
The Electronic Information Industry in Canada

**Volume II: Analysis of Markets
by Information Category**

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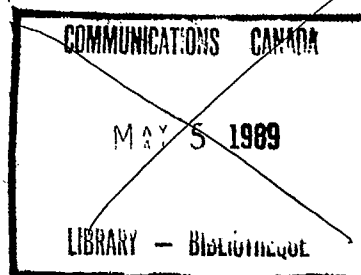
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Section 6:
Analysis of Markets
by Information Category

6. ANALYSIS OF MARKETS BY INFORMATION CATEGORY

This section provides an overview of the electronic information marketplace by category of information.

For each category, a brief overview of the U.S. market is provided (based on the LINK Resources report) including key trends affecting the North American market. This is followed by an overview of the results of this study and a description of those using the category of information, both in electronic and other distribution media.

6.1 Definitions & Description of Layout

The Description of Respondents

The description of respondents compares Phase I users (n = 57) and Phase II non-users (n = 77).

- > Phase I respondents access all categories of information (including "Other Categories of Information") on-line.
- > Phase II respondents receive all categories of information via other distribution media (typically print).

Phase II users of online information (n = 20) are excluded, since those categories which they accessed on-line versus via other distribution media were not identified.

No. of Respondents (# of R) identifies the number of Phase I users and Phase II non-users in each group. This is presented as a percent of total Phase I users/ Phase II non-users (% of cell).

Job Category divides Phase II respondents in the group by job category, and identifies each as a percent of all Phase II non-users in the same job category (% of cell). As noted, Phase I respondents were all librarians or information resources managers.

Economic Sector divides the number of respondents in each group by economic sector, and shows this as a percentage of Phase I users/ Phase II non-users within the same sector.

Since Phase II focussed primarily on "low use" sectors, those sectors from Phase I that were not surveyed in Phase II are identified with an asterisk.

Average Rating includes the average satisfaction rating for Phase II non-users in the group. The rating was based on a scale of 1 to 5, with a "1" indicating very dissatisfied and a "5" indicating very satisfied. (For comparison, the average rating across all categories of information was 3.7.)

Other Categories of Information identifies those additional categories mentioned by 50% or more of respondents in each group.

Key Vendors To This Group identifies those vendors mentioned by 25% of Phase I users in the group. These are presented in alphabetical order.

Awareness of Key Vendors identifies those vendors whose electronic information services (as opposed to corporate identity) were familiar to 25% of Phase II non-users in the group. Respondents were originally asked to respond to a list of 14 vendors, including one fictitious vendor intended to test validity. Again, vendors are presented in alphabetical order.

User Comments provides feedback from Phase I online users.

A note of caution is advised in interpretation of the mentions of specific vendors, in sections "Key Vendors To This Group" and "Awareness of Key Vendors".

- > Phase I users were asked what information sources/vendors they used, but they were *not* asked to identify their sources for each specific information category.

- > Mentions of specific providers by category should therefore be interpreted to mean that, as a group, these users tend to use the vendors identified to meet various information needs. The range of needs is also indicated by the mentions of other types of information categories.

- > Vendors of information that is specifically targeted to users within a group in many cases do not appear in the "Key Vendors" list. This does not suggest that there is a void in this type of information. Instead, it suggests that the market is very competitive, with no one vendor obtaining more than "a 25% market share" among these users.

- > Similarly, "Awareness of Key Vendors" is not related to the specific category of information, but identifies that this group of Phase II non-users is aware of the services of identified vendors to meet various information needs.

6.2 Information Categories

6.2.1 Audience Assessment Information

U.S. MARKET PERSPECTIVE

Audience assessment databases include quantitative and qualitative information of the performance (in terms of audience or readership) of a variety of communications media including newspapers, magazines, radio, and television. Audience assessment information can be distinguished from other types of marketing and media information by its specialization in media measurement, but the data are often used in combination with demographic and product movement data.

Audience assessment data are used in the U.S. by advertising agencies and in-house advertising departments to assist in media purchase decisions, and by the media to assist in editorial and program direction, sales presentations, and advertising promotions.

In general, several macro trends are changing the environment in the North American market into which audience assessment databases are sold:

- > Mega-mergers which tend to consolidate buying units while creating buying power for more sophisticated products;
- > A flaccid economy which has led advertisers to cut back on expenditures and to assume more of the functions of the advertising agencies;
- > Narrowcast marketing strategies.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

Media-related sectors -- specifically advertising agencies, entertainment and publishing/printing companies -- constitute the bulk of use of online audience assessment services in Canada.

Penetration of online audience assessment systems in the advertising departments of companies in other sectors appears minimal in Canada at present. More often, information in print form is used. In fact, print versions are also used by planners in marketing and finance.

Audience assessment data is used in combination with online and print sources of demographic, economic and product information, and news. Its use with product movement information, a key combination in the U.S., is less frequent.

Description of Respondents

	Phase I (N=57)		Phase II (N=77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	9	16	13	17
Job Category (Phase II)				
Librarian			0	0
Marketing			10	27
Finance			3	9
Economic Sector				
Advertising Agencies/Market Research	3	60	*	
Agriculture			2	25
Consumer Electronics			1	20
Credit Card			1	100
Education & Non-profit			3	60
Energy/Fuel	1	33		
Entertainment	2	100	2	50
Food & Beverage	1	33	*	
Household & Personal Care Products			2	33
Legal & Accounting Services			1	20
Lodging & Food Service			1	14
Publishing/Printing	1	100		
Transportation (Passenger)	1	50	*	
Total	9		13	
Average Rating (Phase II)			4.0	

* Sector not included in Phase II

	Phase I	Phase II
Other Categories of Information Used		
Business Credit	X	
Corporate Information		X
Demographic	X	X
Economic	X	X
Legislative & Government		X
News	X	X
Product Information	X	X

Key Vendors To This Group

Minimum No. of Mentions = 3

Dialog
Info Globe

Only two services -- Dialog and Info Globe -- were mentioned by at least three users in Phase I. However, there were 16 other services, including audience assessment services, that were named by one or two users.

Awareness of Key Vendors

Minimum No. of Mentions = 4

Dow Jones
Dun & Bradstreet
Info Globe
Infomart

User Comments

A trend in new business development among audience assessment information vendors in the U.S. has been the development of joint ventures with services providing related information types. The resulting services integrate audience assessment information with select demographic and product movement information.

Apparently, this is not yet taking place to a significant degree in Canada, as one user of audience assessment data indicated that he would like to see just this type of integration.

One user from the advertising sector also noted that the cost of this information was not a critical factor, since electronic information costs can be billed directly to clients. Instead, his major concern was the breadth of the information currently available.

User needs in this sector included:

- > A "proper" service for tracking broadcast and audio clips;
- > Better "people-metering" software;
- > More information regarding consumer behaviour patterns.

6.1.2 Business Credit Information

U.S. MARKET PERSPECTIVE

Business or commercial credit information includes detailed financial and payment records for specific companies and operating units. Business credit databases include such items as trade payment records and associated credit ratings, balance sheets, income statements, and corporate history.

Business credit information is used in making decisions to extend credit, underwrite insurance, evaluate purchases, and to make other financial and risk decisions. The largest purchasers of business credit information in the U.S. (and Canada) are major manufacturers and wholesalers, insurance companies, banks and other financial institutions.

In North America, Dun & Bradstreet is the largest vendor of business credit information, providing a full range of services to meet customers' needs for electronic and print versions. Competition in this market is targeting specific vertical applications (e.g. transportation & trucking).

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

Business credit ranked fourth in terms of mentions by on-line users and was identified by representatives from a wide range of economic sectors including automotive, chemical & drugs, containers & packaging, food & beverage, metals & metalworking & machinery, office equipment and computers, publishing & printing, and transportation.

The financial sectors, such as banks & trusts, insurance, and investment banking/management/brokerage undoubtedly also purchase the data via other electronic media, such as magnetic tape.

Description of Respondents

	Phase I (N = 57)		Phase II (N = 77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	25	44	18	23
Job Category (Phase II)				
Librarians			0	0
Marketing			8	22
Finance			10	29
Economic Sector				
Advertising Agencies/Market Research	2	40	*	
Agriculture			4	50
Automotive	1	100	*	
Banks and Trust Companies	2	40	*	
Chemical & Drugs	2	100	*	
Construction & Building Materials			1	25
Containers & Packaging	1	100	2	50
Education & Non-profit	1	25	3	60
Energy/Fuel	2	67	1	50
Entertainment			2	50
Food & Beverage	3	100	*	
Health Care			2	33
Insurance	2	50	*	
Investment Banking/Management/Brokerage	1	25	*	
Metals & Metalworking & Machinery	2	100	*	
Office Equipment & Computers	1	100	*	
Publishing/Printing	1	100	2	40
Retailing	1	50		
Telecommunications	1	100		
Transportation (Freight)			1	17
Transportation (Passenger)	2	100	*	
Total	25		18	
Average Rating (Phase II)			3.8	

* Sector not included in Phase II

	Phase I	Phase II
Other Categories of Information Used		
Corporate Information	X	X
Economic	X	X
Foreign Exchange and Money Market		X
Legislative & Government	X	X
News	X	X
Product Information	X	
Scientific	X	

Key Vendors to This Group

Minimum No. of Mentions = 7

- CAN/OLE
- Dialog
- Dun & Bradstreet
- Info Globe
- Infomart

Other vendors mentioned by business credit users which are specifically vendors of credit information include local Credit Bureaux and Creditel. There were 38 additional providers mentioned, including 24 which were single-user mentions.

