

Yukon Information Technology Market Research Study

Final Report

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Yukon Information Technology Market Research Study

Executive Summary

A survey of 150 Yukon businesses and non-profit organizations was conducted in March 2003 asking about their use of information technology. This sample size yields a $\pm 7.5\%$ margin of error, 19 times out of 20. The survey excluded governments and firms in the Information Technology industry.

The survey instrument was designed to provide results comparable with Statistics Canada surveys. The topics addressed by the survey included:

- Whether the firms used the following:
 - Personal computers
 - Intranet
 - Mainframes/servers
 - Specialized hardware
 - Email & WWW
 - Web site
 - Accounting/inventory software
 - Specialized software
- Where they purchased the software/hardware, where it was serviced and how much was spent annually.
- The importance of software/hardware to the businesses' operations.
- What plans the firm has for future growth and IT acquisition.
- Industry and firm size (number of employees).

As well, firms were asked questions about their views on the development of a Yukon Portal. Discussion of the responses to that part of the survey is presented in a separate report.

Major survey findings include:

- 80% of Yukon businesses use information technology (IT), about the same as the Canadian average despite the smaller size of Yukon businesses.

Enterprises not using IT

The 18% of businesses that do not use IT tend to have fewer employees and to be concentrated in the personal service and construction industries, and, to a lesser extent, retail sales and transportation industries. Close to 60% of them were planning to use information technology in the future, with the Internet and personal computers being the most popular responses.

Personal computer use

About 80 per cent of Yukon private sector enterprises use personal computers. Surveyed businesses owned 2.9 PCs on average (3.7 each for businesses who actually use a PC). Extrapolating to the total population, the Yukon's private sector uses about 4,700 PCs. Most (91%) used the Windows operating system. PCs were considered absolutely essential for the function of the firm by over 75% of respondents who owned one.

On average, Yukon enterprises spent about \$1,460 on personal computer purchases and an additional \$440 on support for their PCs. The Yukon private sector spent about \$2.3 million to purchase personal computers in 2002, of which \$1.6 million was spent in the Yukon. About \$0.7 million was spent on support, of which \$0.4 million was purchased from Yukon firms, \$0.3 million was done in-house, and a relatively small proportion — \$50,000 — spent Outside.

Intranet/networks

Intranet or networks are definitely more prevalent in the Yukon (31% of enterprises) than in the rest of Canada, where only 12% of enterprises had an intranet or network.

The market for intranet/network support in the Yukon is about \$180,000, of which \$84,000 was purchased from Yukon firms, \$76,000 was done in-house, and about \$23,000 spent Outside. Firms with a network or intranet spent an average of \$488 on support in the last year.

Mainframes/servers

Fewer than 10% of IT-using firms reported using a mainframe or server (8% of the total sample). About half of them maintained it in-house, and almost all the rest used the services of an Outside firm. Survey responses were too small to develop inferences about the size or value of the Yukon market.

Specialized hardware

About 18% of Yukon private sector firms owned specialized hardware in 2002. The private-sector Yukon market for specialized hardware is close to \$1 million, of which \$0.4 million was spent in the Yukon. Most of the \$0.7 million spent on support for specialized hardware was done in the Yukon with \$0.3 million was purchased from Yukon firms, less than \$0.3 million was done in-house, and about \$160,000 spent Outside.

Internet use

More than three-quarters of Yukon enterprises use the Internet (email and Web), significantly more than the 63% for Canada in 2000. Most use both the WWW and email. Cable is the most popular means of Internet access (40% of enterprises interviewed), followed by dial-up and DSL. Very few firms use satellite access. One-person firms tend to use cable most, while the majority of 2-5 employee firms use dial-up access.

Collecting information on the WWW is the most common use of the Internet (90%), followed by communicating with customers and suppliers. Just under half of surveyed firms use the Internet to buy products and about one-quarter use it to sell products. Under one-third use it for promotion.

On average, Yukon businesses spent about \$600 on Internet access in the past year. Satellite access is, not surprisingly, the most expensive form of access at about \$2,000 per year. This is followed by DSL, at an average cost of close to \$1,300, \$1,000 for cable and half that for dial-up access. The overall market for private sector internet access in the Yukon is about \$1 million, excluding households and governments.

Company Web sites

32% of the sample had a company Web site, greater than the 26% of enterprises reported for Canada in 2001. Close to 9% of all Yukon enterprises (27% of those with a Web site) used their site for electronic commerce, and of those, 6% have the ability to accept secure on-line payments. The percentages for e-commerce are in the same range as for Canada in 2000.

The respondents who provided an answer to how important the Web site was to their business all ranked it as important, very important or absolutely necessary. However, a full quarter of respondents did not know how important their Web site was to the functioning of their business.

About half of the sample have their Web site hosted Outside, 40 percent on a Yukon server owned by another firm and the rest have their own server. 44% design and maintain their Web site in-house, about one-third hire Yukon firms and 23% hire Outside firms.

Average Web site hosting expenditures for those who knew their costs was \$435 for firms with Web sites. Design expenses amounted to an average of \$3,425 while Web site maintenance and update expenses average \$880.

Software use

There is a wide variety of specialized software used by Yukon firms, and it appears that very little software is commonly used, other than accounting and sales/inventory software. The following table indicates the percentage of survey respondents using specialized software related to their business as well as their average annual expenditures for purchase and support for all Yukon enterprises.

	<i>Per cent of firms using</i>	<i>Average purchase expenditure</i>	<i>Average support expenditure</i>
Accounting Software	60		
Sales/Inventory	27	\$512	\$132
CAD	3		
GIS	3		
Graphic/Photo	4	\$701	\$114
Other Specialized software	19		

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1.0 Introduction

The use of information technology is growing very rapidly in many industries. And the use of information and communications technologies has been cited as a significant factor in sustaining economic growth. The geographic isolation and small population of the Yukon make IT use by firms particularly important though its ability to connect remote areas to wider markets.

The Draft IT Sector Strategy¹ calls for the increased local supply of IT goods and services within the Yukon. The product of this research project will assist in the overall implementation of the IT Sector Strategy — through the identification of opportunities in the local IT marketplace — to further enhance the development of the IT economic sector and thus improve the economy of the Yukon. As well, the Yukon Information Technology Labour Market Survey² identified the need for a more general survey that looked at the demand for IT services by Yukon businesses.

This market research study has the following four specific goals:

1. to provide a baseline measurement of the extent and types of IT use by Yukon businesses,
2. to measure business expenditures on IT-related products and services, including imported products and services,
3. to measure trends related to import as well as export of IT products and services using both baseline and market potential data, and
4. to obtain potential demand information required for portal study.

The results of Goal #4 — potential demand for a Yukon Internet portal — can be found in a separate report.

1.1. **Methodology**

At the core of this project is a survey of Yukon businesses. The survey provides a snapshot of the current market for IT goods and services, including how much Yukon businesses spend on IT and whether that spending is local or Outside. All interviews were conducted in March of 2003.

1.1.1. Survey

The target was to complete interviews with approximately 150 randomly selected Yukon businesses including First Nation development corporations and agencies. Completing 150 interviews yields a corrected error margin of approximately $\pm 7.5\%$ nineteen times out of twenty given the approximately 1,600 firms in the survey universe.

The survey³ was done through a series of telephone interviews of Yukon businesses. The telephone interviews took approximately 20 minutes on average to complete.

¹ Available at: <http://www.yitis.ca/ITStrategy.pdf>

² Available at: <http://netlab2.yukoncollege.yk.ca/ITsurvey/>

³ See Appendix A -for a copy of the survey instrument used.

The initial contact list for the survey was drawn from the Yukon Yellow pages and Datapath's database of Yukon firms.

1.1.2. Data Analysis

The data collected through the survey was cleaned to ensure consistency and allow for statistical analysis. Response levels to some of the questions varied, e.g. some businesses either could not or did not wish to answer some of the questions.

The cleaned database was analysed using SAS. Most of the analysis is based on simple tabulations of the survey results.

1.2. Comparability with Other IT Market Surveys

Statistics Canada has done occasional (though not annual) surveys of the use of IT by Canadian firms. The latest available figures were published in 2001⁴ and represent results from 2000. The survey covered all economic sectors except agriculture and construction. The findings are based on a sample of approximately 21,000 enterprises with a response rate of 77%, representing 93% of economic activity in Canada. A crucial point made in this survey is that the collection entity used is the *enterprise* rather than the establishment. Using the enterprise excludes intra-firm transactions when measuring e-commerce.

The Statistics Canada survey and this survey of Yukon firms are highly comparable as both have asked many of the same or very similar questions. And as we asked Yukon firms to identify what type of business or industry they operate in and have coded the results into the same NAICS (North American Industry Classification System) categories used by Stats Can, we can compare results within industries as well as overall results for the Yukon with Canada as a whole. Unfortunately the national data is 3 years old, and the past 3 years have seen a major increase in the use of IT by firms everywhere and in all industries. (Where Statistics Canada shows figures from both 1999 and 2000 — in Internet use for example — many industries show a 10 percentage point or more increase in use. Simply extrapolating from those increases would mean most industries are approaching 100% use by 2003).

The Canadian Federation of Independent Business has also done occasional surveys of its membership on the use of IT — and particularly Internet use — by Canadian firms. A fairly detailed survey was done by CFIB in mid-2000⁵ with figures for the first half of 2000 compared to results obtained in early 1999.

