

**REPORT ON A SURVEY OF THE
USE AND SOURCES OF BUSINESS SERVICES**

conducted in February 1988

Services Division
Statistics Canada
89-09-26

INTRODUCTION

In February 1988, Statistics Canada conducted a pilot survey to gather information on the use of business services. Specifically, the survey was designed to test the possibility of determining the extent to which businesses in Canada relied on their own facilities for legal, financial and other services, (see TABLE 1) or whether they tended to purchase them on contract. The survey sought information on the situation for such services in 1987, how things had changed since 1984, and what changes were expected by 1990. Results of the survey are provided in this report. Users are advised to use caution in interpreting these results, since neither the size nor the industrial or geographic distribution of the sample were designed to be representative. The pilot survey was designed primarily to test the possibility of collecting such data, and the survey results, while indicative, are not statistically representative of the universe of businesses in Canada.

The pilot survey tested the hypothesis that *no business services have been created in recent years, but rather the growth in business service industries represents a trend towards the contracting out of those services formerly provided on own account*. Evidence from the survey is not sufficient to confirm or reject the hypothesis in its strong form, but does indicate that both the volume of business services, and the percentage of that volume contracted out, grew over the period of study. This observation, and the fact that the evidence could be gathered from the respondents, suggest that further study would be desirable.

The survey went to 512 respondents. Their distribution by revenue, organizational complexity, 1980 Standard Industrial Classification, and geographical region, are given in TABLES 2 to 5.

HYPOTHESIS AND DEFINITIONS

The interest in the use of business services arises from the fact that the output of service industries, broadly defined, accounts for over half of the GDP and almost three quarters of total employment. Business service industries, in particular, have shown growth in both employment and in measured GDP over the last decade. However, there is the counter claim that there is no change in the output of services, and that many of the service outputs now measured were provided previously on own account. If this is the case, the lack of means for measuring own account services is at fault, and the observed trends reflect nothing more than a different way for business to carry on its activities, a way which results in the services becoming visible and measurable, where they had been relatively invisible to past statistical measurement procedures.

The resolution of these conflicting claims has implications for a third claim that, as small business units supply many services, their net growth is consistent with the observation that most employment creation, in recent years, originated in small business.

If there has been no fundamental change, and the volume of service outputs is growing principally as a result of contracting out, then what is being observed is not necessarily a growth in employment, but a shift from those industries which formerly produced the services on own account, to industries now providing the services on contract. If this is indeed the case, the size of the business units is irrelevant to the change in employment, and what is significant is the change in how business conducts its activities.

This study examines the extreme form of the hypothesis that no business services have been created, but growth in business service industries represents a trend towards contracting out. To analyse this question, some definitions are required.

The target unit in the study is the "enterprise", which is the smallest set of productive operations under common ownership and control, capable of reporting a complete consolidated balance sheet. "Contracting out", in this context, is defined as a transaction that crosses the boundaries of an enterprise, while "own account" refers to transactions that take place within the boundaries of the enterprise, whether within the same producing unit, or among different producing units under the same ownership and control. One consequence of this definition is that transactions in services between a Canadian parent and its foreign subsidiaries, or between a foreign parent and its Canadian subsidiaries, are treated as purchases or sales of services rather than "own-account" transactions.

OUTPUT CLASSIFICATION AND TARGET UNITS

TABLE 1 shows an aggregated classification of business services. Its purpose was to establish whether respondents in the target units could answer questions about these services or whether they were ambiguous or incomplete. Difficulties in distinguishing individual services in finance, marketing and computing were anticipated by providing group categories.

As an objective of the survey was to produce a revised classification for future surveys, respondents were invited to suggest additional business services likely to be contracted out, and the only suggestion was transportation services. Analysis of the results was expected to indicate where the classification could be more, or less, aggregated, and here, legal services was the only candidate for disaggregation.

The target unit for the survey is the business head office, or its ancillary units. An implicit question, when dealing with these units, is how they are structured and how they operate in relation to the rest of the enterprise.

SURVEY VEHICLE

Traditionally, there have been two classes of business surveys. The first measures the financial position of the enterprise as a whole, but it is not designed to measure transactions within the

business. The second class of surveys consists of those designed to produce industrial statistics. They see the business as a set of discrete, mutually exclusive production units and ancillary units. But these surveys do not attempt to measure the intra-company flow of services. While this is not an intrinsic difficulty, and it could be rectified by redesign, the fact remains that these surveys are not suitable vehicles for this study.

There is now a third class of survey which is designed to delineate the structure of a business. These surveys are addressed to head offices and concentrate on the boundaries of the enterprise, its constituent elements, and how the various accounts support the relationships that may exist among the components of the business. At Statistics Canada these surveys are known as "profiling" and their results form the basis of the business register, from which all business surveys are driven.

