effort, or that are not data driven, are reaching saturation.

B

Delivery Mode Analysis

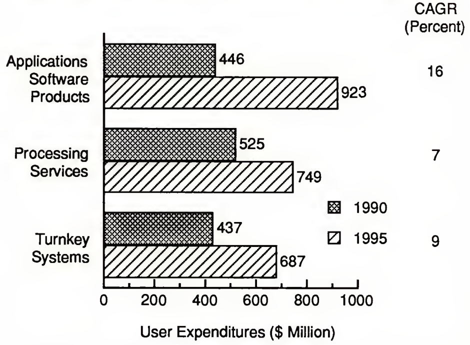
The delivery modes applicable to cross-industry sectors are:

- Applications software products
- Processing services
- Turnkey systems

As shown in Exhibit III-2, processing services is the largest delivery mode in 1990. By 1995, however, applications software products will be the largest delivery mode.

EXHIBIT III-2

"Other" Cross-Industry Sector
Application Solutions by Delivery Mode, 1990-1995



1. Applications Software Products

Marketing and Sales

"Bells and whistles" and tight integration with other functions (such as IOS or EIS) will protect marketing and sales applications software products from what otherwise would be strong sales by external processing services firms.

Growth of low-end marketing and sales applications software products is tied to the market burst of laptops. Growth is expected to continue to be strong for these products.

Lower cost workstations and widespread availability of executive information systems (EISs), graphical user interfaces (GUIs), and relational data base management systems (RDBMs), all serve to promote the use of department-level applications software products, including marketing and sales.

As would be expected, mainframe-based system growth is declining due to the desire to offload the mainframe, expanding availability of low-cost workstations, and customers' increasing awareness/ability to fully utilize RDBMSs in a client-server environment.

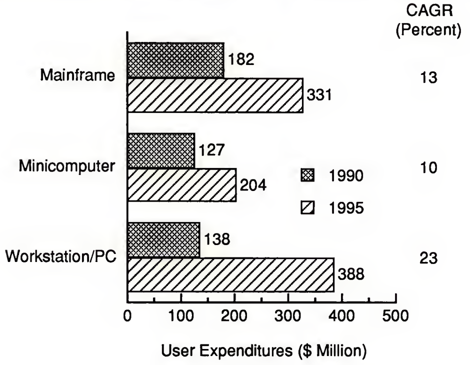
Electronic Publishing

Most electronic publishing software runs on workstations and personal computers. The minicomputer sector is disappearing. Host, or mainframe-based systems were the original mainstay of electronic publishing products and still represent a viable market. Large data-driven applications include catalogs and price lists. Particularly as interest in and development of imaging systems progresses, mainframe-based electronic publishing will continue to flourish.

User expenditures on "other" cross-industry applications software products by platform size are summarized in Exhibit III-3.

EXHIBIT III-3

"Other" Cross-Industry Sector Applications Software Market by Platform Size, 1990-1995



2. Processing Services

User expenditures on "other" cross-industry processing services are predominantly for list processing and customer demographic data. Many small regional list processing organizations compete in this delivery mode. Processing services firms are in a good position to capitalize on this cross-industry sector because sales and marketing application solutions are not yet considered mission critical.

On the other hand, many large companies view customer lists as proprietary and are reluctant to give them to an outside firm because of concerns about security. As workstation-based solutions become more plentiful, more firms will eventually opt to bring this function in-house.

3. Turnkey Systems

Turnkey systems for the "other" sector are forecast to grow at the rate for turnkey systems as a whole and consist of predominantly electronic publishing systems. Marketing and sales systems are also sold through VARs and turnkey systems vendors. These VARs, however, are typically categorized as industry-specific rather than as cross-industry.

INPUT estimates that 40% of electronic publishing systems are sold as turnkey systems. This percentage will decline through the forecast period. Turnkey growth is relatively slow; in 1990 Interleaf stopped reselling hardware, thereby exiting the turnkey market.