⁴ Peterson, G. September 2001. *Electronic Commerce and Technology Use*. Statistics Canada. Catalogue No. 56F0004MIE No. 5.

⁵ Mallet, Ted and Muhamood Kisekka. August 2000. E-Business Update: Internet Use among Small and Medium-sized Firms: CFIB Mid-year survey results.

2.0 Profile of respondents

A total of 151 randomly selected firms were reached as part of this survey. Only one refused to respond to the questionnaire. With a survey of 150 firms out of approximately 1,600 Yukon businesses, percentage responses are within ± 7.5 percentage points of the true figure, 19 times out of 20.

The following table presents the number of respondents in different industries and whether they use Information Technology or computers at all. Note that the sample size for each industry is fairly small, and the results need to be used with the appropriate caution. Any number less than 10 observations (or 7.5%) is not statistically significantly different from zero.

Table 1 Industry and IT use of survey respondents

<i>Industry</i>	<i>Use IT</i>	<i>No IT use</i>	<i>Total Sample</i>
Travel & tour operators	5	1	6
Information & cultural industries	5	0	5
Arts entertainment & recreation	2	0	2
Other Services to consumers/individuals	19	10	29
Professional & technical services	10	0	10
Other services to business	10	1	11
Health Care	3	0	3
Other	1	0	1
Other Natural resources	3	0	3
Social Service	12	0	12
Construction	8	5	13
Manufacturing	5	0	5
Retail sales	16	6	22
Wholesale trade	3	0	3
Transportation & warehousing	8	3	11
Food Service & accommodation	13	1	14
Total firms	123	27	150

Most Yukon firms use computers and information technology, 82% (123 out of 150) according to survey responses. This compares to 81% for Canada. These two numbers are essentially identical.

The firms that do not use IT seem to be concentrated in the personal service and construction industries, although it appears that a substantial portion of retailers also do not use computers. The retailers may use electronic cash registers, however.

The following table presents the size of surveyed businesses – number of employees (full time, part time, permanent and seasonal) – and whether they use Information Technology. Businesses not using IT tend to be smaller. Larger businesses show greater percentages of IT use.

Table 2 Number of employees and IT use of survey respondents

<i>Number of Employees</i>	<i>Use IT</i>	<i>No IT use</i>	<i>Total Sample</i>
Not Available	2	1	3
1 Employee	12	5	17
2-5 Employees	52	15	67
6-9 Employees	28	4	32
10+ Employees	29	2	31
Total firms	123	27	150

2.1. Businesses not using IT

As Table 1 and Table 2 show, about 18% of respondents did not use IT at all. While the numbers for each industry are fairly small, businesses not using IT tend to be concentrated in the personal service and construction industries, and, to a lesser extent, retail sales and transportation industries. The average IT-using business had 11.8 employees compared to 4.0 employees for firms not using IT.

Table 3 Number of employees and IT use of survey respondents (percentages).

<i>Number of Employees</i>	<i>Use IT</i>	<i>No IT use</i>	<i>Total Sample</i>
No Response/Not available	67%	33%	100%
1 Employee	71%	29%	100%
2-5 Employees	78%	22%	100%
6-9 Employees	88%	13%	100%
10+ Employees	94%	6%	100%
Total firms	82%	18%	100%

When asked why they were not using IT, the most frequent response (59%) was that the respondent felt that it was not needed in their type of business. Cost and lack of knowledge were considered less important by most non-IT users.

Table 4 Reasons for not using information technology

<i>Reason</i>	<i>Percentage of businesses (N=24)</i>
Not needed	59.3
Limitations in personnel	7.4
Costs	14.8
Lack of knowledge	11.1
Other reasons	0.0

Firms not currently using IT were asked what their future plans were about computer and Internet use. Although many felt IT was not needed, the majority (56%) nevertheless stated that they were planning or likely to use some form of IT in the future. Personal computers and Internet were cited most often by 41% of the respondents, followed by specialized software (33%) and accounting software (30%). About 22% planned on getting a Web site.

**Table 5 Planned future use of information technology
(businesses not using IT)**

<i>Action</i>	<i>Percentage of businesses (N=27)</i>
Plans to use IT in future	55.6
Future use of Internet	40.7
Future use of a PC	40.7
Future use of specialized software	33.3
Future use of accounting/inventory software	29.6
Future use of a Web site	22.2
Future use of specialized hardware	18.5
Future use of intranet	11.1
Future use of a server	3.7

3.0 Hardware Used by Yukon Businesses

3.1. Personal computers

About 80 per cent of Yukon private sector enterprises use personal computers. All but three (98%) of the businesses using IT used personal computers. Surveyed IT businesses owned 2.9 PCs on average (3.7 for businesses who use a PC). Extrapolating to the total population of approximately 1,600, Yukon businesses use about 4,700 PCs in total.

Most personal computers used the Microsoft Windows operating system (91%). About 8% used Macs and less than 1% (one respondent) used GNU/Linux. While the sample of Mac users is too small to draw valid inferences, it appears that Mac users are in a wide range of industries, with no apparent concentration. The industries with one or two Mac users in the sample include: Information & cultural industries, Arts entertainment & recreation, Professional & technical services, Manufacturing, Retail sales, and Transportation & warehousing.

3.1.1. Utility

For more than 75% of firms using a PC, respondents felt that the PC was absolutely necessary to the functioning of the firm. None thought it was of only marginal benefit.

Table 6 Rating of importance of personal computers to business functioning

<i>Rating of PC</i>	<i>Per cent of respondents with PCs</i>
Absolutely necessary	76.5
Very important	13.5
Important	5.0
Helps somewhat	5.0
Marginal benefit	0.0

3.1.2. Sources

PC users were asked questions about where they bought their PC(s), where they obtained support and how much they had spend on PC purchases in the last year and what did they spend on support. Table 7 shows that about 78 per cent of all businesses interviewed had purchased a PC in the previous year. Of that 78 per cent, 53 % had purchased their PC in the Yukon and 25% purchased them Outside. In other words, more than two thirds of PCs were purchased in the Yukon, if only purchasers are considered rather than the entire sample. Support for PCs was mostly obtained in the Yukon either in-house or from Yukon firms. 30% of firms supported their PCs in-house and 43% obtained PC support in the Yukon.

Table 7 Location of purchases of personal computers and PC-related support

<i>Location of purchase</i>	<i>PC purchases, % of respondents (N=150)</i>	<i>Support purchases, % of respondents (N=150)</i>
No purchases	22.0	21.3
In house		30.0
Yukon firm	52.7	43.3
Outside firm	25.3	5.3
All respondents	100.0	100.0

3.1.3. Spending

The following table shows average purchases of PCs and related support as well as the location of the PC and support purchases. Note that a number of firms did not know how much they had spent on PCs, and some had not purchased PC's in 2002, so the sample size is different than in Table 7. However, the percentages are very close to those presented in that table, so it can be assumed that those who did not know how much they spent have similar purchasing patterns to the others. On average, Yukon enterprises spent about \$1,460 on personal computer purchases and an additional \$440 on support for their PCs.

Table 8 Location and average expenditures on personal computers purchases and support

<i>Location of purchase</i>	<i>PC purchases (N=128)</i>		<i>PC Support purchases (N=131)</i>	
	<i>Per cent</i>	<i>Average Expenditure</i>	<i>Per cent</i>	<i>Average Expenditure</i>
No purchases	24.2	\$0	24.4	\$0
In house			30.5	\$672
Yukon firm	51.6	\$1,996	42.0	\$497
Outside firm	24.2	\$1,784	3.1	\$900
All	100.0	\$1,461	100.0	\$442

These numbers allow extrapolating the size of the PC market for the private for-profit and non-profit sectors in the Yukon. (In addition, governments and households also purchase PCs, but this survey was not designed to address those sectors). Based on the assumption that other Yukon for-profit and non-profit enterprises behave in the same manner as the sample, about \$2.3 million was spent on purchasing personal computers in the Yukon in 2002, of which \$1.6 million was spent in the Yukon. About \$0.7 million was spent on support, of which \$0.4 million was purchased from Yukon firms, \$0.3 million was done in-house, and a relatively small proportion (about \$50,000) spent Outside.

Table 9 Estimated total Yukon private sector expenditures on personal computer purchases and support by location

<i>Location of purchase</i>	<i>Purchase Expenditures</i>		<i>Support Expenditures</i>	
	<i>% of firms</i>	<i>Dollars</i>	<i>% of firms</i>	<i>Dollars</i>
In house			38.1%	\$ 269,695
Yukon firm	67.6%	\$1,579,378	55.1%	389,559
Outside firm	32.4%	758,222	6.8%	47,946
All	100.0%	\$2,337,600	100.0%	\$ 707,200

3.1.4. Use by Industry

The overall percentage of firms using personal computers is about the same for Canada and the Yukon, and individual industries reveal similar patterns. In Table 10, the Yukon industry information has been grouped so that a reasonable number of firms are present in each group. Overall, goods producing industries, trade, transportation and personal service industries seem to have slightly lower PC use in the Yukon, while other Yukon industries tend to use more PCs. The lower use of PCs in goods producing industries could be due to the prevalence of construction firms in the Yukon sample. Construction was not sampled in the Canada survey. It should be noted that these numbers are not conclusive given the small sample size in each industry.