Initial experiments¹ suggest that the profiling surveys can be used to find out which services are used and whether they are purchased or produced on own account, and that such enquiries are not perceived as inflicting undue response burden. For these reasons, the survey for this study was directed at those businesses which had already been profiled.

The target units were selected at a stage in the profiling exercise when there were more than a representative number of completed, or partially completed, profiles for wholesale and retail trade. In addition, some of those in the finance, insurance and real estate category may have reflected the activity of the parent corporation, rather than that of the enterprise under its control. For these reasons the distribution of respondents in TABLE 4 is not representative of the distribution of businesses by 1980 SIC. This is not seen as a defect of this study as its principal objectives are to test the classification and the questionnaire, while gathering sufficient information on contracting out to establish a case for a subsequent survey, perhaps as part of the on-going profiling programme.

MEASUREMENT ISSUES

Quantitative comparison of own account services with purchased services requires a yardstick. The cost of the former and the price of the latter would provide a basis for such comparison; however the availability of this information depends on the accounts kept for each of the services in TABLE 1. This makes the confirmation of the availability of data a part of the test of the initial classification.

In pursuit of a yardstick, the survey asks if a cost is attached to in-house services and the total cost for each service whether

¹ Statistics Canada, "CONTRACTING OUT: Paper for discussion at the Ad Hoc Meeting on Service Industry Statistics (Stockholm, 2-4 November, 1987)."

produced in-house or contracted out. The object is to identify how in-house services are recorded, if at all, and to indicate where other proxies, such as the number of people employed to provide the service, are likely to be required for subsequent surveys.

TEMPORAL COMPARISON

To test the hypothesis that the volume of business services is static while the volume of contracted out services is growing, it is necessary to know, at some point in the past, the cost of own account services and the price of contracted out services. This provides a historical measure of change when compared with the present state, and a trend, which could be extended if plans for the future were also available.

As there were no previous surveys to provide a temporal link, respondents were asked to provide information on the change in the use of business services since 1984, and the anticipated change in use by 1990. These changes and projections were for the volume of services produced in-house and for the volume of services contracted out. Those who provided a service through both sources were asked to give the change and projection for the volume of purchased services as a percentage of the total volume of the service used.

LINKAGE TO OTHER BUSINESS CHARACTERISTICS

In addition to linking the present state of the business to its past and its future, there are linkages to known characteristics of the businesses profiled. Of these, four are used to classify the respondents: total revenue, complexity, industrial classification; and regional office from which the survey was taken.

RESULTS

The survey was conducted by telephone through the Statistics Canada Regional Offices and there was a 94% response rate for full and partial returns, which resulted in 512 responses suitable for analysis. The good response rate was the first indication that the classification was useable. When the response rate was combined with the ability of the regional staff to assist respondents to provide accurate information, it suggested that where respondents could not answer a question, there was a genuine problem of data availability which would have to be taken into account in subsequent surveys.

Services used

The first question was: "Do you use this service?", where the service was one of those listed in TABLE 1. The categories were as specific as possible, except for Finance Department Total, Marketing Department Total, and Computer Centre Total which were

used for respondents who could not provide greater detail. Virtually all respondents were able to answer the question and the results classified, where numbers permit, by revenue, complexity, industry, and by regional office are given in TABLES 6 to 9.

It is clear from TABLE 6 that not all respondents could specify, in detail, which financial services they used. While it was apparently easier to distinguish the component services of marketing and of computing, all three aggregate categories were useful, and especially so for respondents that provided their services both in-house and through contracting out.

The individual services most used were: legal, miscellaneous support and maintenance, data processing and accounting services. All respondents used at least one of the financial services, 88%, at least one of the computing services, and 81%, at least one of the marketing services.

From the breakdown in TABLES 6 to 9, it appears that the percentage of respondents reporting the use of business services is positively correlated with the revenue of the enterprises. Also, on average, enterprises with divisions report the use of more services than the those without divisions. As expected, the industrial breakdown in TABLE 8 shows that manufacturing has the largest number of users of engineering services and of computing services, while retail trade leads in the number of users of advertising services. The regional breakdown suggests that enterprises surveyed from Toronto, and which had head offices in Ontario, use more services than enterprises with head offices in other provinces.

Source of the services

Respondents were also able to answer the second question on whether the service was provided in-house, purchased from outside, or provided from both sources. The results, classified as above, are presented in TABLES 10 to 13.

Management consultancy, as well as miscellaneous support and maintenance services, were assumed to be completely contracted out. For the others, legal services were completely contracted out by 91% of the respondents, followed by architectural services (76%), taxation services (70%), and computer consultancy (62%). For the last two, there were probably additional users of those services included in the aggregate categories. The services provided in-house only were led by data processing (80%), followed by Public Relations (PR) services (51%), engineering services (48%), and accounting services (45%).