IV

Competitive Environment

The marketing and sales competitive environment is highly fragmented. The players are:

- Large software and hardware vendors—including Computer Associates, Digital Equipment, Hewlett-Packard, and IBM
- Companies that specialize in mainframe/DBMS-based client-tracking/ list processing products
- Independent DBMS companies that have extended their product lines to include sales/marketing software. For example, Computer Corporation of America's MarketPulse product is an extension of its original data base product, Model 204.
- Numerous small firms with PC-based single-user sales productivity tools
- Companies whose main product is an EIS or decision support tool

In contrast, electronic publishing has only a handful of players. Key vendors include Datalogics, relative newcomer Frame Technology, Interleaf, Xerox, and IBM.

Market entry barriers are high because a vendor must now provide document management capabilities and systems integration services as well as the ability to run on heterogeneous platforms. Alliances with companies that are developing document management products—such as Saros Corp. (Bellevue, WA), Syntactics (Santa Clara, CA), and SoftSolutions (Orem, UT)—are expected to proliferate.

Examples of diverse vendors in this cross-industry sector are Acxiom, Frame Technology, Interleaf, and SBT:

Acxiom Corporation, 301 Industrial Boulevard, Conway, Arkansas 72032-7103, (501) 450-1440

Acxiom provides processing services and products to traditional direct-marketing organizations and marketing departments of large corporations. Services range from initially identifying potential customers who are most likely to respond favorably to a particular marketing program, to ultimately fulfilling actual customer orders. Revenue for the fiscal year ending March 1990 was $89.7 million.

Effective in January 1990, five companies merged with Acxiom. These five companies are: BSA, Inc.; CCX Network; Modern Mailers; Marketlead Services; and Southwark Computer Services, Ltd. With this consolidation, Acxiom considers itself the leading marketing services company.

The company's primary vehicle for these services is its data communications network through which direct marketing customers receive authorized access to lists and data bases housed in the company's corporate headquarters. Recently Axciom has begun to place more emphasis on service and consulting.

Frame Technology Corporation, 1010 Rincon Circle, San Jose, CA 95131, (408) 433-3311

Frame Technology, a privately held corporation founded in April 1986, had fiscal 1990 revenues of $26.5 million. Its original FrameMaker product was UNIX-based and addressed the needs of technical users who produce documents and must integrate into other applications—such as MCAD, CAE, and CASE.

Now, however, FrameMaker is available for multiple-user interfaces and more than 25 different computers. Its greatest growth is in 386- and 486-based solutions. Licenses are sold to universities, corporations, research and government institutions, software development professionals, and publications groups.

Frame recently announced plans to integrate FrameMaker with SoftBench, a software development integrated framework from Hewlett-Packard. A software developer will be able to create, revise, or refer to documentation directly from within the development environment.

Interleaf, Inc., Ten Canal Park, Cambridge, MA 01241, (617) 577-9800

Interleaf, founded in 1981, develops and markets electronic publishing applications software and provides systems integration and customization services. In November of 1989, Interleaf announced a major restructuring that removed the company from the turnkey systems part of its business and refocused Interleaf on its major growth and value-added business of software and services.

Since its exit from the turnkey business, Interleaf is redirecting a large part of its effort toward customizing its electronic publishing products for specific customers as well as for industry-specific markets through solutions that include access to multiple applications and data bases.

The most recent release of its mainstream product, Interleaf 5, features an open architecture—a data-sharing technology, "active documents," which allows documents to be linked to each other and to other applications in a way that data sharing and moving among multiple applications is transparent. Interleaf 5 is offered for workstations, personal computers, and Apple Macintosh platforms.

The company recently announced a joint development effort with Keyword Office Technologies to develop an interface to Digital's Compound Document Architecture, which will allow Interleaf users to take advantage of Digital's Network Application Services (NAS).

Interleaf's fiscal 1990 revenues were $62.9 million. For 1992 the company's revenue goal is 40% custom software and services, 30% Interleaf 5 software, and 30% document management and tools.

SBT Corporation, One Harbor Drive, Sausalito, CA 94965, (415) 331-9900

SBT's flagship products are SBT Database Accounting Library and SBT Database Executive Library, both built on the PC-based relational database, dBase. Database Executive Library, announced in November 1990, consists of a Corporate Contact Manager (CCM), which tracks telemarketing, sales, collection, and public relations activities. Data is drawn and constantly updated from accounting records within Database Accounting Library applications.