Awareness of Key Vendors

Minimum No. of Mentions = 5

- Dow Jones
- Dun & Bradstreet
- FP Online
- Info Globe

User Comments

Users of business credit information indicated that they felt this service to be expensive, though critical to their business. However, it is interesting to note that there were no comments from the 25 users of business credit regarding business credit products or enhancements they would like to see.

6.2.3 Commodities Information

U.S. MARKET PERSPECTIVE

Commodities information includes real-time and delayed pricing as well as intra-day and historical technical information on a variety of basic products (usually agricultural or mineral). Commodities information covers spot and futures contract trading in precious and base metals, petroleum and petroleum by-products, foodstuffs such as grain, sugar, pork, and coffee as well as cotton, hides, wood, and other basic products.

In the U.S., users of commodities information fall into three main groups:

- > Commodity brokers, trading advisors, and fund managers;
- > Commercial interests, i.e. companies with either a direct interest in commodities markets (such as energy, agribusiness, or large trading companies), or companies using commodities markets as a hedge against a variety of investment exposures;
- > Technical traders, i.e. individuals with no underlying commercial interest in commodities production.

The key factors influencing the performance of commodities information in the U.S. are:

- > The agricultural economy;
- > The national economy;
- > International purchasing;

- > Stock market performance;
- > Stock market volatility;
- > Technological sophistication of market participants.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

Commodities information, either online or via other distribution media, appears in relatively low use across all economic sectors in Canada, even among those from the agricultural sector and those in finance.

Use appears to be restricted to traders and large commercial entities with an indirect interest in the performance of the commodities markets.

Description of Respondents

	Phase I (N = 57)		Phase II (N = 77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	13	23	12	16
Job Category (Phase II)				
Librarian			2	33
Marketing			6	16
Finance			4	12
Economic Sector				
Agriculture	1	50		
Chemical & Drugs	1	50	*	
Consumer Electronics			2	40
Containers & Packaging			3	75
Education & Non-profit			1	20
Energy/Fuel	1	33		
Food & Beverage	1	33	*	
Health Care			1	17
Household & Personal Care Products	1	100	1	17
Industrial Conglomerates			1	33
Investment Banking/Management/Brokerage	4	100	*	
Metals & Metalworking & Machinery	2	100	*	
Publishing/Printing	1	100		
Telecommunications	1	100		
Transportation (Freight)			3	50
Total	13		12	
Average Rating (Phase II)			3.7	

* Sector not included in Phase II

	Phase I	Phase II
Other Categories of Information Used		
Business Credit	X	
Corporate Information		X
Demographic		X
Economic	X	X
Foreign Exchange and Money Market	X	X
Legal	X	X
Legislative & Government		X
News	X	X
Product Information	X	X
Product Movement		X
Securities	X	

Key Vendors to This Group

Minimum No. of Mentions = 4

CAN/OLE
Dialog
Info Globe
Reuters

Awareness of Key Vendors

Minimum No. of Mentions = 3

Dow Jones
Dun & Bradstreet
FP Online
Info Globe
Infomart

User Comments

Users of commodities information offered no comments specific to this category of information.



6.2.4 Consumer Credit Information

U.S. MARKET PERSPECTIVE

Consumer credit services provide information on the credit worthiness and credit history of individuals supplied to credit grantors such as banks, retailers including department stores, credit agencies, financial service companies, and to consumers, who are permitted to get information about their own credit worthiness. The data are highly dynamic since grantors seek up-to-the-minute verification of credit profiles before extending loans or giving credit.

Users in the U.S. are credit and retail managers in banks, trust companies, investment banks and brokerage firms, credit card services and other financial services companies, and high value dealers or retailers such as automobile dealerships and real estate agencies -- all seeking information on credit viability and risk. Consumer credit information vendors in the U.S. are serving increasingly smaller business establishments and adding more and more individual credit profiles to their databases.

The following factors control the growth of revenue from consumer credit information in the U.S.:

- > The condition of the economy;
- > The number of individuals applying for credit, especially home mortgages;
- > The number of people moving to different locations, thus creating new credit information needs;

- > The increased number of credit card suppliers and the increase in aggregate credit purchasing which results from their advertising and promotion;
- > The size of the consumer debtor population.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

Consumer credit information is typically used to process loan applications for high ticket items such as homes and automobiles, and by financial institutions extending consumer credit (banks & trusts; credit card grantors). Typically these applications are handled by credit departments and local managers.

As well, non-interactive and aggregated consumer credit information can be used by other departments (such as marketing) within credit granting organizations.

Description of Respondents

	Phase I (N = 57)		Phase II (N = 77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	14	25	11	14
Job Category (Phase II)				
Librarian				
Marketing			6	16
Finance			5	15
Economic Sector				
Agriculture			2	25
Automotive	1	100	*	
Bank & Trust Companies	2	40	*	
Construction & Building Materials			2	50
Containers & Packaging			1	25
Credit Card			1	100
Education & Non-profit			2	40
Energy/Fuel	1	33		
Food & Beverage	1	33	*	
Health Care			2	33
Insurance	1	25	*	
Investment Banking/Management/Brokerage	3	75	*	
Lodging & Food Service			1	14
Metals & Metalworking & Machinery	1	50	*	
Office Equipment & Computers	1	100	*	
Publishing/Printing	1	100		
Retailing	1	50		
Transportation (Passenger)	1	50	*	
Total	14		11	
Average Rating (Phase II)			3.7	

* Sector not included in Phase II

	Phase I	Phase II
Other Categories of Information Used		
Business Credit	X	X
Corporate Information	X	X
Demographic	X	X
Economic	X	X
Foreign Exchange and Money Market	X	
Legal	X	
Legislative & Government		X
News	X	X
Product Information	X	X
Product Movement		X

Key Vendors to This Group

Minimum No. of Mentions = 4

- Dialog
- Dun & Bradstreet
- FP Online
- Info Globe
- IP Sharp

Nine other services received multiple mentions.

Awareness of Key Vendors

Minimum No. of Mentions = 3

- Dow Jones
- Dun & Bradstreet
- FP Online
- Info Globe

User Comments

Users of consumer credit information commented that online access to this type of information was time-saving, but costly. One user of a local Credit Bureau stated that he is not satisfied with the hardcopy material he receives within minutes of keying in the request and would like to see an increase in the speed and amount of information appearing online.

6.2.5 Demographic Information

U.S. MARKET PERSPECTIVE

Demographic information includes geographic distribution, vital statistics, purchasing, and economic data on human populations and business establishments. Consumer information includes such items as sex, race, age, marital status, occupation and employment, household size and income, location, and purchasing habits while business information includes industrial classification, size in revenues or sales and/or number of employees, executive officers, location, and purchasing data.

Demographic information is often used for market analyses which may also require audience assessment, product information and product movement, and fundamental corporate information. The key users in the U.S. are marketing specialists who believe that success of sales is often predicated on having current information about the characteristics and habits of the target marketplace for products and services to consumers or business establishments. Users rely on the intelligence gathering and monitoring activities of the demographic information producers.

Demographic intelligence is also of vital importance to a broad business and professional community, from the professional site location planner and media buyer to the corporate financial officer, lawyer, librarian, and the reporters and editors who write about the business marketplace.

The industries in the U.S. where users are employed are equally broadly distributed: ad agencies, retail establishments, food & beverage companies, mail order houses, textile & apparel corporations, banks, trust companies, investment banks, government departments,

even education and non-profit establishments. The target industries for growth are equally diverse: construction, agriculture, energy, office equipment, paper & forest products, health care, broadcast media, insurance, and industrial conglomerates.

Major factors affecting the growth of demographic information sales in the U.S. are:

- > A sluggish economy and low penetration of personal computers in key areas such as marketing departments;
- > Lack of awareness of demographic information services;
- > Limited understanding among business people of where their advertising dollars go.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

Demographic information is critical to major organizations in Canada. Demographic data is most often used in conjunction with corporate, economic and product information, and news.

No one industry segment stands out as more likely to use this category, although the penetration of online use can vary within sectors.

A major supplier of demographic information is Statistics Canada, through low-cost publications and online distributors. Dun & Bradstreet data is a second major source. In addition, numerous distributors provide industry specific demographic data.

Description of Respondents

	Phase I (N = 57)		Phase II (N = 77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	24	42	35	45
Job Category (Phase II)				
Librarian			2	33
Marketing			24	65
Finance			9	26
Economic Sector				
Advertising Agencies/Market Research	3	60	*	
Aerospace/Aviation	1	100	*	
Agriculture			3	38
Banks and Trust Companies	3	60	*	
Chemical & Drugs	1	50	*	
Construction & Building Materials			2	50
Consumer Electronics			3	60
Containers & Packaging			2	50
Credit Card			1	100
Education & Non-profit	1	25	4	80
Energy/Fuel	1	33	1	50
Entertainment	1	50	2	50
Health Care			2	33
Household & Personal Care Products	1	100	3	50
Industrial Conglomerates			1	33
Insurance	1	25	*	
Investment Banking/Management/Brokerage	3	75	*	
Legal & Accounting Services			1	20
Lodging & Food Service			4	57
Metals & Metalworking & Machinery	1	50	*	
Paper & Forest Products	2	100	*	
Publishing/Printing	1	100		
Retailing	1	50	4	80
Telecommunications	1	100		
Transportation (Freight)			2	33
Transportation (Passenger)	1	50	*	
Other	1	100	*	
Average Rating (Phase II)			3.3	

Phase I

Phase II

Other Categories of Information Used

Corporate Information	X	X
Economic	X	X
Legislative & Government		X
News	X	
Product Information	X	X

Key Vendors to This Group

Minimum No. of Mentions = 6

- CAN/OLE
- CSG
- Dialog
- Info Globe
- Infomart

Twelve other services received multiple mentions.