Table 10 Percentage of firms that use personal computers by industry, Yukon and Canada

<i>Yukon</i> <i>Industry group</i>	<i>2003</i> <i>(%)</i>	<i>Canada</i> <i>Industry</i>	<i>2000</i> <i>(%)</i>
Goods producing industries (N=21)	76	Forestry, logging	66
		Mining, oil & gas	94
		Utilities	99
		Construction	N/A
		Manufacturing	89
Retail & Wholesale trade (N=25)	72	Wholesale trade	90
		Retail trade	76
Transportation & warehousing & Travel (N=17)	71	Transportation & warehousing	76
Information & cultural industries, Arts & entertainment industries (N=7)	100	Information & cultural industries	94
		Arts, entertainment & recreation	87
Other services to business (N=12)	92	Administration & support	87
		Finance & insurance	84
		Real estate, rental, leasing	71
		Management of companies	63
Professional & technical services (N=10)	100	Professional, scientific & technical	95
Health Care & Social Service (N=15)	100	Health care & social assistance	90
Food Service & accommodation (N=14)	86	Food Service & accommodation	66
Other Services to consumers/individuals (N=29)	66	Other services	76
Educational services (N=0)	N/A	Educational services	95
Total private sector (N=150)	80%	Total private sector	81%

3.2. Intranet use

A little more than 38 per cent of IT-using firms had an intranet or computer network (or 31% of all enterprises). Intranet or networks are definitely more prevalent in the Yukon than in the rest of Canada, where only 12% of enterprises had an intranet.

3.2.1. Utility

The utility of networks or intranets was ranked lower than PCs. Almost two thirds of respondents thought that the network was absolutely essential to the functioning of the enterprise, while 34% thought it was either important or very important. One firm thought it was of only marginal benefit.

Table 11 Rating of importance of intranet/network to business functioning

<i>Rating of Intranet/Network</i>	<i>Per cent of respondents with Intranet or network</i>
Absolutely necessary	61.7
Very important	21.3
Important	12.8
Helps somewhat	0.0
Marginal benefit	2.1

3.2.2. Sources

Only a small percentage of network support was obtained Outside. Most was done either by a Yukon firm or by in-house staff..

Table 12 Location of purchases of intranet/network support

<i>Location of purchase</i>	<i>Support purchases, % of respondents (N=150)</i>
No purchases	68.0
In house	13.3
Yukon firm	14.7
Outside firm	4.0
All respondents	100.0

3.2.3. Spending

Yukon enterprises spent an overall average of \$114 for network support in 2002. Enterprises actually using a network or intranet spent an average of \$488 on support.

Table 13 Location and average expenditures on intranet/network support

<i>Location of purchase</i>	<i>Network support purchases</i>	
	<i>Per cent</i>	<i>Average Expenditure</i>
No purchases	76.7	\$0
In house	12.8	\$443
Yukon firm	9.8	\$546
Outside firm	0.8	\$500
All (N=133)	100.0	\$114

Extrapolating to the Yukon, the market for intranet/network support is about \$180,000, of which \$84,000 was purchased from Yukon firms, \$76,000 was done in-house, and about \$23,000 spent Outside.

Table 14 Estimated total Yukon private sector expenditures on intranet/network support by location

<i>Location of purchase</i>	<i>Support Expenditures</i>	
	<i>% of firms</i>	<i>Dollars</i>
In house	41.7%	\$ 76,000
Yukon firm	45.8%	83,600
Outside firm	12.5%	22,800
All	100.0%	\$182,400

3.2.4. Use by Industry

Intranets or networks are clearly more prevalent in all industries (except for goods producing industries) in the Yukon. Again, it should be noted that construction was not included in Statistics Canada's sample, but forms the largest part of the Yukon Goods producing industry, thereby probably skewing the Yukon numbers downwards relative to Canada.

Table 15: Percentage of firms with an intranet, by industry

<i>Yukon Industry group</i>	<i>2003 (%)</i>	<i>Canada Industry</i>	<i>2000 (%)</i>
Goods producing industries N=21	19	Forestry, logging	2
		Mining, oil & gas	16
		Utilities	25
		Construction	N/A
		Manufacturing	17
Retail & Wholesale trade N=25	24	Wholesale trade	17
		Retail trade	8
Transportation & warehousing & Travel N=17	47	Transportation & warehousing	7
Information & cultural industries, Arts & entertainment industries N=7	71	Information & cultural industries	26
		Arts, entertainment & recreation	10
Other services to business N=12	67	Finance & insurance	29
		Real estate, rental, leasing	11
		Management of companies	11
		Administration & support	13
Professional & technical services N=10	40	Professional, scientific & technical	19
Health Care & Social Service N=15	20	Health care & social assistance	7
Educational services	N/A	Educational services	29
Food Service & accommodation N=14	21	Accommodation & food services	3
Other Services to consumers/individuals N=29	21	Other services	6
All industries N=150	31	Total private sector	12

3.3. Mainframe/Servers

Fewer than 10% of IT-using firms had a server or mainframe (12 respondents – or 8% of all firms). These were not necessarily in larger firms. While no one-person firms had a server, they were equally distributed among other size firms: four each in 2-5-person firms, 6-10-person firms and firms with more than 10 employees.

3.3.1. Utility

Ten of the 12 respondents found that their server or mainframe was absolutely essential for their operation. The other two reported that they helped somewhat or were of marginal value.

3.3.2. Sources

Mainframe/server support was almost equally divided between Outside firms and in-house, with only one reporting obtaining its support from Yukon firms.

3.3.3. Spending

Only half of the respondents knew how much they spent on supporting their mainframe or server. The four who supported their mainframe in house reported an average expenditure of \$2,075, while the other two reported no expenditure.

3.3.4. Use by Industry

The industries that reported using servers or mainframes included Business Services, Transportation and warehousing, Food service and accommodation and retail & wholesale trade. However, the numbers are very small and do not allow deriving inferences.

Table 16 Percentage of firms with a mainframe/server, by industry, Yukon

<i>Industry</i>	<i>% with mainframes/servers</i>
Transportation & warehousing & Travel N=17	11.8
Info., cultural Arts & entertainment industries N=7	0.0
Other Services to consumers/individuals N=29	3.4
Professional & technical services N=10	10.0
Other services to business N=12	25.0
Health Care & Social Service N=15	0.0
Goods Producing Industries N=21	0.0
Retail & Wholesale trade N=25	12.0
Food Service & accommodation N=14	14.3
All industries N=150	8.0

3.4. Specialized Hardware

Close to 22% of IT-using firms (or 18% of all respondents reported using specialized hardware). No details were obtained on the nature of the specialized hardware.

3.4.1. Utility

The specialized hardware was absolutely essential for more than three-quarters of firms using it. The others rated it as very important or important.

Table 17 Rating of importance of specialized hardware to business functioning

<i>Rating of Specialized hardware</i>	<i>Per cent of respondents with Specialized hardware</i>
Absolutely necessary	77.8
Very important	14.8
Important	7.4
Helps somewhat	0.0
Marginal benefit	0.0

3.4.2. Sources

Respondents were asked questions about where they purchased the specialized hardware and where they obtained support for it. More than half of the specialized hardware purchases were made Outside, but support is obtained mostly in-house or within the Yukon.

Table 18 Location of purchases of specialized hardware and related support

<i>Location of purchase</i>	<i>Specialized hardware purchases, % of respondents (N=150)</i>	<i>Specialized hardware support purchases, % of respondents (N=150)</i>
No purchases	82.0	82.0
In house		7.3
Yukon firm	8.0	6.7
Outside firm	10.0	4.0
All respondents	100.0	100.0

3.4.3. Spending

Table 19 shows the location of and average spending on purchases of specialized hardware and related support. Note that a number of firms did not know how much they had spent on hardware, and some had not purchased any in 2002, so the sample size is different than in Table 18. On average, Yukon enterprises spent about \$606 on specialized hardware purchases and an additional \$440 on support for that hardware.

Table 19 Location and average expenditures on specialized hardware purchases and support

<i>Location of purchase</i>	<i>PC purchases (N=142)</i>		<i>PC Support purchases (N=140)</i>	
	<i>Per cent</i>	<i>Average Expenditure</i>	<i>Per cent</i>	<i>Average Expenditure</i>
No purchases	86.6	\$0	87.9	\$0
In house			6.4	\$1,206
Yukon firm	8.5	\$4,267	4.3	\$8,383
Outside firm	4.9	\$4,979	1.4	\$150
All	100.0	\$606	100.0	\$439

Extrapolating to the Yukon market, close to \$1 million was spent on purchasing specialized hardware in the Yukon in 2002, of which \$0.4 million went to Yukon firms. About \$0.7 million was spent on support, of which \$0.3 million was purchased from Yukon firms, \$0.3 million was done in-house, and about \$160,000 spent Outside. Most of the support for specialized hardware was done in the Yukon.

Table 20 Estimated total Yukon private sector expenditures on specialized hardware purchases and support by location

<i>Location of purchase</i>	<i>Purchase Expenditures</i>		<i>Support Expenditures</i>	
	<i>% of firms</i>	<i>Dollars</i>	<i>% of firms</i>	<i>Dollars</i>
In house			40.7%	\$ 286,163
Yukon firm	44.4%	\$ 430,933	37.0%	260,148
Outside firm	55.6%	538,667	22.2%	156,089
All	100.0%	\$ 969,600	100.0%	\$ 702,400

3.4.4. Use by Industry

Specialized hardware seems to be most prevalent in the Information and cultural industries, and in the Business Services industries. This probably reflects the use of scanners and printers used in graphic work. It seems that little or no specialized hardware is used in the Food Service and Accommodation industries.