Looking at the breakdown of the source information, it appears that large enterprises provide more legal services both in-house and through purchase than smaller enterprises. The fact that there is high in-house production of engineering services in the finance, insurance and real estate category would appear to confirm the problem with industrial classification referred to earlier. The regional breakdown suggests that Ontario based firms go outside

more for market research services than those in British Columbia or Quebec, and those in Quebec go outside more for taxation services.

Services provided in-house only

81% of respondents reported the use of at least one service provided on own account only. The number of respondents in this category was low for those services normally provided from other sources, as can be seen from TABLE 10.

The first question for those using an in-house service, only, was whether a cost was attached to the service. Most answered this question, with up to 46% saying that, for individual services, they did attach a cost and most of those were able to provide a total cost for the service. The percentage of respondents providing a cost is given in the first column of TABLE 18. Most of those who could provide a total cost could also indicate whether that cost included direct costs, overheads, or purchases of services.

The components of total cost are summarized in TABLE 14 from which it is clear that the ability to produce a valuation which includes direct costs and overheads, or direct costs, overheads and purchases, varies from service to service. If respondents in these two categories are those able to give a full valuation, at least half are in this position. However, this is half of those able to give a total cost, and this number for some services is low. Also, some respondents may have misinterpreted the meaning of the purchased services component of cost to mean the cost of purchases needed to provide the service in-house. For the provision of in-house services it was expected that the cost of purchased services would be a very small component of the total cost.

TABLE 15 shows the source of the services produced within the enterprise, whether they originated from head office, the divisions, or from both, and it is clear that they are provided principally by the head office. Computing, engineering and architectural services are the most distributed. Respondents were asked whether the head office kept accounts for services if they were produced in a division. More respondents reported that accounts were kept than reported the provision of services by divisions. This suggests a misinterpretation of the question.

Respondents were asked about the trends in the use of purchased services between 1984 and 1987, but the numbers were too small to analyse. They were also asked about trends in the total volume of services, and these results are presented in TABLE 18 and are discussed in the section on trends.

Services provided both in-house and through contracting out

72% of respondents reported at least one service provided both in-house and through contracting out. Response was low in this category for architectural services which are either contracted out, or provided in-house, but rarely are they provided from both

sources. Response was also low for legal services, which are mainly contracted out, and for data processing, which is mainly provided in-house.

As in the case of in-house services, respondents were able to say whether they attached a cost to the in-house portion of the service, and of those that did, most were able to report a total cost. The percentage of respondents providing a total cost is given in the first column of TABLE 20. The components of the total cost are given in TABLE 16, and they can be compared with TABLE 14 for in-house services only. The observation can be made again, that if those reporting direct costs and overheads, or direct costs, overheads and purchases are those able to give a full valuation, then, with the exception of computer consultancy, over half of those reporting cost figures were in this position.

Services produced in-house, when the same service is also purchased, are supplied principally by the head office, as can be seen in TABLE 15. If architectural, legal and data processing services are ignored because of low response, the distributed services produced in-house are engineering and market research. On average, the head office is less likely to keep accounts for services supplied by its divisions, if the same service is also purchased. It should be noted that response to questions about the source of in-house services and accounting practice was lower in this case than it was when there was no purchase of the same services provided in-house.

Respondents were asked about trends in the use of purchased services, and these results along with trends in the total volume of services are presented in TABLES 19 and 20 and are discussed in the trends section below.

Services contracted out only

97% of respondents used at least one service that was completely contracted out, and most were able to provide a value of the service purchased. The percentage of respondents actually giving a value for purchased services is given in TABLE 17. As in the case of in-house services only, there was no trend analysis of changes in the relative amounts of own account and contracted out services between 1984 and 1987, however there were discernible trends in the total volume of purchased services.

Trends

TABLE 17 shows that the volume of services purchased by those contracting out, only, increased between 1984 and 1987, and is forecast to increase by 1990, but not at the same rate. Note should be taken, however, that the percentages in the table are based on the number of responses, and that they are unweighted by a value measure.

TABLE 18 shows the trends for the total consumption of services produced in-house, only. As in the case of purchased services,

consumption grew between 1984 and 1987, and is projected to grow between 1987 and 1990.

For respondents using both in-house and purchased services, the trends are similar to those using only one or the other, and the results are shown in TABLES 19 and 20. TABLE 21 addresses the question of how the volume of purchased services, as a percentage of total consumption of services, changed, and is projected to change. The table, which is based on respondent numbers, shows that the ratio increased between 1984 and 1987, and is projected to remain static to 1990. The low percentages in the table result from the fact that not every respondent who used both in-house and purchased services was able to respond to this question.

CONCLUSIONS

The survey results, based on respondent numbers, suggest that the total consumption of in-house services, and the total value of purchased services, grew over the period 1984 to 1987, and both are projected to grow further by 1990. If this result is accepted at face value, it contradicts the first part of the hypothesis that no business services have been created.