Awareness of Key Vendors

Minimum No. of Mentions = 9

- Dow Jones
- Dun & Bradstreet
- Info Globe

User Comments

Users stated that they would like to see more demographic information in conjunction with corporate and industry information. They would like more information on markets by sales and other parameters.

Government information was also requested: online searchable data or microfiche from Consumer and Corporate Affairs, and more demographic information comparable to that which is available through Statistics Canada.

6.2.6 Economic Information

U.S. MARKET PERSPECTIVE

Economic information covers data in numerical, textual, and graphic form which details the historical production and consumption characteristics of economies, at various levels and for various subsets of economies. It includes such subject areas as trade and trade payments, employment, flow of funds, country assessment and risk, industrial performance, and micro- and macro-economic forecasting.

Economic and econometric data are manipulated with elaborate applications software programs for comparative analysis and forecasting. Economic analyses often combine economic information with other information types such as demographic, fundamental corporate, and business and consumer credit, as well as with proprietary internal databases.

Users in the U.S. tend to be professional analysts such as money or fund managers, economists, planners, or marketers; even purchasing agents of critical goods and services. Many users are in commercial banking, investment banking and brokerage firms, as well as manufacturing, retailing, industrial conglomerates, and governments.

The key factor controlling the revenues and growth of this information type in the U.S. is world economic performance. The relationship between sales of economic information services and the economy itself is generally perceived to be inverse.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

IP Sharp, recently purchased by Reuters, has developed an international reputation for its economic/ econometric databases.

However, both users of online economic information and those who use economic data via other media expressed concerns about the scope and coverage of information available.

Economic data is used in conjunction with several other online services, including corporate, demographic, legal, legislative & government, news, product and scientific information.

Description of Respondents

	Phase I (N=57)		Phase II (N=77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	33	58	55	71
Job Category (Phase II)				
Librarian			5	83
Marketing			24	65
Finance			26	76
Economic Sector				
Advertising Agencies/Market Research	2	40	*	
Agriculture	1	50	5	63
Banks and Trust Companies	4	80	*	
Chemical & Drug	2	100	*	
Construction & Building Materials			3	75
Consumer Electronics			3	60
Containers & Packaging			3	75
Credit Card			1	100
Education & Non-profit	3	75	4	80
Energy/Fuel	3	100	2	100
Entertainment	1	50	2	50
Food & Beverage	2	66	*	
Health Care			2	33
Household & Personal Care Products	1	100	6	100
Industrial Conglomerates			3	100
Insurance	2	50	*	
Investment Banking/Management/Brokerage	4	100	*	
Legal & Accounting Services	1	25	2	40
Lodging & Food Service			7	100
Metals & Metalworking & Machinery	2	100	*	
Paper & Forest Products	2	100	*	
Publishing/Printing	1	100	1	20
Retailing			4	80
Telecommunications	1	100	1	100
Transportation (Freight)			6	100
Transportation (Passenger)	1	50	*	
Average Rating (Phase II)			3.5	

	Phase I	Phase II
Other Categories of Information Used		
Business Credit	X	
Corporate Information	X	X
Demographic	X	X
Legal	X	
Legislative & Government	X	X
News	X	X
Product Information	X	
Scientific	X	

Key Vendors to This Group

Minimum No. of Mentions = 9

- CAN/OLE
- Dialog
- FP Online
- Info Globe
- Infomart

Sixteen other vendors also received multiple mentions.

Awareness of Key Vendors

Minimum No. of Mentions = 14

- Dow Jones
- Dun & Bradstreet
- FP Online
- Info Globe
- Infomart

User Comments

There is great concern among U.S. users over the relevance and accuracy of this type of data. This same concern was expressed by users in this study who commented that the economic information available is of poor quality and coverage.

One user stated that he would like to see more information on investment banking.

Another user stated that economic forecasting databases (especially those which are non-American) are particularly costly.

6.2.7 Fundamental Corporate and Historical Pricing Information

U.S. MARKET PERSPECTIVE

Fundamental corporate performance data and forecasts, and historical pricing information on corporate debt or equity issues which are, have been, or will be publicly traded are all included in this information type. It comprises numeric and textual data from SEC filings, annual reports, investment bank research reports, together with standardized time series of historical equity prices.

Fundamental corporate information is distinguished from certain categories of business news, such as earnings announcements, primarily depending on the completeness of the financial data offered. A few financial statistics in the context of a news item would not be included in this category. Historical pricing information differs from current (including real-time) pricing in that it is provided as a retrospective time series and is updated no more frequently than daily. Historical pricing is often used for end-of-day reconciliations and long term pricing adjustments for splits and other restructuring.

In the U.S., professional investors (including portfolio managers, investment advisors, plan sponsors, and trust departments in banks) use fundamental corporate information, often in conjunction with historical pricing and earnings estimate databases, to:

- > Screen for companies that match their investment criteria;
- > Get detailed financial reports with historical information and ratio analysis on selected companies;

- > Download selected information into spreadsheets for quarterly comparisons, industry comparisons, growth models, and cash flows models;
- > Monitor key characteristics of the companies they own to watch for early signs of potential weakness.

Merger and acquisition specialists and investment bankers use these databases to target acquisition candidates and to perform valuation exercises. Corporate finance departments use them to evaluate investment decisions and to monitor the performance of past investments. Corporate strategic planning departments use fundamental and historic pricing information for competitive analysis. Other users include traders, individual investors, credit analysts, and marketing analysts.

The key factors affecting sales of this information type in the U.S. are the behaviour of the financial markets and the accelerating exploitation of advanced, largely PC-based technology. The most basic day-to-day indicator of the use of corporate information is trading volume. A secondary indicator is the level of merger and acquisition activity.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

Because of the differing reporting requirements of Canadian vs U.S. stock exchanges, a significant source of detailed corporate information -- the SEC filings or 10Ks -- does not have a Canadian equivalent. As a result, less detailed information is available on Canadian companies and Canadian operations of U.S. based companies, compared to information that is readily available in the U.S.

The significant demand for corporate information is being met by a growing number of corporate databases being offered by Canadian-based vendors.

Not surprisingly, use of online services offering corporate information is widespread across industry sectors. It is most often used in with conjunction with online economic, product information and news sources.

Description of Respondents

	Phase I (N=57)		Phase II (N=77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	34	60	54	70
Job Category (Phase II)				
Librarian			3	50
Marketing			27	73
Finance			24	71
Economic Sector				
Advertising Agencies/Market Research	3	60	*	
Agriculture			7	88
Banks and Trust Companies	4	80	*	
Chemical & Drugs	2	100	*	
Construction & Building Materials	1	100	2	50
Consumer Electronics			5	100
Containers & Packaging	1	100	4	100
Education & Non-profit	2	50	3	60
Energy/Fuel	3	100	1	50
Entertainment			3	75
Food & Beverage	3	100	*	
Health Care			3	50
Household & Personal Care Products			4	67
Industrial Conglomerates			2	67
Insurance	1	25	*	
Investment Banking/Management/Brokerage	4	100	*	
Legal & Accounting Services	1	25		
Lodging & Food Service			7	100
Metals & Metalworking & Machinery	2	100	*	
Paper & Forest Products	2	100	*	
Publishing/Printing	1	100	2	40
Retailing	1	50	3	60
Telecommunications	1	100	1	100
Transportation (Freight)			5	83
Transportation (Passenger)	2	100	*	
Average Rating (Phase II)			3.4	

* Sector not included in Phase II

	Phase I	Phase II
Other Categories of Information Used		
Business Credit	X	
Economic	X	X
Legislative & Government		X
News	X	X
Product Information	X	
Scientific	X	

Key Vendors to This Group

Minimum No. of Mentions = 9

- CAN/OLE
- Dialog
- FP Online
- Info Globe
- Infomart

Seventeen other services also received multiple mentions.

Awareness of Key Vendors

Minimum No. of Mentions = 14

- Dow Jones
- Dun & Bradstreet
- FP Online
- Info Globe

User Comments

One major user of corporate information stated that these services are somewhat overpriced and felt that this was unlikely to change due to the great demand for this type of information.

Several comments were made about the poor quality of this type of information. Users would like to see this on-line information become more accurate, more complete, and more timely. One user commented that the corporate database he uses is updated only once a year (the same as the print version).

There were several comments made about the lack of Canadian corporate information, and part of this results from the differences in reporting requirements for Canadian vs. U.S. companies. For example, users would like to see more information in Canadian annual reports (i.e. sales figures), and other ownership information. Users also believe that they require database services containing more competitive analysis. One user stated that he would like to see a database containing official press releases for Canadian companies, similar to those offered by Mead Data and Dialog.

6.2.8 Foreign Exchange and Money Market Information

U.S. MARKET PERSPECTIVE

Foreign exchange and money market information is pricing and technical data related to the exchange of currencies, currency futures, bankers acceptances, certificates of deposit, commercial paper, and government securities including treasury notes, bills, bonds and their associated options.

The foreign exchange and money market information type includes historical pricing services as well as real time market information services such as Reuters and Telerate.

Users of foreign exchange and money market information in the U.S. are mainly institutional traders, (i.e. traders within banks and investment or insurance companies), although an increasing number of corporate treasurers and large individual investors are becoming active in these markets.