Table 21 Percentage of firms with specialized hardware, by industry, Yukon

<i>Industry</i>	<i>% with specialized hardware</i>
Transportation & warehousing & Travel N=17	11.8
Transportation & warehousing & Travel N=17	23.5
Info., cultural Arts & entertainment industries N=7	42.9
Other Services to consumers/individuals N=29	10.3
Professional & technical services N=10	20.0
Other services to business N=12	33.3
Health Care & Social Service N=15	6.7
Goods Producing Industries N=21	19.0
Retail & Wholesale trade N=25	24.0
Food Service & accommodation N=14	0.0
All industries N=150	18.0

4.0 Internet Use by Yukon Businesses

4.1. Web and email use

More than three-quarters of Yukon enterprises use the Internet. This is significantly higher than the 63% for Canada in 2000. About 75% use email, compared to 60% for Canada. As Table 22 shows, of the firms using the Internet, most use both the Web and email.

**Table 22 Internet use by Yukon firms,
percentage of sample**

<i>Internet use</i>	<i>Percent of sample (N=150)</i>
Email ONLY	2.0
WWW ONLY	1.3
Both WWW & Email	72.7
Subtotal - Internet use	76.0
No Internet use	24.0
All firms	100.0

Table 23 indicates that the majority of enterprises surveyed used a broadband connection: 34% used cable and 24% DSL. Close to 40% still use a dial-up modem for their Internet connection. Only one enterprise stated that they used a satellite connection.

**Table 23 Type of Internet connection used by
Yukon firms**

<i>Type of Internet connection</i>	<i>Per cent of firms using internet (N=115)</i>
High speed via cable	33.9%
High speed DSL	23.5%
Dial-up	39.1%
Satellite	0.9%
Don't know	2.6%
All	100.0%

It is interesting to note that enterprises with between 5 and 9 employees are relatively big users of dial-up connections, relatively more than larger and smaller firms. Fewer than half of the firms in that group have broad-band access. Also, one-person firms are the heaviest users of cable. This might point to cost constraints to using DSL service for smaller firms.

Table 24 Type of Internet connection used by number of employees

	<i>1 Employee</i>	<i>2-5 Employees</i>	<i>6-9 Employees</i>	<i>10+ Employees</i>
High speed via cable	50.0	21.3	42.3	35.7
High speed DSL	16.7	23.4	26.9	25.0
Dial-up	33.3	51.1	30.8	32.1
Satellite	0.0	0.0	0.0	3.6
Don't know	0.0	4.3	0.0	3.6
All	100.0	100.0	100.0	100.0

4.1.1. Utility

Table 25 presents the percentage of firms using the Internet for different purposes. Collecting information on the WWW is the most common use, followed by communicating with customers and suppliers. Just under half of surveyed firms use the Internet to buy products and about one-quarter use it to sell products. Under one-third use it for promotion.

Table 25 Purposes for using of Internet

<i>Internet use purpose</i>	<i>% of Internet users (N=115)</i>	<i>% of sample (N=150)</i>
To communicate with suppliers	69.0	52.0
To communicate with customers	76.1	57.3
For promotion	41.6	31.3
To sell products	31.9	24.0
To buy products	62.8	47.3
To collect information on the Web	90.3	68.0

Respondents were also asked how important email and access to the Web were to their operation. Overall, Web access was considered more important than email. Nevertheless, the majority of respondents thought that both email and Web access were absolutely necessary to the functioning of the firm.

Table 26 Rating of importance of email and Web access to business functioning

	<i>Email (N=115)</i>	<i>WWW access (N=115)</i>
<i>Rating</i>	<i>Per cent of respondents with Internet access</i>	<i>Per cent of respondents with Internet access</i>
Absolutely necessary	50.4%	61.7
Very important	18.3%	21.3
Important	15.7%	12.8
Helps somewhat	11.3%	0.0
Marginal benefit	4.3%	2.1

4.1.2. Spending

Table 27 presents average spending on Internet access by respondents. On average, Yukon businesses spent about \$600 on Internet access. Satellite access, is not surprisingly, the most expensive form of access at about \$2,000 per year. This is followed by DSL, at an average cost of close to \$1,300, approximately \$1,000 for cable and half that for dial-up access.

Table 27 Average spending on Internet access by type of access

<i>Internet Access</i>	<i>% of respondents (N=131)</i>	<i>Average Spending</i>
No Internet	26.7	\$0
High speed via cable	26.0	\$1,004
High speed DSL	15.3	\$1,271
Dial-up	29.8	\$505
Satellite	0.8	\$2,000
Don't Know	1.5	\$200
All	100.0	\$623

Extrapolating to the private sector Yukon market, about \$1 million was spent on Internet access in 2002.

Table 28 Estimated total Yukon private sector expenditures on Internet access

<i>Internet Access</i>	<i>Purchase Expenditures</i>	
	<i>% of firms</i>	<i>Dollars</i>
No internet	27.1%	\$0
High speed via cable	26.4%	\$423,000
High speed DSL	15.5%	\$315,000
Dial-up	30.2%	\$244,000
Satellite	0.8%	\$25,000
	100.0%	\$1,000,000

4.1.3. Use by Industry

Table 29 compares Internet use by industry for the Yukon and for Canada, while Table 30 presents the same comparison for email only. In terms of Internet use, the patterns are quite similar for the two jurisdictions, with the Yukon showing higher percentages. The dramatic differences are in the food and accommodation services industry, health care and social services, and transportation industries.

Looking at email use only in Table 30, the Yukon percentages are the same except for the food services and accommodation industry, where two Web users did not report using email.

Table 29: Percentage of firms that use the Internet: by industry

<i>Yukon</i> <i>Industry group</i>	<i>2003</i> <i>(%)</i>	<i>Canada</i> <i>Industry</i>	<i>2000</i> <i>(%)</i>
Goods Producing Industries	76	Forestry, logging	42
		Mining, oil & gas	78
		Construction	N/A
		Utilities	81
		Manufacturing	78
Retail & Wholesale trade	64	Wholesale trade	75
		Retail trade	53
Transportation & warehousing & Travel	76	Transportation & warehousing	57
Info., cultural arts & entertainment industries	100	Information & cultural industries	93
		Arts, entertainment & recreation	69
Professional & technical services	90	Professional, scientific & technical	84
Other services to business	92	Finance & insurance	76
		Real estate, rental, leasing	51
		Management of companies	53
		Administration & support	75
Educational services	N/A	Educational services	89
Health Care & Social Service	80	Health care & social assistance	62
Food Service & accommodation	93	Accommodation & food services	44
Other Services to consumers/individuals	59	Other services	52
All industries	76	Total private sector	63

Table 30: Percentage of firms using email: by industry

<i>Yukon</i> <i>Industry group</i>	<i>2003</i> <i>(%)</i>	<i>Canada</i> <i>Industry</i>	<i>2000</i> <i>(%)</i>
Goods Producing Industries	76	Forestry, logging	34
		Mining, oil & gas	73
		Construction	N/A
		Utilities	83
		Manufacturing	75
Retail & Wholesale trade	64	Wholesale trade	74
		Retail trade	48
Transportation & warehousing & Travel	76	Transportation & warehousing	51
Info., cultural Arts & entertainment industries	100	Information & cultural industries	91
		Arts, entertainment & recreation	76
Professional & technical services	90	Professional, scientific & technical	50
Other services to business	92	Finance & insurance	85
		Real estate, rental, leasing	49
		Management of companies	70
		Administration & support	84
Educational services	N/A	Educational services	59
Health Care & Social Service	80	Health care & social assistance	62
Food Service & accommodation	79	Accommodation & food services	40
Other Services to consumers/individuals	59	Other services	48
All industries	75	Total private sector	60

4.2. Company Web sites

Thirty-two per cent of respondents had a company Web site, representing 39 per cent of Yukon firms using IT. This is substantially more than the 26% of enterprises reported for Canada in 2001. Close to 9% of all Yukon enterprises (27% of those with a Web site) used their site for electronic commerce, and of those, 6% have the ability to accept secure on-line payments. The percentages for e-commerce are in the same range as for Canada in 2000.

Table 31 Uses of Web sites (e-commerce & database/accounting)

	<i>% of</i> <i>respondents</i> <i>with Web sites</i>	<i>% of all</i> <i>respondents</i>
E-commerce	27.1	8.7
Secure Web site	18.8	6.0
Accounting, database	16.7	5.3

4.2.1. Utility

All respondents who provided an answer to how important the Web site was to their business ranked it as important, very important or absolutely necessary. None thought it was unimportant. However, a full quarter of respondents did not know how important their Web site was to the functioning of their business.

Table 32 Rating of importance of Web site to business functioning

<i>Rating</i>	<i>Per cent of respondents with Web site (N=48)</i>
Absolutely necessary	29.2
Very important	29.2
Important	16.7
Helps somewhat	0.0
Marginal benefit	0.0
Don't know	25.0

4.2.2. Sources

Respondents were asked questions on where the Web site hosting, design, and maintenance was done. About half have their Web site hosted Outside, 40 percent on a Yukon server owned by another firm, and the rest use their own server, also presumably in the Yukon. A fairly high proportion (44%) do their own Web site design and maintenance. About one-third hire Yukon firms and 23% hire Outside firms.