The results also suggest that the purchased services, as a percentage of services consumed, grew between 1984 and 1987. This result is consistent with the second part of the hypothesis, that growth in business service industries represents a trend towards contracting out. But it is not conclusive on whether this trend is at the expense of in-house service reductions.

The survey demonstrates that, for each service, respondents could give their expenditure on purchased services, and some could produce a valuation of in-house services which included direct costs, overheads and, where appropriate, purchases. This raises two questions. The first is whether a full valuation of in-house services could be gathered from a higher percentage of respondents if a survey of this type were a more frequent, and therefore more familiar, occurrence. The second question is whether a separate measure of value ought to be collected which might be more readily accessible, such as the number of people employed in producing the service. These questions could be resolved by an additional survey.

The output classification proved satisfactory in that respondents could say whether the services in the classification were used, and whether they were provided in-house, contracted out, or both. In some cases it was possible to assign a value to services purchased, or made on own account. The high use of legal services would suggest that this category be disaggregated for future use. At the suggestion of respondents, transportation services should be included.

The profile survey proved an effective context in which to conduct this study, and the questionnaire, with minor adjustments, could form part of the profile survey. Making information collection on contracting out part of an on-going collection process would go

some way towards solving some measurement problems, and it would remove from the respondent the burden of producing past trends.

Finally, the survey, which was a pilot study with a modest number of target units and 512 actual responses, achieved its principal objectives of gathering information, and determining the ease with which it could be supplied by respondents. In doing this, much was learned about the classification of services, the minimization of response burden, and the use of a profiling survey as the context in which to do such a study.

FURTHER INFORMATION

The contact person for this survey is Laurie Hill (613-951-3494), Services Division.

TABLE 1. Business Services

Business Services

Legal Services
Taxation Services
Accounting Services
Finance Department Total
Market Research Service
PR Services
Advertising Services
Marketing Department Total
Computer Consultancy
Data Processing
Computer Centre Total
Engineering Services
Architectural Services
Management Consultancy
Miscellaneous Support and Maintenance

TABLE 2. Respondent distribution: by revenue

Revenue range \$millions	Number of respondents	Revenue \$millions
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250 and over	4	1969
100 - 249	37	5066
75 - 99	19	1638
50 - 74	50	3002
25 - 49	134	4543
10 - 24	202	3153
under 10	60	153
not available	8	
Total	512	19525

TABLE 3. Respondent distribution: by complexity

Number of legal entities	Number of divisions	Number of respondents	Revenue \$millions
more than one	more than one	99	4719
	none	234	9423
one	more than one	17	750
	none	138	3828
not available		24	805
Total		512	19525

TABLE 4. Respondent distribution: by industrial classification

Industrial classification	Number of respondents	Revenue \$millions
Primary industries	9	215
Manufacturing	86	4349
Construction, transportation and storage, communications and other utilities	40	1269
Wholesale trade	159	5347
Retail trade	98	3139
Finance, insurance and real estate	66	2948
Business service industries	33	1454
All other service industries	7	225
Classification not available	14	579
Total	512	19525

TABLE 5. Respondent distribution: by regional office

Regional office	Number of respondents	Revenue \$millions
St. John's	9	423
Halifax	11	294
Montreal	138	3957
Toronto	199	8676
Winnipeg and Edmonton	48	1924
Vancouver	107	4249
Total	512	19525

TABLE 6. The use of business services by enterprises categorized by revenue

Business services	Percentage of respondents in the revenue category, which use the service (revenue in \$millions)					
	All	Less than \$10M	\$10M to \$24M	\$25M to \$49M	\$50M to \$99M	\$100M and above
Legal Services	98	93	98	99	99	95
Taxation Services	66	57	62	68	75	73
Accounting Services	71	71	67	72	80	76
Finance Department Total	32	33	39	31	23	27
At least one Financial Service	100	100	100	100	100	100
Market Research Services	38	26	30	41	51	56
PR Services	30	12	25	35	36	51
Advertising Services	70	69	68	77	65	71
Marketing Department Total	8	3	8	7	9	15
At least one Marketing Service	81	74	78	85	84	88
Computer Consultancy	59	55	58	62	64	51
Data Processing	71	78	67	72	75	73
Computer Centre Total	11	7	10	12	12	22
At least one Computing Service	88	84	86	89	90	98
Engineering Services	38	29	34	40	45	54
Architectural Services	25	19	25	26	20	32
Management Consultancy	30	14	28	37	30	41
Miscellaneous Support	72	66	67	77	74	88