The volatility and growth of the foreign exchange and money markets have contributed to the growth of the information vendors serving these markets. There is clearly increased awareness of the potential profits available to institutional and corporate speculators, and of the potential penalties for the corporations and institutions which do not actively manage their exposure in these markets. Approximately 90% of foreign exchange trading is speculative in nature.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

In addition to the institutional and speculative trading, foreign exchange and money market data is critical to those organizations selling into, or buying from the U.S. The fluctuations in the dollar, especially the strengthening of the Canadian dollar that has taken place recently, will have a major impact on the bottom line statements of these companies.

Foreign exchange and money market data is used in combination with numerous other online services, including economic, commodities and securities databases.

Description of Respondents

	Phase I (N=57)		Phase II (N=77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	19	33	27	35
Job Category (Phase II)				
Librarian			1	17
Marketing			6	16
Finance			20	59
Economic Sector				
Agriculture			3	38
Automotive	1	100	*	
Banks and Trust Companies	2	40	*	
Chemical & Drugs	1	50	*	
Construction & Building Materials			2	50
Consumer Electronics			3	60
Containers & Packaging			3	75
Education & Non-profit	1	25	2	40
Energy/Fuel	1	33	1	50
Entertainment			1	25
Food & Beverage	1	33	*	
Health Care			1	17
Household & Personal Care Products	1	100	2	33
Industrial Conglomerates			1	33
Insurance	2	50	*	
Investment Banking/Management/Brokerage	4	100	*	
Legal & Accounting Services			1	20
Lodging & Food Service			1	14
Metals & Metalworking & Machinery	2	100	*	
Publishing/Printing	1	100	3	60
Telecommunications	1	100		
Transportation (Freight)			3	50
Transportation (Passenger)	1	50	*	
Total	19		27	
Average Rating (Phase II)			3.9	

* Sector not included in Phase II

	Phase I	Phase II
Other Categories of Information Used		
Business Credit	X	
Commodities	X	
Corporate Information	X	X
Demographic	X	
Economic	X	X
Legal	X	X
Legislative & Government	X	X
News		X
Product Information	X	
Scientific	X	
Securities	X	

Key Vendors to This Group

Minimum No. of Mentions = 5

- CAN/OLE
- Dialog
- Info Globe
- Infomart

Eleven other services received multiple mentions.

Awareness of Key Vendors

Minimum No. of Mentions = 7

- Dow Jones
- Dun & Bradstreet
- FP Online
- Info Globe
- Infomart

User Comments

Phase I users made no specific comments related to the foreign exchange and money markets services that they currently use.

6.2.9 Legal Information

U.S. MARKET PERSPECTIVE

Legal information includes the citations, abstracts and full text of foreign, federal and state and provincial statutes, local law, case law, regulations, and court decisions. Electronic legal reference aids are also included.

The legal information segment is distinct from the legislative and governmental information type in that it does not include, for example, data on the law-making process. Legal information may be distinguished from patent and trademark information as the latter is restricted to technical data on inventions and registration information.

The primary application for legal information services is to make electronic searches of voluminous case law. Additional information types carried by legal information vendors are: news, legislation, scientific, fundamental, corporate, and product information (e.g., official Airlines Guide).

In the U.S., librarians/information specialists, attorneys, accountants, and corporate financial officers are the primary users of legal information services.

The following key factors influence the growth of legal information services in the U.S.:

- > Increased exposure of today's law school students to electronic searching;
- > Growth of office automation among law offices and courts;

- > Increased computer sophistication among lawyers;
- > An expanding selection of, and increasing competition among, legal databases;
- > Increasing computerization of government agencies.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

Competition in online legal databases has increased in Canada, in terms of both distribution and marketing. While legal information is already used in electronic and printed form in a wide range of companies and by those outside the legal profession, this competition will stimulate growth in this category.

Like their counterparts in the U.S., the next generation of practitioners will be more receptive to new ways of doing business. Not only will they be experienced computer users, they will have exposure to legal databases and a better understanding of the price/value of electronic searching.

Description of Respondents

	Phase I (N=57)		Phase II (N=77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	20	35	31	40
Job Category (Phase II)				
Librarian			2	33
Marketing			13	35
Finance			16	47
Economic Sector				
Agriculture			1	13
Banks and Trust Companies	3	60	*	
Construction & Building Materials			3	75
Consumer Electronics			2	40
Containers & Packaging			1	25
Education & Non-profit	1	25	2	40
Energy/Fuel	3	100	1	50
Entertainment			4	100
Food & Beverage	1	33	*	
Health Care			4	67
Household & Personal Care Products			4	67
Industrial Conglomerates			1	33
Insurance	1	25	*	
Investment Banking/Management/Brokerage	3	75	*	
Legal & Accounting Services	3	75	1	20
Lodging & Food Service			2	29
Metals & Metalworking & Machinery	2	100	*	
Publishing/Printing	1	100	2	40
Telecommunications	1	100		
Transportation (Freight)			3	50
Transportation (Passenger)	1	50	*	
Total	20		31	
Average Rating (Phase II)			4.1	

* Sector not included in Phase II

	Phase I	Phase II
Other Categories of Information Used		
Business Credit	X	
Corporate Information	X	X
Economic	X	X
Legislative & Government	X	X
News	X	X
Product Information	X	

Key Vendors to This Group

Minimum No. of Mentions = 5

- CAN/OLE
- CSG
- Dialog
- Dow Jones
- Dun & Bradstreet
- FP Online
- Info Globe
- Infomart
- Mead Data
- QL Systems

Ten other vendors received multiple mentions.

Awareness of Key Vendors

Minimum No. of Mentions = 8

- Dow Jones
- Dun & Bradstreet
- FP Online
- Info Globe
- Infomart

User Comments

Phase I users made no specific comments related to the legal services that they currently use.

6.2.10 Legislative & Governmental Information

U.S. MARKET PERSPECTIVE

Legislative and governmental information consists of:

- > Indices, citations, abstracts, and the full text of non-legal and non-regulatory government publications;
- > Legislative tracking services for federal, provincial, state, and municipal legislation;
- > Information on the research and fiscal activities of government, including procurement for defense, law enforcement, information management, committee and subcommittee activities, voting records, notices, hearings, calendars of events, and meetings.

Legal information, the most closely-related information type, includes case law, full coverage of international, federal, provincial, state, and local law as well as comprehensive coverage of regulations and court decisions.

Because the legislative and governmental information category covers such diverse subjects as fair employment practices, chemical substances control, occupational safety and health, gun control, international relations, political contributions, and legislation, the range of users and purchasers in the U.S. is just as wide. Large corporations in industries such as office equipment, energy, and telecommunications, trade associations, law offices, accounting firms, lobbying groups, and politicians' offices are all represented.

The job functions of legislative and governmental information users in the U.S. include scientists and researchers, defense contractors, purchasing agents, personnel

managers, public relations specialists, corporate officers, product developers, federal procurement officials, government contractors, information specialists, and general managers.

The key factors influencing sales of legislative and governmental information in the U.S. are:

- > The health of the economy;
- > The level of government contracting;
- > Acceptance of electronic distribution of information;
- > Penetration of personal computers among user organizations;
- > The amount of support which both states and Federal government give to local government;
- > The amount of federal and state regulation;
- > The emergence of critical issues in domestic and world politics;
- > The rejection of online information technology by personnel departments;
- > Lack of technical sophistication among regulatory information vendors;
- > Recent onslaught of competition in this area.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

While most organizations incorporate legislative and government information in their plans and activities, the information is primarily used in non-electronic media.

The government primarily uses a paper-based system of distribution. This provides ready access to information and documents at no or low cost to the public.

In addition, the government provides electronic access to specific information via distributors. It becomes the task of these distributors to convince potential users of the cost/benefit of electronic access.

Users would like to see an improvement in both the coverage and quality of legislative and government information. This depends to some extent on government's willingness to increase distribution of information in electronic form. Moreover, it depends on distributors' success in developing a critical mass of users, to profitably support additional services and increased R&D. Distributors are currently faced with:

- > Competition with alternative, low cost government sources.
- > Competition with other distributors marketing versions of the same government source data.

Description of Respondents

	Phase I (N=57)		Phase II (N=77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	22	39	57	74
Job Category (Phase II)				
Librarian			5	83
Marketing			28	76
Finance			24	71
Economic Sector				
Agriculture	1	50	6	75
Banks and Trust Companies	3	60	*	
Construction & Building Materials			3	75
Consumer Electronics			3	60
Containers & Packaging			4	100
Education & Non-profit	3	75	4	80
Energy/Fuel	1	33	1	50
Entertainment	1	50	4	100
Food & Beverage	2	67	*	
Health Care			6	100
Household & Personal Care Products			4	67
Industrial Conglomerates			2	67
Insurance	3	75	*	
Investment Banking/Management/Brokerage	2	50	*	
Legal & Accounting Services			5	100
Lodging & Food Service			5	71
Metals & Metalworking & Machinery	1	50	*	
Paper & Forest Products	1	50	*	
Publishing/Printing	1	100	2	40
Retailing			3	60
Telecommunications	1	100	1	100
Transportation (Freight)			4	67
Transportation (Passenger)	2	100	*	
Total	22		57	
Average Rating (Phase II)			3.5	

* Sector not included in Phase II

	Phase I	Phase II
Other Categories of Information Used		
Business Credit	X	
Corporate Information	X	X
Economic	X	X
Foreign Exchange and Money Market	X	
Legal	X	
News	X	X
Product Information	X	
Scientific	X	

Key Providers to This Group

Minimum No. of Mentions = 6

- CAN/OLE
- Dialog
- Dun & Bradstreet
- FP Online
- Info Globe
- Infomart

Thirteen other vendors received multiple mentions.