The company is an innovative user of communications capabilities in that CCM keeps detailed records of each call made (including duration and content), automatically generates call lists, and when linked with SBT's fax server, allows fax messages, personalized cover sheets, and prescanned documents to go directly from the user's workstation to the customer. It transmits facsimiles from within the Corporate Contact Manager application and thus eliminates the need to exit the application and load a separate communications program.

The privately held company was founded in 1980. Its products are sold through consultants, systems integrators, and resellers.

Exhibits IV-1 and IV-2 summarize issues with which vendors are grappling in the "other" cross-industry sector. For both marketing/sales and electronic publishing, integration is a key. Integration encompasses the merging of features and functions with other applications areas, as well as the ability to access data from other standalone applications. Because of the many integration aspects, focusing through clear product positioning and identification of target markets is becoming increasingly important for success. Technology and marketing alliances—particularly with vendors having systems integration capabilities—will also become increasingly important. Growth for both is promoted by availability of client-server architectures and distributed data bases.

EXHIBIT IV-1

Marketing and Sales Application Solutions Competitor Issues

- Closely integrated with other applications
- Competing products—IOS, EIS—will also keep market relatively small
- Features and functions vary widely
- Communications capabilities and flexible software are key

EXHIBIT IV-2

Electronic Publishing Competitor Issues

- Overabundance of features and functions
- No new entrants expected
- Competitive advantages through integration
- Strong growth of collaborative author-driven products

A

Appendix: Definitions

No industry-specific definitions have been used in this report.

See the separate volume, *Appendix A: Definition of Terms*, for the general definitions of industry structure and delivery modes used throughout INPUT reports.

B

Appendix: Forecast Data Base

EXHIBIT B-1

"Other" Cross-Industry Sector User Expenditure Forecast by Delivery Mode 1989-1995

Market Sectors	1989 ($M)	Growth 89-90 (%)	1990 ($M)	1991 ($M)	1992 ($M)	1993 ($M)	1994 (M)	1995 ($M)	CAGR 90-95 (%)
Sector Total	1,290	9	1,407	1,532	1,685	1,873	2,097	2,360	11
Processing Services	490	7	525	556	595	642	694	749	7
- Transaction Processing	490	7	525	556	595	642	694	749	7
Turnkey Systems	405	8	437	471	512	561	619	687	9
Applications Software	395	13	446	504	579	670	784	923	16
- Mainframe	165	10	182	200	224	253	288	331	13
- Minicomputer	115	10	127	139	153	168	185	204	10
- Workstation/PC	115	20	138	166	202	248	311	388	23

EXHIBIT B-2

1990 MAP Data Base Reconciliation "Other" Cross-Industry Sector

Delivery Modes	1989 Market				1994 Market				89-94 CAGR per data 89 rpt (%)	89-94 CAGR per data 90 rpt (%)
	1989 Report (Fcst) ($M)	1990 Report (Actual) ($M)	Variance from 1989 Report ($M)	Variance from 1989 Report (%)	1989 Report (Fcst) ($M)	1990 Report (Fcst) ($M)	Variance from 1989 Report ($M)	Variance from 1989 Report (%)		
Total Other Cross-Industry Sector	1,289	1,290	2	0	2,033	2,097	64	3	10	10
Processing Services	490	490	0	0	720	694	-26	-4	8	7
- Transaction Processing	490	490	0	0	720	694	-26	-4	8	7
Turnkey Systems	405	405	0	0	595	619	24	4	8	9
Applications Software	394	395	2	0	718	784	66	9	13	15

About INPUT

INPUT provides planning information, analysis, and recommendations to managers and executives in the information processing industries. Through market research, technology forecasting, and competitive analysis, INPUT supports client management in making informed decisions.

Continuous-information advisory services, proprietary research/consulting, merger/acquisition assistance, and multiclient studies are provided to users and vendors of information systems and services (software, processing services, turnkey systems, systems integration, professional services, communications, systems/software maintenance and support).

Many of INPUT's professional staff members have more than 20 years' experience in their areas of specialization. Most have held senior management positions in operations, marketing, or planning. This expertise enables INPUT to supply practical solutions to complex business problems.

Formed as a privately held corporation in 1974, INPUT has become a leading international research and consulting firm. Clients include more than 100 of the world's largest and most technically advanced companies.

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