TABLE 7. The use of business services by enterprises categorized by complexity

Business Services	Percentage of respondents in the category, which use the service			
	More than one legal entity		One legal entity	
	more than one division	no divisions	more than one division	no divisions
Legal Services	100	97	100	96
Taxation Services	65	67	53	65
Accounting Services	70	71	53	75
Finance Department Total	32	34	47	30
At least one Financial Service	100	100	100	100
Market Research Services	39	37	29	38
PR Services	34	32	41	23
Advertising Services	71	66	76	78
Marketing Department Total	8	8	12	7
At least one Marketing Service	83	76	94	87
Computer Consultancy	66	58	76	56
Data Processing	74	71	82	70
Computer Centre Total	12	11	6	12
At least one Computing Service	93	85	94	89
Engineering Services	46	41	29	25
Architectural Services	29	23	29	22
Management Consultancy	37	29	35	27
Miscellaneous Support	77	70	82	71

TABLE 8. The use of business services by enterprises categorized by industrial classification

Business services	Percentage of respondents in the industry category, which use the service					
	Manufacturing	Construction, transportation and storage, communications	Wholesale trade	Retail trade	Finance, insurance, real estate	Business services
Legal Services	97	98	98	98	98	97
Taxation Services	67	65	69	63	65	75
Accounting Services	74	68	73	69	67	84
Finance Department Total	28	35	31	38	41	13
At least one Financial Service	100	100	100	100	100	100
Market Research Services	36	23	47	28	48	41
PR Services	30	25	30	21	41	44
Advertising Services	59	73	72	81	74	69
Marketing Department Total	7	3	6	5	11	6
At least one Marketing Service	71	75	83	88	83	78
Computer Consultancy	67	50	64	49	59	63
Data Processing	73	68	72	72	77	66
Computer Centre Total	13	10	11	7	11	13
At least one Computing Service	92	85	90	83	89	81
Engineering Services	67	60	26	16	44	44
Architectural Services	26	45	13	24	36	34
Management Consultancy	34	23	27	22	42	34
Miscellaneous Support	64	75	75	72	71	78

TABLE 9. The use of business services by enterprises, categorized by regional office conducting the survey

Business services	Percentage of respondents surveyed by the regional office, which use the service					
	All	Vancouver	Winnipeg and Edmonton	Toronto	Montreal	St. John's and Halifax
Legal Services	98	97	100	99	95	100
Taxation Services	66	55	75	63	77	55
Accounting Services	71	58	100	68	80	55
Finance Department Total	32	49	--	33	28	45
At least one Financial Service	100	100	100	100	100	100
Market Research Services	38	26	42	53	26	15
PR Services	30	14	23	49	21	10
Advertising Services	70	67	90	75	61	60
Marketing Department Total	8	7	--	11	6	20
At least one Marketing Service	81	78	94	88	70	80
Computer Consultancy	59	55	52	62	63	40
Data Processing	71	69	90	72	64	75
Computer Centre Total	11	9	--	19	7	--
At least one Computing Service	88	82	92	94	82	85
Engineering Services	38	36	31	50	26	30
Architectural Services	25	21	15	35	16	30
Management Consultancy	30	21	17	44	23	20
Miscellaneous Support	72	63	96	86	60	10

-- amount too small to be expressed.

TABLE 10. Business services provided in-house, from outside, or both, categorized by revenue

Business services	Percentage of respondents in the category, giving source of service used (revenue in \$millions)								
	All			Less than \$10M			\$10M to \$24M		
	In	Out	Both	In	Out	Both	In	Out	Both
Legal Services	2	91	7	2	93	6	3	91	6
Taxation Services	8	70	23	9	67	24	4	80	16
Accounting Services	45	13	43	61	7	32	41	22	37
Finance Department Total	4	25	69	--	58	42	4	26	69
Market Research Services	40	34	26	40	33	27	56	30	15
PR Services	51	32	17	57	14	29	60	24	16
Advertising Services	24	48	28	15	68	18	30	41	29
Marketing Department Total	24	29	44	50	50	--	29	24	41
Computer Consultancy	19	62	19	13	75	13	10	70	19
Data Processing	80	9	11	78	16	7	77	10	13
Computer Centre Total	38	17	41	75	--	25	38	24	29
Engineering Services	48	35	16	47	35	18	45	38	16
Architectural Services	18	75	6	27	73	--	18	75	6
	\$25M to \$49M			\$50M to \$99M			\$100M and above		
	In	Out	Both	In	Out	Both	In	Out	Both
Legal Services	2	92	6	--	94	6	3	79	18
Taxation Services	9	69	22	13	60	27	7	50	43
Accounting Services	41	8	51	42	7	51	55	--	45
Finance Department Total	5	20	76	13	--	75	--	27	73
Market Research Services	36	35	29	34	37	29	17	43	39
PR Services	51	32	17	52	28	20	24	57	19
Advertising Services	23	50	27	18	47	36	17	52	31
Marketing Department Total	20	40	40	33	50	17	--	--	100
Computer Consultancy	27	54	19	30	52	18	29	48	24
Data Processing	82	7	10	81	10	10	93	--	7
Computer Centre Total	25	19	56	75	--	25	11	22	67
Engineering Services	50	37	13	55	32	13	36	32	32
Architectural Services	11	83	3	21	64	14	31	62	8

Note: Answers to multiple choice questions may not add to 100 per cent due to rounding and/or non-response.