Awareness of Key Vendors

Minimum No. of Mentions = 15

- Dow Jones
- Dun & Bradstreet
- FP Online
- Info Globe
- Infomart

User Comments

As noted, users stated that access to Canadian government information online is poor and they would like to see more government material available. Specifically mentioned were official government press releases from Investment Canada and Consumer and Corporate Affairs.

6.2.11 News

U.S. MARKET PERSPECTIVE

News in the form of indices, abstracts, citations, and the full text of new items represents the electronic marketplace for both global/general and specific business and industrial news. It includes the electronic information products derived from a variety of sources, from newspapers, magazines, newswires, and newsletters to news from farm bureaus, public/press relations offices, associations, and societies covering foreign and domestic affairs, business, sports, the arts & sciences, law, and financial commodities markets.

The core user-group in the U.S. is composed of librarians and information specialists, although there is reasonably heavy use from brokers and professional traders, public affairs specialists, planners, marketers, and corporate managers. The other job functions indicating usage of electronic news information services include lawyers, accountants, loan officers, planners, farmers, financial analysts, reporters & editors, and individual investors.

The market for news crosses all industries, although provider respondents in the U.S. gave high ratings to Fortune 500 and industrial conglomerates, brokerage and investment banks, and government.

The main application of news databases is for research of facts, statistics, trends, events, and recent historical information about people, corporations, institutions, places, products, dates, issues, events, and other newsworthy situations.

Factors controlling the growth of news vendors in the U.S. are:

- > The competition to match data, services, quality, and distribution efficiency with real business information needs on a timely basis;
- > Increased interest in real-time and current information, to support management decision making;
- > Availability of personal computers and other desktop access equipment, especially to management;
- > Costs (to the vendor) of business development and of information acquisition;
- > Ability to target news which is necessary, not discretionary;
- > Ease of access (log on) and affordable pricing;
- > Reliability of terminal equipment and telecommunications links;
- > The emergence of crucial national and international issues, and the degree to which business conditions are affected by them;
- > The rate of globalization of markets;
- > Education of the marketplace, particularly the end-user community, to the value of electronic information services;
- > The escalation of knowledge workers' salaries;

- > Increasingly centralized information purchasing in mid-sized companies;
- > Development of integrated office information systems;
- > Increasing budgets for consumption of outside information sources.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

More users mentioned use of online news services than any other category of information.

The competitive situation for news services has changed. Five years ago, Info Globe was the only serious contender in high quality, full text Canadian news information, and competition came primarily from newswire services. At that time, FP and Infomart were experimenting with alternative distribution media, including videotex. Now, with the support of print-publishing parents companies, FP Online and Infomart are aggressively competing for share of market in the electronic publishing business.

This level of competition appears to be creating positive conditions in the marketplace:

- > It was the single category of information where major improvements in the quality, scope and coverage of information were recognized.
- > Even among non-users, there is a high level of awareness of the electronic services provided by these vendors across all information types.

This receptivity in the marketplace, complemented by the fact that news services are widely applicable to a variety of economic sectors and job functions, no doubt sets the stage for growth in the category.

Description of Respondents

	Phase I (N=57)		Phase II (N=77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	37	65	59	77
Job Category (Phase II)				
Librarian			4	67
Marketing			32	86
Finance			23	68
Economic Sector				
Advertising Agencies/Market Research	3	60	*	
Agriculture	1	50	5	63
Banks and Trust Companies	3	60	*	
Chemical & Drugs	1	50	*	
Construction & Building Materials			3	75
Consumer Electronics			3	60
Containers & Packaging	1	100	4	100
Credit Card			1	100
Education & Non-profit	3	75	5	100
Energy/Fuel	3	100	2	100
Entertainment			3	75
Food & Beverage	3	100	*	
Health Care			5	83
Household & Personal Care Products	1	100	5	83
Industrial Conglomerates			2	67
Insurance	2	50	*	
Investment Banking/Management/Brokerage	4	100	*	
Legal & Accounting Services	3	75	3	60
Lodging & Food Service			5	71
Metals & Metalworking & Machinery	2	100	*	
Paper & Forest Products	2	100	*	
Publishing/Printing	1	100	5	100
Retail			4	80
Telecommunications	1	100		
Transportation (Freight)			4	67
Transportation (Passenger)	2	100	*	
Other	1	100	*	
Average Rating (Phase II)			3.8	

	Phase I	Phase II
Other Categories of Information Used		
Business Credit	X	
Corporate Information	X	X
Demographic	X	
Economic	X	X
Legal	X	
Legislative & Government	X	X
Product Information	X	

Key Providers to This Group

Minimum No. of Mentions = 10

- Dialog
- FP Online
- Info Globe
- Infomart

In addition, eighteen other services received multiple mentions.

Awareness of Key Vendors

Minimum No. of Mentions = 15

- Dow Jones
- Dun & Bradstreet
- FP Online
- Info Globe

User Comments

Users commented that they would like to see more Canadian news online (French language newspapers and newspapers from Eastern and Western Canada were mentioned specifically) although availability is perceived to be improving. Users would like to see all

Canadian news available on one service and searchable all at once.

Some concern was expressed over cost as well as inconsistent and inaccurate indexing of online news.

6.2.12 Patent and Trademark Information

U.S. MARKET PERSPECTIVE

Patent information contains publicly-available citations, indices, abstracts and full text of patents, as well as patent transfer, reissuance, and litigation information. Trademark information includes product descriptions or services, and filing and registration information.

Patent and trademark information may be characterized as dealing with technical data on inventions and registration information respectively. The legal, legislation, and government information segments are distinct in that they consist primarily of laws, the law-making process, or executive agency regulations.

The primary application for patent and trademark information is to make electronic searches of voluminous technical and registration records. Only one of the surveyed vendors in the U.S. study reported offering additional information types, i.e., bankruptcy and corporate information.

The primary users in the U.S. of patent and trademark information tend to be corporate and government librarians/information specialists, government patent and trademark researchers, corporate attorneys and paralegals, corporate marketing and licensing professionals, product developers, and financial analysts.

The following factors exert a positive influence on the growth of patent and trademark information in the U.S.:

- > Growing market awareness of the benefits of accessing data electronically;
- > Significant cost savings compared with traditional custom consulting;
- > Rapid expansion of product development in the computer, pharmaceutical, and toy industries;
- > "Push" influence of U.S. vendors through international electronic gateways in awakening foreign markets;
- > "Pull" influence of selected foreign governments in subsidizing research and development as a catalyst to strengthen respective economies.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

While the influences affecting the market for patent and trademark information may be similar, the vendors in Canada are typically not restricted to serving this market alone. More often, patent & trademark databases are marketed alongside other types of legislative & government databases.

Within large organization, the frequent need for patent and trademark information virtually necessitates its access in an electronic version by information specialists. However, printed versions may be used to a lesser extent by marketing and financial analysts.

Description of Respondents

	Phase I (N=57)		Phase II (N=77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	18	32	13	17
Job Category (Phase II)				
Librarian			1	17
Marketing			9	24
Finance			3	9
Economic Sector				
Agriculture			2	25
Banks and Trust Companies	1	20	*	
Chemical & Drugs	2	100	*	
Construction & Building Materials	1	100	1	25
Consumer Electronics			1	20
Containers & Packaging	1	100		
Education & Non-profit	2	50	2	40
Energy/Fuel	1	33		
Entertainment			2	50
Food & Beverage	2	67	*	
Health Care			2	33
Household & Personal Care Products			2	33
Lodging & Food Service			1	14
Metals & Metalworking & Machinery	2	100	*	
Paper & Forest Products	2	100	*	
Publishing/Printing	1	100		
Retailing	1	50		
Telecommunication	1	100		
Transportation (Passenger)	1	50	*	
Total	18		13	
Average Rating (Phase II)			4.2	

* Sector not included in Phase II

	Phase I	Phase II
Other Categories of Information Used		
Business Credit	X	
Corporate Information	X	X
Demographic	X	X
Economic	X	
Legal		X
Legislative & Government	X	X
News		X
Product Information		X
Product Movement	X	
Real Estate	X	
Scientific	X	

Key Providers to This Group

Minimum No. of Mentions = 5

- BRS
- CAN/OLE
- CSG
- Dialog
- Info Globe
- Infomart

Seven other services received multiple mentions.

Awareness of Key Vendors

Minimum No. of Mentions = 4

- Dow Jones
- Dun & Bradstreet
- FP Online
- Info Globe
- Infomart

User Comments

Current users offered no specific comments related to patents and trademark services.

6.2.13 Product Information

U.S. MARKET PERSPECTIVE

Product information consists of textual and numeric data relating to the cost, characteristics, and availability of products and services of great diversity, including: airplanes, audiovisual materials, real estate, colleges & universities, semiconductor chips, vehicles, military supplies, products advertised in yellow-page directories, used computers, software, and consulting services. Even databases that quantify advertising expenditures by product are included.

Excluded are product movement databases that provide information on the ordering, shipment, inventory, and sales of products by brand name or manufacturer. Also excluded are audience assessment databases, including quantitative and qualitative information on the performance of communications media, and vertical market/operational databases that serve or monitor the operations of a specific vertical market or industry.