Table 33 Location of Web site hosting, design and updates

<i>Location</i>	<i>Hosting</i>	<i>Design & Updates</i>
In house	12.5	43.8
Yukon	39.6	33.3
Outside	47.9	22.9
All Web site owners	100.0	100.0

4.2.3. Spending

Average Web site hosting expenditures for those who knew their costs was \$96 per year for the entire sample and \$435 for firms with Web sites. Respondents spent an average of \$3,425 for initial Web site design expenses. Note that this is not an annual amount, but how much firms originally spent on their Web site. Web site maintenance and update expenses averages \$220 overall and \$880 for firms with Web sites.

Table 34 Location and average expenditures on Website hosting, design and updates

<i>Location</i>	<i>Hosting (N=131)</i>		<i>Design (N=129)</i>		<i>Updates (N=136)</i>	
	<i>Per cent of sample</i>	<i>Average Expenditure</i>	<i>Per cent of sample</i>	<i>Average Expenditure</i>	<i>Per cent of sample</i>	<i>Average Expenditure</i>
No Web site	77.9	\$0	79.1	\$0	75.0	\$0
In house	1.5	\$680	8.5	\$6,282	11.0	\$1,320
Yukon firm	9.2	\$368	8.5	\$1,861	9.6	\$710
Outside firm	11.5	\$456	3.9	\$580	4.4	\$148
All	100.0	\$96	100.0	\$717	100.0	\$220

Extrapolating to Yukon totals for update costs is difficult because of the low response rate size and the high variability. Too many firms did not know their update costs and this resulted in average update costs ranging from \$148 to \$1,320, as

Table 34 shows. Little confidence can be placed on estimates as different weighting schemes ended up with results ranging from \$350,000 to \$1.3 million in Web site update expenditures.

4.2.4. Use by Industry

The percentage of businesses with Web sites is by and large similar in most industries when comparing the Yukon with Canada. The notable differences are in the food service and accommodation industry, transportation & warehousing and in professional & technical services. The relatively greater number of companies with Web sites in the first two is likely related to the importance tourism to the Yukon's economy.

Table 35 percentage of enterprises with Web sites, Yukon 2003 and Canada 2000

<i>Yukon</i>	<i>2003</i>	<i>Canada</i>	<i>2000</i>
<i>Industry group</i>	<i>(%)</i>	<i>Industry</i>	<i>(%)</i>
Goods Producing Industries N=21	19	Forestry, logging	5
		Mining, oil & gas	23
		Utilities	31
		Construction	N/A
		Manufacturing	38
Retail & Wholesale trade N=25	16	Wholesale trade	34
		Retail trade	23
Transport. & warehousing & Travel N=17	58	Transportation & warehousing	13
Info., cultural Arts & entertainment N=7	57	Information & cultural industries	54
		Arts, entertainment & recreation	36
Professional & technical services N=10	50	Professional, scientific & technical	30
Other services to business N=12	50	Finance & insurance	34
		Real estate, rental, leasing	22
		Management of companies	17
		Administration & support	33
Educational services	N/A	Educational services	70

Health Care & Social Service N=15	20	Health care & social assistance	16
Food Service & accommodation N=14	50	Accommodation & food services	18
Other Services to consumers/individuals N=29	17	Other services	22
All industries N=150	32	Total private sector	26

There were only nine respondents who indicated that their Web site had secure on-line payment capability. This sample size is too small to draw any valid inferences about which industries used that capability. The industries where there was more than one respondent who used secure on-line payments include food service and accommodation, and transportation and warehousing.

**Table 36: Percentage of firm's Web sites with online payment ability:
by industry, Canada, 2000**

<i>Industry</i>	<i>Canada (%) 2000</i>
Forestry, logging	15
Mining, oil & gas	9
Utilities	19
Manufacturing	5
Construction	N/A
Wholesale trade	8
Retail trade	12
Transportation & warehousing	9
Information & cultural industries	16
Finance & insurance	15
Real estate, rental, leasing	3
Professional, scientific & technical	7
Management of companies	10
Administration & support	2
Educational services	4
Health care & social assistance	5
Arts, entertainment & recreation	2
Accommodation & food services	13
Other services	9
Total private sector	8

5.0 Software Used by Yukon Businesses

Software related questions, other than the PC operating system questions discussed in Section 3.1 above related to the respondents' use of accounting, sales/inventory and specialized software. The main purpose of the software questions was to aid in portal feature design, so basic questions such as the use of office productivity tools were not asked. As well, internet use implies the use of Web browsers and email clients.

5.1. Accounting/Inventory

About 60 per cent the firms interviewed use accounting software. Most of those (50% of all firms, 74% of IT-users) use off-the-shelf accounting software. Inventory and sales tracking software is less common. A little more than one-quarter of the sample uses sales and inventory software. The majority of that sales/inventory software was custom made. Examination of the data shows that the larger the firm, the more likely that it is using custom-made software.

**Table 37 Accounting and sales/inventory software use
Yukon enterprises, percentage of sample**

	<i>Per cent of sample using Accounting software (N=150)</i>	<i>Per cent of sample using Sales/inventory software (N=150)</i>
<i>Internet use</i>		
Off-the shelf software	50	13
Custom software	10	15
Subtotal - software use	60	27
IT-users not using software	21	52
No IT	20	20
All firms	100	100

5.1.1. Utility

A majority of accounting software users thought that type of software was absolutely necessary to the functioning of the firm. The perceived importance of sales and inventory software was considerably greater where more than two thirds of respondents employing that software thought it was absolutely essential to the functioning of the firm.

**Table 38 Rating of importance of accounting and sales/inventory software
to business functioning**

	<i>Accounting (N=90)</i>	<i>Sales/inventory (N=35)</i>
<i>Rating</i>	<i>Per cent of respondents with accounting software</i>	<i>Per cent of respondents with sales/inventory software</i>
Absolutely necessary	57.8	68.6
Very important	20.0	20.0
Important	11.1	8.6
Helps somewhat	5.6	2.9
Marginal benefit	4.4	0.0
Don't know	1.1	0.0

5.1.2. Sources

Table 39 shows that the majority of accounting and sales/inventory software was purchased in the Yukon, although purchases Outside were also a considerable portion. Comparing off-the-shelf software to custom made, it appears that a majority of off-the-shelf software is bought in the Yukon and supported either in-house or by Yukon firms. On the other hand, most of the custom software is purchased and supported Outside.

Table 39 Location of purchases of accounting and sales/inventory software and related support

<i>Location of purchase</i>	<i>Software purchases, % of respondents (N=150)</i>	<i>Software support, % of respondents (N=150)</i>
No purchases	36.0	36.0
In house		22.0
Yukon firm	34.7	21.3
Outside firm	25.3	18.0
Don't Know	4.0	2.7
All respondents	100.0	100.0

5.1.3. Spending

Average spending in the Yukon on accounting and sales/inventory software was \$512 per firm for software acquisition and \$132 on support. Those who purchased from Outside firms spend considerably more on average, close to four times as much. This is a result of the tendency to obtain custom-made software outside. Because of the bias introduced by the number of firms not knowing their expenditures and the small number of responses, it is again not possible to extrapolate to Yukon totals.

Table 40 Average annual expenditures by Yukon firms on accounting and sales/inventory software, by location.

	<i>Software acquisition</i>	<i>Software support</i>
In house		\$134
Yukon firm	\$234	\$118
Outside firm	\$1,897	\$498
Don't Know	\$475	\$0
All firms	\$512	\$132

5.1.4. Use by Industry

Most industries are not far from the average of 61% of users of accounting software. The exceptions are the Professional and Technical services industry (which includes accounting firms) and the Other services to business industry (including bookkeeping services). Not surprisingly, the relatively largest user of sales and inventory software is the Retail & wholesale trade and the professional and technical services sectors.

Table 41 Percentage of firms using accounting and sales /inventory software, Yukon 2003

<i>Industry group</i>	<i>Accounting</i>	<i>Sales/Inventory</i>
Goods Producing Industries N=21	66.7	33.3
Transportation & warehousing & Travel N=17	58.8	17.6
Retail & Wholesale trade N=25	52.0	40.0
Info., cultural Arts & entertainment industries N=7	57.1	14.3
Professional & technical services N=10	70.0	40.0
Other services to business N=12	83.3	16.7
Health Care & Social Service N=15	66.7	13.3
Food Service & accommodation N=14	57.1	35.7
Other Services to consumers/individuals N=29	51.7	31.0
All industries N=150	60.7	28.7

5.2. Other Specialized Software

About one quarter of Yukon enterprises use some form of specialized software. Specific questions were asked about Computer Aided Design (CAD), Geographic Information systems (GIS) and Graphical or photo software, but the number of firms using any of them is relatively small. Note that respondents were asked to describe the specialized software, but there were no duplications as is shown in the listing in Appendix B, page 53.

Table 42 Use of specialized software

	<i>Per cent of sample</i>
CAD	2.7
GIS	3.3
Graphic/Photo	4.0
Other specialized software	19.3
Total specialized software users	27.3
Other IT users	54.7
No IT	18.0
Total	100.0

5.2.1. Utility

Specialized software is most often absolutely necessary to the functioning of the firm. Over three quarters of the respondents with specialized software indicated that it was absolutely essential to the functioning of the firm.

Table 43 Rating of importance of specialized software to business functioning

<i>Rating</i>	<i>Per cent of respondents with specialized software (N=41)</i>
Absolutely necessary	75.6
Very important	14.6
Important	4.9
Helps somewhat	2.4
Marginal benefit	2.4

5.2.2. Sources

Most specialized software is purchased Outside. About two thirds of those who purchase software Outside also obtain their support there, while software purchased in the Yukon is supported here. About one third of the software purchased Outside is supported in-house.