-- amount too small to be expressed.

TABLE 11. Business services provided in-house, from outside, or both, categorized by complexity

Business services	Percentage of respondents in the category, giving source of the service used											
	More than one legal entity						One legal entity					
	More than one division			No divisions			More than one division			No divisions		
	In	Out	Both	In	Out	Both	In	Out	Both	In	Out	Both
Legal Services	1	87	12	3	91	6	--	94	6	2	93	5
Taxation Services	11	55	34	9	71	21	11	67	22	3	81	16
Accounting Services	42	10	48	45	12	43	44	--	56	42	17	42
Finance Department Total	6	13	75	5	34	61	--	13	88	2	24	73
Market Research Services	41	23	36	40	30	30	20	60	20	40	45	15
PR Services	41	41	18	45	31	24	29	71	--	75	16	9
Advertising Services	20	47	33	24	48	28	23	31	46	26	50	23
Marketing Department Total	13	38	50	32	37	32	--	50	50	33	11	44
Computer Consultancy	20	54	26	21	60	19	8	62	31	16	73	12
Data Processing	79	8	12	85	7	7	86	--	14	69	13	18
Computer Centre Total	42	25	25	44	16	40	--	--	100	31	19	44
Engineering Services	37	41	22	58	29	11	40	40	20	40	49	11
Architectural Services	10	76	14	25	72	2	--	80	20	23	74	3

Note: Answers to multiple choice questions may not add to 100 per cent due to rounding and/or non-response.

-- amount too small to be expressed.

TABLE 12. Business services provided in-house, from outside, or both, categorized by industrial classification

	Percentage of respondents in the category, giving source of the service used											
Business services	All			Manufacturing			Construction, transportation and storage, communications					
	In	Out	Both	In	Out	Both	In	Out	Both			
Legal Services	2	91	7	5	82	13	--	95	5			
Taxation Services	8	70	23	5	59	36	4	62	35			
Accounting Services	45	13	43	61	8	31	52	4	44			
Finance Department Total	4	25	69	13	21	58	7	36	57			
Market Research Services	40	34	26	39	29	32	11	44	44			
PR Services	51	32	17	77	23	--	50	30	20			
Advertising Services	24	48	28	27	57	16	24	59	17			
Marketing Department Total	24	29	44	50	17	33	--	100	--			
Computer Consultancy	19	62	19	22	62	16	20	60	20			
Data Processing	80	9	11	76	13	11	78	7	15			
Computer Centre Total	38	17	41	36	18	45	25	50	25			
Engineering Services	48	35	16	57	19	24	25	38	38			
Architectural Services	18	75	6	32	64	5	11	78	11			
	Wholesale trade			Retail trade			Finance, insurance, real estate			Business services		
	In	Out	Both	In	Out	Both	In	Out	Both	In	Out	Both
Legal Services	1	95	4	--	98	2	3	86	11	6	81	13
Taxation Services	8	74	17	3	89	8	5	65	30	17	67	17
Accounting Services	43	13	44	32	21	47	32	14	55	44	11	44
Finance Department Total	--	27	71	5	24	70	--	30	70	--	25	75
Market Research Services	45	31	24	44	48	7	38	25	38	54	15	31
PR Services	54	25	21	52	33	14	30	48	22	36	36	29
Advertising Services	25	43	32	19	48	33	20	47	33	36	36	27
Marketing Department Total	33	22	44	40	20	40	--	43	57	--	--	50
Computer Consultancy	16	67	18	19	65	17	13	67	21	25	35	40
Data Processing	87	6	7	76	10	14	75	12	14	86	5	10
Computer Centre Total	50	11	33	43	14	29	--	43	57	75	--	25
Engineering Services	63	37	--	13	75	6	52	45	3	57	36	7
Architectural Services	25	60	10	4	92	--	17	79	4	36	64	--

Note: Answers to multiple choice questions may not add to 100 per cent due to rounding and/or non-response.

-- amount too small to be expressed.