A number of product information vendors in the U.S. are devoted strictly to information about products -- Aztex Hotel Information Service; Videolog (electrical and electronic components); and Comp-U-Store shopping service, with descriptions and prices of nationally advertised consumer products.

However, many more deliver product information nested within a service, including other information types such as Demographic, Scientific, or Vertical Market/Operational. These are exemplified by such diverse distributors as Sabre and Apollo, which in addition to ordering and confirmation services, provide hotel and travel information, and by Dialog Information Services, which offers a

variety of product information among its large array of scientific and business databases.

Vendors of product information in the U.S. are a diverse group including CDA Spectrum (pension plans), MDC's Micromedex (health care & drug products), CompuServe (movies, consumer goods, insurance, drugs, music, cars, colleges, etc.), INET, Rand McNally's Milemaker (carrier route mileage), International Research & Evaluation (optics, lasers, toxic substances, land, etc.), and Delphi.

Product information is often coupled with manipulative software, frequently offline, for report writing, integration with Point-of-Sale data, messaging, and other applications.

Users in the U.S. are as diverse as the product information they seek. They include purchasing agents, meeting planners, consumers seeking to buy, logistics personnel, sales people, automobile mechanics, travellers for pleasure and business, electronic engineers seeking specifications for products they are creating through computer-aided design, field service maintenance & repair staff, accountants, librarians, and general management. The industries and institutions in which users operate are equally diverse, from education to government to health care to home hardware.

There are five key factors which influence the growth of product information services in the U.S.:

- > The economic situation;
- > The awareness and acceptance of electronic information services;
- > Trends in marketing, particularly to consumers;

- > Improvements in technology;
- > The globalization of business, especially the development of international competition.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

Although there is widespread use of this category, product information specifically related to the Canadian market is lacking.

In the U.S., most vendors have carved niche markets, and there is the demand to support the costs of collecting and maintaining this information. Vendors can afford to specialize, and it is typically highly specialized information that is required. As well, these services have an international appeal for companies wanting to compete in the U.S. market.

The critical mass is apparently not there to support similar service development for the Canadian market. If a change is to occur in this situation, it is likely to come from two forces:

- > Conversion of internal and operational databases to commercially available services, thus leveraging the "sunk costs" of development and maintenance.
- > Widespread use of micro-computer based technology with standard software packages that limit the cost of development.

Description of Respondents

	Phase I (N=57)		Phase II (N=77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	25	44	32	42
Job Category (Phase II)				
Librarian			4	67
Marketing			21	57
Finance			7	21
Economic Sector				
Advertising Agencies/Market Research	2	40	*	
Agriculture			3	38
Banks and Trust Companies	2	40	*	
Chemical & Drugs	2	100	*	
Construction & Building Materials	1	100	1	25
Consumer Electronics			4	80
Containers & Packaging	1	100	2	50
Education & Non-profit	2	50	2	40
Energy/Fuel	2	67	1	50
Entertainment			2	50
Food & Beverage	3	100	*	
Health Care			2	33
Household & Personal Care Products			5	83
Industrial Conglomerates			1	33
Investment Banking/Management/Brokerage	2	50	*	
Lodging & Food Service			4	57
Metals & Metalworking & Machinery	2	100	*	
Office Equipment & Computers	1	100	*	
Paper & Forest Products	2	100	*	
Publishing/Printing	1	100		
Retailing			3	60
Telecommunications	1	100	1	100
Transportation (Freight)			1	17
Transportation (Passenger)	1	50	*	
Total	25		32	
Average Rating (Phase II)			3.9	

	Phase I	Phase II
Other Categories of Information Used		
Business Credit	X	
Corporate Information	X	X
Demographic	X	X
Economic	X	X
Legal	X	
Legislative & Government	X	X
News	X	X
Patents & Trademarks	X	
Product Movement	X	X
Scientific	X	

Key Providers to This Group

Minimum No. of Mentions = 7

CAN/OLE
Dialog
Info Globe
Infomart

Thirteen other services also received multiple mentions.

Awareness of Key Vendors

Minimum No. of Mentions = 8

Dow Jones
Dun & Bradstreet
FP Online
Info Globe
Infomart

User Comments

As noted above, users stated that they need more Canadian databases for product information and that the information these databases contain should be in more detail than that which is currently available.

6.2.14 Product Movement Information

U.S. MARKET PERSPECTIVE

Product movement databases provide information on the ordering, shipment, inventory, and sales of products by brand name or manufacturer. Products typically traced include magazines, personal care products, and food. However, a wide range of other products are tracked by such databases, including pharmaceutical, import/export commodities of all kinds, computer hardware and software, petroleum products, and so on.

These databases are distinguished from other marketing and media databases in that they track the sales and distribution of products in specific areas or locations, rather than focusing on availability or aggregate economic profiles of product classes.

Most expenditures in the U.S. for product movement information are made by consumer-oriented companies. However, the overall market segment is spread over several vertical markets with distinctive and widely varying needs. Users are primarily market research analysts, although a trend is underway to provide data and analysis to upper-level decision makers such as product or brand managers.

The sale of product movement information in the U.S. thrives on the intense competition between suppliers and promoters of packaged foods and beverages, personal care products, and household goods.

There is a direct relationship between the growth of the product movement information business and the size of the suppliers' market research budgets. New product introductions also have a bearing on sales of this information type.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

An established standard of doing business in consumer and packaged goods industries dictates a high demand for product movement information. A huge capital investment has been made in sophisticated data collection and analysis methods. Still, this study indicates that the delivery media to clients is often paper-based.

Product movement information in other economic sectors is less sophisticated, suffering from the same problems of a lack of critical mass, discussed earlier.

Description of Respondents

	Phase I (N = 57)		Phase II (N = 77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	15	26	25	32
Job Category (Phase II)				
Librarian			3	50
Marketing			16	43
Finance			6	18
Economic Sector				
Advertising Agencies/Market Research	2	40	*	
Agriculture			3	38
Banks and Trust Companies	2	40	*	
Chemical & Drugs	1	50	*	
Construction & Building Materials			1	25
Consumer Electronics			3	60
Containers & Packaging	1	100	1	25
Education & Non-profit	2	50	1	20
Entertainment			1	25
Health Care			1	17
Household & Personal Care Products	1	100	4	67
Industrial Conglomerates			1	33
Investment Banking/Management/Brokerage	1	25	*	
Lodging & Food Service			3	43
Metals & Metalworking & Machinery	1	50	*	
Paper & Forest Products	1	50	*	
Publishing/Printing	1	100		
Retailing			3	60
Telecommunications	1	100	1	100
Transportation (Freight)			2	33
Transportation (Passenger)	1	50	*	
Total	15		25	
Average Rating (Phase II)			3.9	

* Sector not included in Phase II

	Phase I	Phase II
Other Categories of Information Used		
Business Credit	X	
Corporate Information	X	X
Demographic	X	X
Economic	X	X
Legal	X	
Legislative & Government	X	X
News	X	X
Patents & Trademarks	X	
Product Information	X	X
Product Movement	X	
Scientific	X	
Vertical Market/Operational	X	

Key Providers to This Group

Minimum No. of Mentions = 4

CAN/OLE
Dialog
Info Globe
Infomart

Ten other services received multiple mentions.

Awareness of Key Vendors

Minimum No. of Mentions = 7

Dow Jones
Dun & Bradstreet
FP Online
Info Globe
Infomart

User Comments

Users stated that the volume of information contained in product movement information databases is so great that problems are encountered in storage and multi-user access. There was also some concern expressed with the accuracy of this type of information.

6.2.15 Real Estate

U.S. MARKET PERSPECTIVE

Real estate information includes publicly-available information on the location, price, ownership, financing, features, and the availability of commercial and residential real estate. It also encompasses computerized loan origination data regarding mortgage rates and availability.

The primary application of real estate information services is to match potential buyers and sellers of real estate according to characteristics desired by the buyer (e.g., price, location, property type). A secondary application is to match a potential buyer's financial requirements with the best available property loan. Another real estate information application is the use of homeowner databases (including details of financing) as direct marketing tools for financial services suppliers.

The most frequent users of real estate information in the U.S. are real estate agents and associations, Boards of Realtors, loan officers, attorneys, corporate site planners, real estate developers, tax assessors, and investors.

The following factors exert influence on the growth of real estate information services in the U.S.:

- > The level of interest rates for real estate mortgage loans;
- > Increasing computer sophistication of end-users;
- > Reduction of the online information subscription base as Boards of Realtors consolidate to reduce operating expenses.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

Real estate information represented the least frequently mentioned of all information categories, either in electronic or other distribution media.

The major market is among real estate agencies. Here, the demand, buying power and influence created by either mergers or national franchising of independent agencies has created critical mass. As well, use of on-line listings is now essential to competitive client service.

Financial and lending institutions are also users of online real estate information, although to a lesser degree. Other economic sectors dependent on the housing and building construction market obtain real estate information via non-electronic delivery media.

Within large organizations, real estate information is typically used in combination with a wide range of other information types to meet specialized information needs.