Table 44 Location of purchases of specialized software and related support

<i>Location of purchase</i>	<i>Software purchases, % of respondents (N=150)</i>	<i>Software support, % of respondents (N=150)</i>
No purchases	70.7	72
In house		7.3
Yukon firm	7.3	6.7
Outside firm	21.3	14.0
Don't Know	0.7	0.0
All respondents	100.0	100.0

5.2.3. Spending

At an average cost of \$4,513, specialized software obtained Outside the Yukon cost considerably more to acquire and support than software purchased in the Yukon. Again, because of the wide variance in software costs, it is not possible to obtain overall Yukon figures for specialized software sales or support.

Table 45 Average annual expenditures by Yukon firms on specialized software, by location.

	<i>Software acquisition</i>	<i>Software support</i>
In house		\$250
Yukon firm	\$170	\$81
Outside firm	\$4,513	\$791
Don't Know	\$300	
All firms	\$701	\$114

5.2.4. Use by Industry

The use of specialized software seems to be relatively more concentrated in the Professional & Technical services sector and in Other services to business sectors. The Food service and accommodation sector appears to be the least intensive user of specialized software.

Table 46 Percentage of firms using specialized software, Yukon 2003

<i>Industry group</i>	<i>Per cent of respondents</i>
Goods Producing Industries N=21	29
Transportation & warehousing & Travel N=17	35
Retail & Wholesale trade N=25	36
Info., cultural Arts & entertainment industries N=7	14
Professional & technical services N=10	60
Other services to business N=12	50
Health Care & Social Service N=15	13
Food Service & accommodation N=14	7
Other Services to consumers/individuals N=29	14
All industries N=150	27

Appendix A - Survey Instrument

Survey Outline – IT study –Internet Code book
Final Version March 10, 2003

I - Intro/screener

1. Hello, this is _____ from DataPath Systems, a Yukon market research company. We are conducting a short survey today on behalf of the Yukon government about business use of technology such as computers and the Internet. Can I speak with the owner or the person who is responsible for computer systems and Internet?

Yes – Continue

Not available – arrange call back

Company does not use computers – (CONFIRM YOU ARE SPEAKING WITH A
MANAGER/OWNER. RECORD NO COMPUTER AND GO TO Q.C)

Refused – terminate

2. (IF NEW PERSON – REREAD INTRO). Does your business use Information technology, such as computers or the Internet for business purposes?

1 = 1..IF YES Skip to Q1

2 = 2..If NO –

3. Why doesn't your business use computers or the Internet? (DO NOT READ LIST – CHECK ALL THAT APPLY) -

Not needed for this type of business
Limitations in personnel,
Costs,
Lack of knowledge/don't know how,
Other –specify
SKIP TO FUTURE GROWTH SECTION

1= yes - one column
each

Text

II - Level of use

1. Does your business use the Internet for email, access to the World wide Web, both or you don't have Internet access? (THEY DO NOT HAVE TO HAVE A WEBSITE – CHECK ONLY ONE)
 - 1 = Email ONLY
 - 2 = WWW ONLY
 - 3 = Both
 - 4 = Neither – skip to Q2

- a. Is your internet service (READ LIST –ONE ONLY):
 - 1 = High speed via cable
 - 2 = High speed via ISP (DSL service)
 - 3 = Dial-up
 - 4 = Satellite
 - 5 = 99. Don't know

- b. Approximately, how much, in total, do you spend per year for Internet service? (NO RANGES – IF RANGE GIVEN – CONFIRM WITH MID-POINT) DK=99999

- c. Which of these do you use the Internet for in your business (READ LIST, CHECK ALL THAT APPLY)
 - To communicate with suppliers,
 - To communicate with customers,
 - For promotion,
 - To sell products, or
 - To buy products
 - To collect information available on the Web

1= yes - one column each

- d. Is email: (READ LIST) (IF Q1=WWW ONLY – DO NOT ASK, SKIP TO e)
 - 1 = Absolutely necessary for the functioning of the firm,
 - 2 = Very important,
 - 3 = Important,
 - 4 = Helps somewhat
 - 5 = Or is a marginal benefit to the firm.

- e. f. (IF Q1 = EMAIL ONLY, SKIP TO Q2) Is internet access to the Web:
 - 1 = Absolutely necessary for the functioning of the firm,
 - 2 = Very important,
 - 3 = Important,
 - 4 = Helps somewhat
 - 5 = Or is a marginal benefit to the firm

2. Does your company have its own Website?

- 1 = Yes
- 2 = No – SKIP TO Q4
- 3 = 99. Don't know – SKIP TO Q4

a. Is that site hosted: (READ LIST – ONE ONLY)

- 1 = In the Yukon
- 2 = Outside
- 3 = Your own Web server – where you host your site
- 4 = 99. Don't know

b. Does the site have Ecommerce service — that is, can people buy goods or services on your Website?

- 1 = Yes
- 2 = No (SKIP TO Qd)
- 99 = Don't know

c. Is this a secure site that allows credit card payments?

- 1 = Yes
- 2 = No
- 99 = Don't know

d. How much does it cost per year to host the site? (DK = 99999)

e. Is the site design and updating done by (READ LIST – CHECK ALL THAT APPLY):

- Your own employees
- A Yukon firm
- An Outside firm
- Don't know

1= yes - one column
each

f. How much did you spend originally on site design costs? (DK = 99999)

g. Last year, how much did you spend on updating the site? (DK = 99999)

h. Do you use that site for company data such as inventory, accounting or other database information?

- 1 = Yes
- 2 = No
- 99 = DK

i. Is your Website: (READ LIST)

- 1 = Absolutely necessary for the functioning of the firm,
- 2 = Very important,
- 3 = Important,
- 4 = Helps somewhat
- 5 = Or is a marginal benefit to the firm.

3. Do you use personal computers?

- 1 = Yes
- 2 = NO – SKIP TO Q5

a. Which operating system do you run: (READ LIST, CHECK ALL THAT APPLY)

Windows

1= yes - one column each

Mac or
Linux

- b. How many PC's does your business use? DK = 99
- c. Do you typically purchase your computers (READ LIST – ONE ONLY)
 - 1 = In the Yukon
 - 2 = Or Outside
- d. Last year, how much did your business spend on personal computer hardware? DK = 99999
- e. Is the support and maintenance for your PCs primarily done (READ LIST ONE ONLY)
 - 1 = In house,
 - 2 = By a Yukon firm,
 - 3 = Or Outside?
- f. How much do you typically spend per year for support and maintenance of PCs? DK = 99999
- g. Is the PC (READ LIST):
 - 1 = absolutely necessary for the functioning of the firm,
 - 2 = very important,
 - 3 = important,
 - 4 = helps somewhat OR
 - 5 = is a marginal benefit to the firm.
- 4. Does your business use a **Non PC server** – such as a mainframe system
 - 1 = Yes
 - 2 = No – SKIP TO Q6
 - 99 = Don' t know
- a. In the support and maintenance for your mainframe primarily done (READ LIST ONE ONLY)
 - 1 = In house,
 - 2 = By a Yukon firm,
 - 3 = Or an Outside firm?
- b. How much do you typically spend per year for support and maintenance of your mainframe/server?
DK = 99999
- c. Is the mainframe/server, (READ LIST)
 - 1 = absolutely necessary for the functioning of the firm,
 - 2 = very important,
 - 3 = important,
 - 4 = helps somewhat OR
 - 5 = is a marginal benefit to the firm.

5. Does your business use an Intra net, or computers that are networked together? .
1 = Yes
2 = No (SKIP TO Q6)
99 = Don't know
- a. Do you typically purchase your intranet/network support and maintenance (READ LIST – ONE ONLY)
1 = Done in-house by employees/owner
2 = In the Yukon
3 = Or Outside
- b. Last year, how much did your business spend on your intranet/network needs? DK = 99999
- c. Is the intranet or network (READ LIST)
1 = absolutely necessary for the functioning of the firm,
2 = very important,
3 = important,
4 = helps somewhat OR
5 = is a marginal benefit to the firm.
6. Do you use a computerized accounting system?
1 = Yes
2 = No (SKIP TO Q6b)
3 = 99 = DK
- a. Is it (READ LIST ONE ONLY)
1 = Off the shelf like Simply Accounting, ACCPAC, Quick Books,
2 = Or custom
99 = DK
- b. Do you use inventory and sales tracking on your computer system?
1 = Yes
2 = No (IF Q 6 = NO - SKIP TO Q7)
99 = DK
- c. Is it: (READ LIST)
1 = Off the shelf like Access or ACT
2 = Or custom software?
99 = DK
- d. Do you typically purchase your accounting or inventory and sales tracking software (READ LIST – ONE ONLY)
1 = In the Yukon
2 = Or Outside
99 = DK
- e. Last year, how much did your business spend on accounting and inventory and sales tracking software? DK = 99999
- f. In the support and maintenance for your accounting and inventory and sales tracking software primarily done (READ LIST ONE ONLY)

- 1 = In house,
- 2 = By a Yukon firm,
- 3 = Or Outside?

g. How much do you typically spend per year for support and maintenance of your accounting and inventory and sales tracking software? DK = 99999

h. Is the accounting and inventory and sales tracking software, (READ LIST)

- 1 = absolutely necessary for the functioning of the firm,
- 2 = very important,
- 3 = important,
- 4 = helps somewhat OR
- 5 = is a marginal benefit to the firm.