TABLE 13. Business services provided in-house, from outside, or both, categorized by regional office conducting the survey

Business services	Percentage of respondents in the category, giving source of the service used											
	All			Vancouver			Toronto			Montreal		
	In	Out	Both	In	Out	Both	In	Out	Both	In	Out	Both
Legal Services	2	91	7	4	91	5	2	90	8	2	90	8
Taxation Services	8	70	23	5	63	32	11	56	33	5	84	11
Accounting Services	45	13	43	29	24	47	36	11	53	52	13	35
Finance Department Total	4	25	69	4	23	71	3	9	85	5	62	33
Market Research Services	40	34	26	46	32	21	37	30	33	53	31	17
PR Services	51	32	17	40	27	33	54	31	15	52	38	10
Advertising Services	24	48	28	21	43	36	23	51	26	27	52	20
Marketing Department Total	24	29	44	14	43	43	14	32	50	38	25	38
Computer Consultancy	19	62	19	22	53	25	20	60	20	16	64	20
Data Processing	80	9	11	76	9	15	82	8	10	80	8	12
Computer Centre Total	38	17	41	30	20	50	34	16	45	60	20	20
Engineering Services	48	35	16	26	54	21	57	29	14	50	33	17
Architectural Services	18	76	6	9	86	--	16	74	10	36	64	--

Note: Answers to multiple choice questions may not add to 100 per cent due to rounding and/or non-response.

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TABLE 14. For respondents producing services in-house only: components of the cost of in-house services

Business services	Percentage of those respondents reporting on cost components, which reported that the cost included direct costs(D), overheads(O), and purchase of services(P), in the following combinations:						
	Only			Both			All of
	D	O	P	D+O	D+P	O+P	D+O+P
Legal Services	100	--	--	--	--	--	--
Taxation Services	--	--	20	80	--	--	--
Accounting Services	17	4	2	58	4	--	15
Finance Department Total	33	--	--	33	--	--	33
Market Research Services	5	--	--	79	--	--	16
PR Services	16	--	4	72	--	--	8
Advertising Services	14	6	6	66	--	--	9
Marketing Department Total	--	--	--	60	--	--	40
Computer Consultancy	27	--	--	55	18	--	--
Data Processing	20	2	1	60	--	2	15
Computer Centre Total	22	--	--	61	--	--	17
Engineering Services	18	--	--	76	--	--	6
Architectural Services	50	--	--	50	--	--	--

Note: Answers to multiple choice questions may not add to 100 per cent due to rounding.

-- amount too small to be expressed.

TABLE 15. For respondents producing services in-house: source of the services and accounting practice

Business services	Percentage of respondents reporting in-house services produced by head office(HO), by divisions(Div), or by both, and if the service is produced in a division, whether the head office keeps accounts of services produced there as well as in head office							
	In-house only				Both in-house and purchase			
	HO	Div.	Both	HO keeps accounts	HO	Div.	Both	HO keeps accounts
Legal Services	89	--	11	11	54	--	19	26
Taxation Services	92	4	4	19	35	--	5	9
Accounting Services	85	4	9	29	44	--	10	17
Finance Department Total	86	14	--	29	42	3	4	11
Market Research Services	92	3	5	26	37	2	12	16
PR Services	85	5	8	28	41	--	7	7
Advertising Services	90	5	5	33	52	--	6	13
Marketing Department Total	90	--	--	40	28	6	6	17
Computer Consultancy	91	2	7	19	34	3	7	17
Data Processing	86	3	10	28	43	--	13	10
Computer Centre Total	82	9	9	32	38	8	--	4
Engineering Services	81	6	11	29	41	16	3	19
Architectural Services	83	9	9	52	29	14	--	--

Note: Answers to multiple choice questions may not add to 100 per cent due to rounding and/or non-response.

-- amount too small to be expressed.

TABLE 16. For respondents producing services in-house and contracting out for the same services: components of the cost of in-house services

Business services	Percentage of those respondents reporting on cost components, which reported that the cost included direct costs(D), overheads(O), and purchase of services(P), in the following combinations:						
	Only			Both			All of
	D	O	P	D+O	D+P	O+P	D+O+P
Legal Services	20	--	13	--	--	--	67
Taxation Services	21	--	5	--	--	--	74
Accounting Services	13	2	15	3	10	--	57
Finance Department Total	22	--	4	4	6	--	63
Market Research Services	6	6	--	6	6	--	78
PR Services	10	10	20	10	--	--	50
Advertising Services	15	--	4	2	15	--	63
Marketing Department Total	38	--	13	--	38	--	13
Computer Consultancy	16	--	5	16	16	--	47
Data Processing	7	--	7	14	14	--	57
Computer Centre Total	27	--	--	9	18	--	45
Engineering Services	15	--	15	8	15	--	46
Architectural Services	--	--	--	--	--	--	100

Note: Answers to multiple choice questions may not add to 100 per cent due to rounding.

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TABLE 17. For respondents purchasing services only: percentage giving a value, and volume trends

Business services	Percentage giving a value of purchase	Percentage reporting a change in volume purchased:					
		Since 1984			Expected by 1990		
		Up	Down	Same	Up	Down	Same
Legal Services	89	49	7	43	25	12	62
Taxation Services	76	40	5	47	28	5	59
Accounting Services	57	54	4	20	33	7	43
Finance Department Total	98	50	7	40	40	7	50
Market Research Services	60	57	6	31	37	11	48
PR Services	55	57	2	35	33	12	49
Advertising Services	84	54	5	38	38	6	54
Marketing Department Total	92	42	--	50	25	8	58
Computer Consultancy	80	60	10	23	39	15	41
Data Processing	72	56	3	31	31	9	47
Computer Centre Total	100	70	--	30	40	10	50
Engineering Services	71	54	12	30	33	16	49
Architectural Services	71	56	12	27	34	13	48
Management Consulting	63	43	4	43	21	12	56
Miscellaneous Support	77	42	2	50	24	4	66

Note: Answers to multiple choice questions may not add to 100 per cent due to rounding and/or non-response.