Description of Respondents

	Phase I (N = 57)		Phase II (N = 77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	8	14	9	12
Job Category (Phase II)				
Librarian			0	0
Marketing			5	14
Finance			4	12
Economic Sector				
Bank and Trust Companies	2	40	*	
Construction & Building Materials			2	50
Consumer Electronics			1	20
Education & Non-profit	1	25	2	40
Energy/Fuel	1	33		
Investment Banking/Management/Brokerage	1	25	*	
Lodging & Food Service			2	29
Publishing/Printing	1	100		
Retailing			1	20
Transportation (Freight)			1	17
Transportation (Passenger)	1	50	*	
Other	1	100	*	
Total	8		9	
Average Rating (Phase II)			3.2	

* = Sector not included in Phase II

	Phase I	Phase II
Other Categories of Information Used		
Business Credit	X	
Corporate Information	X	X
Demographic	X	X
Economic	X	X
Foreign Exchange and Money Market		X
Legal	X	
Legislative & Government	X	X
News	X	X
Product Information	X	X
Product Movement	X	
Scientific	X	
Vertical Market/Operational	X	

Key Providers to This Group

Minimum No. of Mentions = 2

Because of the small number of users of real estate information identified in this study (8), all services that received multiple mentions represent "a 25% share". These services include: Info Globe, FP Online, Infomart, Mead Data, Dialog, CSG, Dun & Bradstreet, CAN/OLE, Textline, Dow Jones, and BRS.

Awareness of Key Vendors

Minimum No. of Mentions = 3

- Dow Jones
- Dun & Bradstreet
- FP Online
- Info Globe
- Infomart

User Comments

Two users commented that the optimal system would allow for each company to structure the information according to its particular needs. Another user would like to see a simpler command structure.

6.2.16 Scientific Information

U.S. MARKET PERSPECTIVE

Scientific information includes indexes, citations, abstracts, numerical data, and increasingly the full text of writings and reference materials on life sciences (with emphasis on biomedical science, pharmaceuticals, and health care in general), chemistry, earth science, physical sciences, social science & the humanities.

Most of the scientific information services are bibliographic or referral in nature and are still used primarily by research specialists.

The information services cover a wide range of scientific disciplines. Corporate and institutional purchasing patterns for scientific information vary greatly. Large corporate purchasers may have small information centers with little usage of scientific research databases, or just the reverse. Some companies have organized large departments to research scientific fields such as environmental science, but have little knowledge of electronic information services. All of the disciplinary and interdisciplinary scientific information vendors are supported by a core of high-use customers, as well as by an extremely heterogeneous secondary market.

The largest category of users in the U.S. is librarians and information specialists, accounting for anywhere from 30% to 100% of service usage. Health professionals are a distant second, typically representing 6-15% of service revenues.

Scientists and researchers form a barely quantifiable market for most science services. Lawyers and engineers use a number of services, generally to a lesser

degree. The most successful distributors to end-user professionals are highly specialized services.

The key factors having the greatest influence on sales of scientific information are as follows:

- > R&D budgets set by the U.S. government, by Western Europe, and others;
- > Federal funding and grants for technology transfer, for academia, for research by individuals and institutions; also indirect government funding which, when cut, squeezes non-corporate librarians;
- > The health of the overall economy;
- > The information budgets of librarians and information specialists at a time when staff resources are shrinking;
- > Corporate budgets for R&D;
- > The cost of information resources and the price of applying electronic information services;
- > Demand for information services by emerging professional, consumer, and line-management end-users;
- > Escalation of knowledge workers' salaries;
- > The installed base of communicating terminals and the familiarity of the market with online services;
- > Training, marketing, and promotion resources.
- > Impact of CD-ROM and other portable media;

- > Perceived difficulty of use;
- > Malpractice insurance premiums, the regulation of health care fees, and escalating hospital and physician fees, all of which are having a positive effect on the need for medical information;
- > Increasing foreign competition;
- > Emergence of integrated office information systems.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

Use of online scientific information was focussed in high tech, chemical & drugs, food & beverage, manufacturing and education/non profit sectors. As in the U.S., librarians appear to constitute the largest group of users.

U.S. based vendors are targeting the professional end-user market, and as a result, are developing software enhancements to make their services easier to use. Several users noted that U.S. databases are improving at a faster pace than Canadian-based sources.

Canadian users are not a "captive market" for Canadian-based vendors. Unlike other categories of information, there was no expressed demand for uniquely Canadian scientific databases. Although there are no doubt exceptions, it is typically perceived as an international subject. Thus, if use of Canadian sources is going to be maintained at present levels, enhancements are required to make these sources more competitive with those available through U.S.-based vendors.

Description of Respondents

	Phase I (N = 57)		Phase II (N = 77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	22	39	11	14
Job Category (Phase II)				
Librarian			3	50
Marketing			5	14
Finance			3	9
Economic Sector				
Aerospace/Aviation	1	100	*	
Agriculture	1	50	2	25
Banks and Trust Companies	1	20	*	
Chemical & Drugs	2	100	*	
Construction & Building Materials	1	100	1	25
Consumer Electronics			1	20
Containers & Packaging			1	25
Education & Non-profit	4	100	2	40
Energy/Fuel	2	67		
Food & Beverage	3	100	*	
Health Care			2	33
Household & Personal Care Products			1	17
Investment Banking/Management/Brokerage	1	25	*	
Metals & Metalworking & Machinery	2	100	*	
Paper & Forest Products	2	100	*	
Telecommunications	1	100		
Transportation (Freight)			1	17
Transportation (Passenger)	1	50	*	
Total	22		11	
Average Rating (Phase II)			4.1	

* Sector not included in Phase II

	Phase I	Phase II
Other Categories of Information Used		
Business Credit	X	
Corporate Information	X	X
Demographic		X
Economic	X	X
Legislative & Government	X	X
News	X	X
Patents & Trademarks	X	
Product Information	X	X
Product Movement		X

Key Providers to This Group

Minimum No. of Mentions = 6

- CAN/OLE
- Dialog
- Info Globe
- Infomart

In addition, 11 other services received multiple mentions.

Awareness of Key Vendors

Minimum No. of Mentions = 3

- Info Globe

Only Info Globe was familiar to at least three Phase II respondents who used scientific information.

User Comments

One user indicated dissatisfaction with CAN/OLE's commands. He felt they were too difficult for the occasional user, and especially in contrast to Medline, which he found much more user-friendly.

A heavy scientific user stated that he currently uses 10% Canadian versus 90% foreign databases and expects that his use of Canadian databases will decline.

6.2.17 Securities Information

U.S. MARKET PERSPECTIVE

Securities information includes both real time and delayed pricing as well as related intra-day technical information produced by a variety of analytical functions. Financial instruments include corporate and municipal debt (bonds), equities (stocks), mortgage-backed securities, associated instruments, and contracts such as futures and index options.

Day-end and historical-securities-pricing information is the fundamental corporate & historical pricing section, and government and treasury securities fall within the foreign exchange and money market section.

Users of securities information in the U.S. range from institutional and retail brokers to fund managers, individual investors, and the stock exchanges themselves. Securities information services are used to monitor the performance of securities markets and their component issues.

The growth of the financial services industry as a whole is the greatest influence on the revenues of securities information services in the U.S. More specifically, growth can be attributed to:

- > Growth in the amount of funds under professional management;
- > New brokerage business entrants (from commercial banks, insurance companies, and mutual funds);
- > Growth in the size of securities markets through increased securitization of debt and the placement of new issues.

The performance of securities markets was also widely regarded as a key growth factor. Market trend and market volume are both thought to have a direct relationship to the revenues of securities information vendors.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

In the U.S., major acquisitions are taking place in an aggressive battle to gain share of this lucrative market. The Canadian industry has also experienced similar shake-up, with three Canadian-based vendors, including two key brokerage service vendors, purchased by these mega-companies.

In brokerage services, CMQ (Autoquote) -- considered a major player in the North American market -- was purchased by Telerate. Dataline (Canquote) was bought by Mead Data. According to news sources, CMQ has more than 60% of the Canadian brokerage market, and Dataline has more than 30%.

In other securities information services, IP Sharp has been purchased by Reuters, who had already made a move to enter the North American securities information market with the acquisition of Institnet in the U.S..

Certainly, the loss of these leading Canadian companies to foreign ownership is viewed with mixed emotions. However, more realistically, it follows the trend of the globalization of international trading centres that is currently taking place, and provides for an infusion of cash in an extremely competitive, R&D-intensive marketplace.

Description of Respondents

	Phase I (N=57)		Phase II (N=77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	16	28	20	26
Job Category (Phase II)				
Librarian			0	0
Marketing			2	5
Finance			18	53
Economic Sector				
Agriculture			2	25
Banks and Trust Companies	4	80	*	
Chemical & Drugs	1	50	*	
Construction & Building Materials			2	50
Containers & Packaging	1	100	2	50
Education & Non-profit			3	60
Energy/Fuel	1	33	1	50
Entertainment			1	25
Food & Beverage	1	33	*	
Health Care	1	50	3	50
Industrial Conglomerates			2	67
Insurance	1	25	*	
Investment Banking/Management/Brokerage	3	75	*	
Legal & Accounting Services			3	60
Lodging & Food Service			1	14
Metals & Metalworking & Machinery	2	100	*	
Publishing/Printing	1	100		
Total	16		20	
Average Rating (Phase II)			3.6	

* Sector not included in Phase II

	Phase I	Phase II
Other Categories of Information Used		
Business Credit	X	
Corporate Information	X	X
Economic	X	X
Foreign Exchange and Money Market	X	X
Legal	X	X
Legislative & Government		X
News	X	X
Product Information	X	

Key Providers to This Group

Minimum No. of Mentions = 4

- CSG
- Dialog
- Dow Jones
- Dun & Bradstreet
- FP Online
- Info Globe
- Infomart

Specific securities databases mentioned include both CMQ and Canquote.