7. Do you use any specialized computer **hardware** needed specifically for your type of business?

- 1 = Yes
- 2 = No (SKIP TO Q8)
- 3 = 99 DK

a. Do you typically purchase your specialized hardware (READ LIST – ONE ONLY)

- 1. In the Yukon
- 2. Or Outside
- 99 = DK

b. Last year, how much did your business spend on specialized hardware? DK = 99999

c. In the support and maintenance for your specialized hardware primarily done (READ LIST ONE ONLY)

- 1 = In house,
- 2 = By a Yukon firm,
- 3 = Or Outside?
- 99 = DK

d. How much do you typically spend per year for support and maintenance of your specialized hardware? DK = 99999

e. Is the specialized hardware, (READ LIST)

- 1 = absolutely necessary for the functioning of the firm,
- 2 = very important,
- 3 = important,
- 4 = helps somewhat OR
- 5 = is a marginal benefit to the firm.

8. Does your business use any specialized software specific for your type of business or custom software you had written especially for your business?

- 1 = Yes
- 2 = No (SKIP TO Q9)
- 99 = DK

a. What types of specialized software do you use? (CHECK ALL THAT APPLY)

CAD

1= yes - one column each

GIS
Graphic design/photo
Other Specify_____TEXT_____

- b. For your CAD is it (READ LIST ONE ONLY)
 - 1 = Off the shelf ,
 - 2 = Or custom made for your business
 - 99 = dk
- c. For your GIS is it (READ LIST ONE ONLY)
 - 1 = Off the shelf
 - 2 = Or custom made for your business
 - 99 = DK
- d. For your Graphic design/photo is it (READ LIST ONE ONLY)
 - 1 = Off the shelf
 - 2 = Or custom made for your business
 - 99 = DK
- e. For your other specify is it (READ LIST ONE ONLY)
 - 1 = Off the shelf
 - 2 = Or custom made for your business
 - 99 = DK
- f. Do you typically purchase your specialized software (READ LIST – ONE ONLY)
 - 1 = In the Yukon
 - 2 = Or Outside
 - 99 = DK
- g. Last year, how much did your business spend on specialized software? DK=99999
- h. In the support and maintenance for your specialized software primarily done (READ LIST ONE ONLY)
 - 1 = In house,
 - 2 = By a Yukon firm,
 - 3 = Or Outside?
 - 99 = DK
- i. How much do you typically spend per year for support and maintenance of your specialized software?
DK = 99999
- j. Is the specialized software, (READ LIST)
 - 1 = absolutely necessary for the functioning of the firm,
 - 2 = very important,
 - 3 = important,
 - 4 = helps somewhat OR
 - 5 = is a marginal benefit to the firm.
- 9. Are there any other types of computer or Internet systems you use that we haven't covered yet?
(OPEN ENDED) TEXT

10. In total for 2002, how much did your business spend for computer hardware, software, Internet access and Website design and maintenance? DK = 99999

III - Future growth

11. In the near future are you expecting your business will likely grow or are you planning for growth in the near future?

- 1 = Yes
- 2 = No (SKIP TO Q12)
- 3 = 99 = DK

- b. Which of the following do you think will contribute to the growth of your business (READ LIST – CHECK ALL THAT APPLY)

- Tourism
- Outside sales or exporting
- Sales to Yukoners
- Change in type of sales you do, like Wholesale vs. retail
- Adding new products
- Other specify

1= yes - one column each

IV - How IT can help your business

12. Earlier, you mentioned you did not use some of the items I mentioned. For each one, please tell me if you are likely to, or plan to use it in the future. Are you likely to start using:

List all "No" items in Q1-10. YES/NO TO EACH.

- Internet
- Website
- PC
- Non-pc
- Intranet
- Accounting/inventory
- Specialized Hardware
- Specialized Software

V - Vision test (portal questions)

13. Looking to the future, how interested would your business be in a Yukon-wide business portal Website that would potentially offer economies of scale for marketing to both the Yukon and Outside, and services within the portal such as Web-based accounting and inventory systems, Web page design etc. How interested are you in learning more about such a portal? (READ LIST)
- 1 = Extremely interested
 - 2 = Somewhat interested
 - 3 = Neutral
 - 4 = Not very interested (SKIP TO BUSINESS PROFILE SECTION)
 - 5 = Not at all interested (SKIP TO BUSINESS PROFILE SECTION)
14. Now I am going to read a few features a portal might offer. Using a scale from a low of 1 to a high of 5, please tell me how helpful you think each feature might be to your business. How useful would it be:
- a. To have a central Website where all Yukon businesses could be listed and linked from
 - 1 = Not at all useful
 - 2 = Not very useful
 - 3 = Neutral
 - 4 = Somewhat useful
 - 5 = Extremely useful
 - b. To have that Website advertised outside the Yukon
 - 1 = Not at all useful
 - 2 = Not very useful
 - 3 = Neutral
 - 4 = Somewhat useful
 - 5 = Extremely useful
 - c. To have a standard accounting system set up that your business could use
 - 1 = Not at all useful
 - 2 = Not very useful
 - 3 = Neutral
 - 4 = Somewhat useful
 - 5 = Extremely useful
 - d. To have a standard inventory and sales tracking system set up that your business could use
 - 1 = Not at all useful
 - 2 = Not very useful
 - 3 = Neutral
 - 4 = Somewhat useful
 - 5 = Extremely useful
 - e. To have a Web design service you could access
 - 1 = Not at all useful
 - 2 = Not very useful
 - 3 = Neutral
 - 4 = Somewhat useful
 - 5 = Extremely useful
 - f. To have Ecommerce on that site selling your Yukon products or services
 - 1 = Not at all useful

- 2 = Not very useful
- 3 = Neutral
- 4 = Somewhat useful
- 5 = Extremely useful

- g. Providing you with statistics on usage such as reports back on user visits, number of people hitting pages, and actual sales items)
- 1 = Not at all useful
 - 2 = Not very useful
 - 3 = Neutral
 - 4 = Somewhat useful
 - 5 = Extremely useful

15. Are there any other features you would like such a portal to include? (SPECIFY) TEXT

16. Based on the features you would be interested in, how much, per year, would your business be willing to pay in order to be included on this portal site? DK = 99999

17. Do you think it is appropriate for the Yukon Government to invest in such a site?
- 1 = Yes
 - 2 = No
 - 99 = DK

VI - Business profile

18. What type of business/industry do you mainly operate in (DO NOT READ LIST)
- 1 = Mining & Oil & Gas
 - 2 = Other Natural resource (Agriculture, forestry, etc)
 - 3 = Utilities
 - 4 = Construction
 - 5 = Manufacturing
 - 6 = Retail sales (stores)
 - 7 = Wholesale trade
 - 8 = Transportation & warehousing
 - 9 = Food Service & accommodation
 - 10 = Travel & tour operators (hotels, wilderness operators, etc)
 - 11 = Information & cultural industries (Print, film, music publishing, telecommunications)
 - 12 = Arts entertainment & recreation
 - 13 = Other Services to consumers/individuals
 - 14 = Professional & technical services (Lawyers, accountants, engineers, architects, design, consulting, advertising)
 - 15 = Other services to business (finance & insurance, real estate, and rentals)
 - 16 = Educational services
 - 17 = Health Care
 - 18 = Government (YTG, Federal, First Nations, City, Town)
 - 19 = Other: SPECIFY: BLANK _ CODED _____
19. Last Year, how many employee positions (including the owners) did you have who were:
- a. Full time, more than 30 hours a week and permanent or year round DK = 99
 - b. Full time, more than 30 hours a week and seasonal (part of the year) DK = 99
 - c. Part time permanent DK = 99
 - d. Part time seasonal DK =99
20. Record Gender.
- 1 = male
 - 2 = female

Thank and terminate

Appendix B - Frequency of Survey Responses

1. Does your business use Information technology, such as computers or the Internet for business purposes?

Intro1		
Intro1	Frequency	Percent
	1	0.66
Yes	126	82.89
No	25	16.45

□

3. Why doesn't your business use computers or the Internet

Not needed for this type of business
 Limitations in personnel,
 Costs,
 Lack of knowledge/don't know how,
 Other –specify

Intro3notneeded		
Intro3notneeded	Frequency	Percent
No	135	88.82
Yes	17	11.18

Intro3limitations		
Intro3limitations	Frequency	Percent
No	150	98.68
Yes	2	1.32

Intro3costs		
Intro3costs	Frequency	Percent
No	148	97.37
Yes	4	2.63

Intro3lackknowledge		
Intro3lackknowledge	Frequency	Percent
No	149	98.03
Yes	3	1.97

Intro3other		
Intro3other	Frequency	Percent

 No 152 100.00

Intro3specifyother

Intro3specifyother	Frequency	Percent
	143	94.08
Do job manually	1	0.66
It doesn't require one	1	0.66
Just haven't got one yet.	1	0.66
No need for it	1	0.66
No reason to have one	1	0.66
Office in home ,not needed at present time	1	0.66
haven't got to it	1	0.66
just regional service	1	0.66
told me they had no computer then hung up	1	0.66

-
-
-

1. Does your business use the Internet for email, access to the World wide Web, both or you don't have Internet access? (THEY DO NOT HAVE TO HAVE A WEBSITE)

Qluseinternet

Qluseinternet	Frequency	Percent
	27	17.76
Email ONLY	3	1.97
WWW ONLY	2	1.32
Both WWW & Email	109	71.71
Neither WWW & Email	11	7.24

a. Is your internet service :

Qlaservice

Qlaservice	Frequency	Percent
	38	25.00
High speed via cable	39	25.66
High speed DSL	26	17.11
Dial-up	45	29.61
Satellite	1	0.66
DK	3	1.97

b. Approximately, how much, in total, do you spend per year for Internet service?