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TABLE 18. For respondents producing services in-house only: percentage giving an internal cost, and volume trends

Business services	Percentage giving an internal cost	Percentage reporting a change in volume consumed:					
		Since 1984			Expected by 1990		
		Up	Down	Same	Up	Down	Same
Legal Services	11	56	11	33	11	--	78
Taxation Services	19	46	12	42	23	--	73
Accounting Services	33	47	8	42	32	5	61
Finance Department Total	43	57	14	29	43	--	57
Market Research Services	25	49	9	39	40	5	52
PR Services	33	52	11	33	38	4	54
Advertising Services	41	53	12	33	44	3	50
Marketing Department Total	60	50	--	40	20	10	50
Computer Consultancy	21	54	7	39	33	4	63
Data Processing	35	65	5	27	44	3	49
Computer Centre Total	82	50	--	50	55	5	41
Engineering Services	40	53	10	34	44	1	52
Architectural Services	30	61	4	35	35	--	61

Note: Answers to multiple choice questions may not add to 100 per cent due to rounding and/or non-response.

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TABLE 19. For respondents purchasing services, who provide the same service in-house: percentage giving a value of purchases, and volume trends

Business services	Percentage giving a value of purchase	Percentage reporting a change in volume purchased:					
		Since 1984			Expected by 1990		
		Up	Down	Same	Up	Down	Same
Legal Services	43	17	3	31	11	3	34
Taxation Services	53	34	3	27	18	4	42
Accounting Services	39	29	2	20	17	4	30
Finance Department Total	54	30	4	23	14	9	34
Market Research Services	33	33	2	18	22	4	27
PR Services	26	33	7	15	19	7	30
Advertising Services	38	30	1	15	20	5	22
Marketing Department Total	44	44	--	11	17	--	39
Computer Consultancy	43	38	9	10	12	16	29
Data Processing	35	28	--	23	15	15	20
Computer Centre Total	46	50	--	8	21	4	33
Engineering Services	38	9	--	41	6	6	38
Architectural Services	43	29	--	14	--	29	14

Note: Answers to multiple choice questions may not add to 100 per cent due to rounding and/or non-response.

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TABLE 20. For respondents using in-house services, who provide the same service through contracting out: percentage giving an internal cost, and volume trends

Business services	Percentage giving an internal cost	Percentage reporting a change in volume consumed:					
		Since 1984			Expected by 1990		
		Up	Down	Same	Up	Down	Same
Legal Services	43	43	6	11	34	9	17
Taxation Services	23	23	1	13	16	3	19
Accounting Services	38	31	2	20	25	2	24
Finance Department Total	44	29	4	16	25	4	20
Market Research Services	37	29	--	20	27	--	22
PR Services	37	26	7	11	33	--	11
Advertising Services	50	37	2	16	28	3	23
Marketing Department Total	44	44	--	--	39	--	6
Computer Consultancy	31	31	3	9	21	2	21
Data Processing	38	38	3	15	30	--	25
Computer Centre Total	46	33	--	13	33	4	8
Engineering Services	44	41	--	16	16	6	38
Architectural Services	57	43	--	--	43	--	--

Note: Answers to multiple choice questions may not add to 100 per cent due to rounding and/or non-response.

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TABLE 21. For respondents who provide the same service both in-house, and through contracting out: percentage of service purchased, and trends in percentage purchased

Business services	Percentage of service purchased outside	Percentage reporting a change in percentage purchased:					
		Since 1984			Expected by 1990		
		Up	Down	Same	Up	Down	Same
Legal Services	56	26	6	20	6	14	40
Taxation Services	49	6	4	17	4	4	25
Accounting Services	15	7	6	27	4	6	39
Finance Department Total	21	7	6	31	9	6	33
Market Research Services	33	8	4	33	6	4	39
PR Services	40	15	4	26	4	--	41
Advertising Services	55	19	2	31	6	5	44
Marketing Department Total	54	22	--	17	17	--	28
Computer Consultancy	45	9	5	19	7	9	29
Data Processing	27	10	8	23	10	10	35
Computer Centre Total	16	13	--	29	17	--	25
Engineering Services	38	13	6	28	3	9	44
Architectural Services	15	29	--	--	14	14	14

Note: Answers to multiple choice questions may not add to 100 per cent due to rounding and/or non-response.

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