Awareness of Key Vendors

Minimum No. of Mentions = 5

- CSG
- Dow Jones
- Dun & Bradstreet
- FP Online
- Info Globe
- IP Sharp

User Comments

Users generally indicated that they would like to see more Canadian securities information online. One user stated that a service they use promised Canadian securities information but has not followed through. Users would like to see a package through which they could search all securities information without accessing many different databases. There was also some concern with the "cleanliness" of the data currently available.

6.2.18 Vertical Market/Operational Information

U.S. MARKET PERSPECTIVE

Vertical market operation (VMO) information subsumes databases from several different industries, including transportation, energy, insurance, library, health care, construction, agriculture, and automotive.

Vertical market/operational information includes two main groups of electronic information products:

- > Databases which were originally developed to support or to monitor the operations of a specific vertical market or industry. In this context, "operational" information means information which is a by-product of the operations of an industry or vertical market; that is, the information itself is not the end product of the industry, but serves to support or to monitor a productive function of the industry. Several of these services also have a transactional component.

- > Also included are miscellaneous information types (not defined elsewhere and specifically directed at the external information needs of selected vertical markets) which are too small to continue to be treated as independent categories. Included here are the information segments of energy, construction, farming information services, transportation, library, and medical.

The latter category above constitutes by far the smaller portion of the overall VMO information category.

Some of the largest VMO information services in the U.S. (such as the airline reservation systems SABRE, APOLLO, and PARS) were not included in earlier LINK

forecasts because they were not marketed outside their primary industry group and because they were less widely perceived as profit centers. Now that user-friendly versions of the reservation systems (such as EasySabre and TravelShopper) have been combined with related product information (hotels, rental cars) and are being marketed to a wide variety of end-users, they must be included as electronic information services.

In most cases, the development of vertical market operational information services follows a recognizable pattern:

- > A group of operating units in the same industry or vertical market share a common need for collection, processing, and/or access to operational information;
- > Operational information is systematically collected from or contributed by participants in a specific industry;
- > A separate subsidiary or third party is established to serve as the operational information caretaker/distributor. The information collector/distributor sells the information (in a value-added form) back to the industry or market participants which generated it;
- > By virtue of the value-added processing it has undergone, the vertical market operational database becomes accessible and useful to related industries and markets. In many cases, substantial incremental income is generated by the secondary users of VMO databases. For example, VMO databases generated by the passenger transportation industry become useful to the travel and aerospace industries. Automotive databases become useful to the insurance industry for collision estimating. Construction industry databases become accessible to

banks, insurance companies, and real estate interests.


Vertical market operational information databases may follow this pattern more or less closely and may be at any stage of this development. There is also considerable diversity in terms of the extent of value-added processing, the degree of automation, and the closeness with which the database is integrated into the operations of the primary information providers.

VMO information services which are established as independent profit centers (rather than as elements of cost structure) and are offered commercially become eligible for inclusion as electronic information services.

Today, VMO information services in various stages of development are increasingly being recognized and cultivated as independent profit-making entities. This is the result of a continuing proliferation of information processing expertise and technology among service and manufacturing industries whose primary business is not information.

Vertical market operational services encompass a wide spectrum of applications, including reservation systems, pharmacy management, auto collision claims processing, freight rates with optimum routes, and library cataloguing & interlibrary lending.

Likewise, the users of these services in the U.S. span several vertical markets. They include shippers, travel agents, traffic managers, freight rate analyzers, truck dispatchers, automobile dealers, auto body repairmen, claims estimators, insurance adjustors, after parts suppliers, faculty members, bankers, production and design engineers, inventors, appraisers, county assessors, loan officers, state tax authorities, pharmacists and pharmaceutical retailers.



The software is equally focussed to provide such things as freight bill audits, personal computer ratings, mapping, production data management, and office management. Industries include soft goods manufacturing, retailing, agriculture, drugs and chemicals, telecommunications, and office equipment in addition to the industries obviously associated with the jobs and software mentioned above.

Although all of these services are available online, many are also provided on magnetic tape, interactive voice, floppy disks, hard disks, and paper.

Key U.S. Trends by VMO

The most discrete submarkets within the vertical market/operational type are transportation, automotive, library, and energy. Others include construction, agriculture, health care, and pharmacy management.

Transportation

The following factors have the greatest impact on the growth of VMO transportation information services in the U.S.:

- > Deregulation of airlines and trucking industries resulting in increased competition and more volatile pricing data;
- > Consolidation of airline industry leading to increased efficiency of airlines passenger reservations marketplace;
- > Expansion of satellite communications networks to provide 24-hour worldwide coverage for air/land/sea tracking of cargo;

- > Increasing user sophistication for truck and auto routing;
- > Growth in personal computer penetration for cargo tracking applications;
- > Increased cost efficiency of CD-ROM (in combination with writable media) for truck and auto routing applications;
- > Budget cutbacks by the federal government which may adversely affect the aerospace industry.

Library Services

The following factors have the greatest impact on the growth of VMO library information services in the U.S.:

- > Increasingly easy to use communications software;
- > Standards being set and pooled data being shared among libraries;
- > Decreasing cost for terminals and modems;
- > Increased end user searching with fixed-price, hard-disk or CD-ROM at lower cost than available online;
- > Increased demand for CD-ROM and digital videodisc (and CDI) by reference departments of small and public service libraries;
- > Cost savings for end-user by moving off large systems onto local area networks and linked gateways;
- > High cost of telecommunications;

- > Move towards in-house publishing by institutions;
- > Competition from CD-ROM sales;
- > Increased cost for currently free government information due to federal government cost recovery policies.

Automotive

The following factors have the greatest influence on the growth of VMO automotive information in the U.S.:

- > Increasing user sophistication with computerization for auto insurance applications;
- > Poor weather and higher speed limits increase auto accident rates and the demand for auto collision estimating databases;
- > Low user awareness of potential benefits of electronic access to data in the auto body repair market.

Energy

The following factors have the greatest impact on the growth of energy industry information services in the U.S.:

- > Low oil prices and industry contraction reduces demand for computerized information;
- > Low user awareness of potential benefits of electronic access to oil drilling data.

SUMMARY OF FINDINGS ON THE CANADIAN MARKET

The use of VMO information, either online or via other distribution media, has not developed to the same extent in Canada as in the U.S..

In the U.S. analysis, this category captured miscellaneous information types not defined elsewhere and specifically directed at the external information needs of selected vertical markets. In Canada, major electronic information services and major Canadian-based industry leaders are (for the most part) captured in the above categories. The obvious exceptions include passenger transportation, agricultural, and library systems

There are fixed costs associated with the development of electronic information services, which do not vary whether the information will be sold to hundreds or thousands. In the U.S., there is a much larger market base for specialized, vertically targeted information that can share these costs. Canadian vendors will continue to fight against the problem of limited market size in developing cost-effective, specialized electronic information alternatives.

Description of Respondents

	Phase I (N=57)		Phase II (N=77)	
	# of R	% of Cell	# of R	% of Cell
No. of Respondents	17	30	18	23
Job Category (Phase II)				
Librarian			2	33
Marketing			10	27
Finance			6	18
Economic Sector				
Advertising Agencies/Market Research	2	40	*	
Agriculture	1	50	1	13
Banks and Trust Companies	3	60	*	
Chemical & Drugs	1	50	*	
Construction & Building Materials			1	25
Containers & Packaging			2	50
Credit Card			1	100
Education & Non-profit	3	75	3	60
Entertainment			2	50
Health Care	2	100		
Household & Personal Care Products			1	17
Insurance	1	25	*	
Investment Banking/Management/Brokerage	1	25	*	
Lodging & Food Service			2	29
Publishing/Printing	1	100		
Retailing			2	40
Transportation (Freight)			3	50
Transportation (Passenger)	2	100	*	
Total	17		18	
Average Rating (Phase II)			3.3	

* Sector not included in Phase II

Phase I

Phase II

Other Categories of Information Used

Corporate Information	X	X
Demographic	X	X
Economic	X	X
Legislative & Government		X
News	X	X

Key Providers to This Group

Minimum No. of Mentions = 5

- CAN/OLE
- Dialog
- Dun & Bradstreet
- Info Globe
- Infomart
- Mead Data

In addition, nine other services received multiple mentions.

Awareness of Key Vendors

Minimum No. of Mentions = 5

- Dow Jones
- Dun & Bradstreet
- FP Online
- Info Globe
- Infomart

User Comments

One major transportation information user stated that he is dissatisfied with the present necessity of searching several databases and would like to see a separate but complete air transportation database. He would also like the Canadian government to arrange for Dialog's

aerospace database to be accessible to Canadians on-line. (It is currently available in Canada in print only.)

Another user of airline information stated that the availability of fare information is crucial and he would like to see a cooperative reservation system and cooperative industry-wide information on cargo.

There were no comments made by users specifically referring to library-oriented information. However, IDC learned that the National Library of Canada is working in the area of developing standard software for North American libraries.

One user stated from the agriculture sector stated that he would like to see more information online from Statistics Canada and the information should be easier to access and cheaper than that which is currently available.

A heavy user of health care information stated that the cost of this type of information is high and he encounters indexing problems. He also said that he would like to see more relevant Canadian databases, particularly for Canadian statistics. (He is currently using only U.S.). In general, he would like to see the following types of information: consumer health, health information for the non-professional, and health care administration.

Users across all vertical markets suggested that there is poor access to government materials, Canadian management journals, material on human resources management, and information technology. As well, there is inadequate information available on engineering specifications and standards, especially international standards.

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