Q1bspendinternet

Q1bspendinternet	Frequency	Percent
NR/NA MISSING	43	28.29
\$100-\$499	31	20.39
\$500-\$999	23	15.13
\$1,000-\$1,999	27	17.76
\$2,000-\$4,999	8	5.26
\$5,000-\$9,999	1	0.66
DK	19	12.50

c. Which of these do you use the Internet for in your business

- To communicate with suppliers,
- To communicate with customers,
- For promotion,
- To sell products, or
- To buy products
- To collect information available on the Web

Q1csuppliers

Q1csuppliers	Frequency	Percent
No	74	48.68
Yes	78	51.32

Q1ccustomers

Q1ccustomers	Frequency	Percent
No	66	43.42
Yes	86	56.58

Q1cpromotion

Q1cpromotion	Frequency	Percent
No	104	68.42
Yes	48	31.58

Q1csellproducts

Q1csellproducts	Frequency	Percent
No	116	76.32
Yes	36	23.68

Q1cbuyproducts

Q1cbuyproducts	Frequency	Percent
No	81	53.29
Yes	71	46.71

Q1ccollectinfo

Q1ccollectinfo	Frequency	Percent
No	50	32.89
Yes	102	67.11

d. Is email:

Q1demailvalue

Q1demailvalue	Frequency	Percent
	38	25.00
Absolutely necessary	57	37.50
Very important	21	13.82
Important	18	11.84
Helps somewhat	13	8.55
Marginal benefit	5	3.29

f. Is internet access to the Web:

Q1finternetvalue

Q1finternetvalue	Frequency	Percent
	38	25.00
Absolutely necessary	48	31.58
Very important	26	17.11
Important	23	15.13
Helps somewhat	13	8.55
Marginal benefit	4	2.63

2. Does your company have its own Website?

Q2companyWeb

Q2companyWeb	Frequency	Percent
	27	17.76
Yes	48	31.58
No	77	50.66

a. Is that site hosted:

Q2ahosted		
Q2ahosted	Frequency	Percent
	104	68.42
Yukon	19	12.50
Outside	23	15.13
own Web server	6	3.95

b. Does the site have Ecommerce service — that is, can people buy goods or services on your Website?

Q2becommerce		
Q2becommerce	Frequency	Percent
	104	68.42
Yes	13	8.55
No	34	22.37
DK	1	0.66

c. Is this a secure site that allows credit card payments?

Q2csecure		
Q2csecure	Frequency	Percent
	138	90.79
Yes	9	5.92
No	3	1.97
DK	2	1.32

d. How much does it cost per year to host the site?

Q2dcostperyear		
Q2dcostperyear	Frequency	Percent
NR/NA MISSING	107	70.39
\$0	1	0.66
LT \$100	1	0.66
\$100-\$499	15	9.87
\$500-\$999	4	2.63
\$1,000-\$1,999	5	3.29
DK	19	12.50

e. Is the site design and updating done by:

Q2esitedesignownemployees		
Q2esitedesignownemployees	Frequency	Percent
No	131	86.18
Yes	21	13.82

Q2esitedesignYukonfirm

Q2esitedesign Yukonfirm	Frequency	Percent
No	136	89.47
Yes	16	10.53

Q2esitedesignOutsidefirm

Q2esitedesign Outsidefirm	Frequency	Percent
No	141	92.76
Yes	11	7.24

Q2eDK

Q2e DK	Frequency	Percent
No	152	100.00

f. How much did you spend originally on site design costs?

Q2fdesignncost

Q2fdesignncost	Frequency	Percent
NR/NA MISSING	104	68.42
\$0	7	4.61
\$100-\$499	7	4.61
\$500-\$999	4	2.63
\$1,000-\$1,999	1	0.66
\$2,000-\$4,999	6	3.95
\$10,000 +	2	1.32
DK	21	13.82

g. Last year, how much did you spend on updating the site?

Q2gupdatecost

Q2gupdatecost	Frequency	Percent
NR/NA MISSING	104	68.42
\$0	19	12.50
\$100-\$499	6	3.95
\$500-\$999	2	1.32
\$1,000-\$1,999	4	2.63
\$2,000-\$4,999	1	0.66
\$5,000-\$9,999	1	0.66
\$10,000 +	1	0.66
DK	14	9.21

h. Do you use that site for company data such as inventory, accounting or other database information?

Q2husedatabase

Q2husedatabase	Frequency	Percent
	104	68.42
Yes	8	5.26
No	39	25.66
DK	1	0.66

i. Is your Website:

Q2iWebsitevalue

Q2iWebsitevalue	Frequency	Percent
	104	68.42
Absolutely necessary	14	9.21
Very important	14	9.21
Important	8	5.26
DK	12	7.89

3. Do you use personal computers?

Q3usePC

Q3usePC	Frequency	Percent
	27	17.76
Yes	119	78.29
No	6	3.95

a. Which operating system do you run:

Q3aWindows

Q3a Windows	Frequency	Percent
No	41	26.97
Yes	111	73.03

Q3aMac

Q3a Mac	Frequency	Percent
No	142	93.42
Yes	10	6.58

Q3aLinux

Q3a Linux	Frequency	Percent
No	151	99.34
Yes	1	0.66

b. How many PC's does your business use?

Q3bhowmanyPCs

Q3bhowmanyPCs	Frequency	Percent
.	1	0.66
0	33	21.71
1	46	30.26
2	22	14.47
3	5	3.29
4	14	9.21
5	6	3.95
6	4	2.63
7	4	2.63
8	2	1.32
9	3	1.97
10	4	2.63
12	1	0.66
15	3	1.97
40	1	0.66
99	3	1.97

c. Do you typically purchase your computers:

Q3cwherebuy

Q3cwherebuy	Frequency	Percent
	36	23.68
Yukon	78	51.32
Outside	38	25.00

d. Last year, how much did your business spend on personal computer hardware?

Q3dspendhardware

Q3dspendhardware	Frequency	Percent
NR/NA MISSING	34	22.37
\$0	28	18.42
LT \$100	1	0.66
\$100-\$499	11	7.24
\$500-\$999	6	3.95
\$1,000-\$1,999	17	11.18
\$2,000-\$4,999	20	13.16
\$5,000-\$9,999	9	5.92
\$10,000 +	4	2.63
DK	22	14.47

e. Is the support and maintenance for your PCs primarily done

Q3ewheresupport

Q3ewheresupport	Frequency	Percent
	35	23.03
In house	44	28.95
Yukon firm	65	42.76
Outside firm	8	5.26

f. How much do you typically spend per year for support and maintenance of PCs?

Q3fspendsupport

Q3fspendsupport	Frequency	Percent
NR/NA MISSING	38	25.00
\$0	26	17.11
LT \$100	3	1.97
\$100-\$499	37	24.34
\$500-\$999	10	6.58
\$1,000-\$1,999	7	4.61
\$2,000-\$4,999	9	5.92
\$5,000-\$9,999	3	1.97
DK	19	12.50

g. Is the PC (READ LIST): absolutely necessary for the functioning of the firm, very important, important, helps somewhat OR is a marginal benefit to the firm.

Q3gPCvalue

Q3gPCvalue	Frequency	Percent
	34	22.37
Absolutely necessary	90	59.21
Very important	16	10.53
Important	6	3.95
Helps somewhat	6	3.95

4. Does your business use a *Non PC server* – such as a mainframe system

Q4NonPCserver

Q4NonPCserver	Frequency	Percent
	27	17.76
Yes	12	7.89
No	111	73.03
DK	2	1.32

a. In the support and maintenance for your mainframe primarily done:

Q4asupportmainframe

Q4asupportmainframe	Frequency	Percent
	140	92.11
In house	5	3.29
Yukon firm	1	0.66
Outside firm	6	3.95

b. How much do you typically spend per year for support and maintenance of your mainframe/server?

Q4bpendmainframe

Q4bpendmainframe	Frequency	Percent
NR/NA MISSING	141	92.76
\$0	2	1.32
\$100-\$499	1	0.66
\$500-\$999	1	0.66
\$5,000-\$9,999	1	0.66
DK	6	3.95

c. Is the mainframe/server:

Q4cmainframevalue

Q4cmainframevalue	Frequency	Percent
	140	92.11
Absolutely necessary	10	6.58
Helps somewhat	1	0.66
Marginal benefit	1	0.66

5. Does your business use an Intra net, or computers that are networked together? .

Q5intranet

Q5intranet	Frequency	Percent
	27	17.76
Yes	47	30.92
No	78	51.32

a. Do you typically purchase your intranet/network support and maintenance

Q5awherebuyintranet

Q5awherebuyintranet	Frequency	Percent
	105	69.08
In house	19	12.50
Yukon firm	22	14.47
Outside firm	6	3.95

b. Last year, how much did your business spend on your intranet/network needs?

Q5bspendingintranet

Q5bspendingintranet	Frequency	Percent
NR/NA MISSING	105	69.08
\$0	10	6.58
\$100-\$499	4	2.63
\$500-\$999	8	5.26
\$1,000-\$1,999	7	4.61
\$2,000-\$4,999	1	0.66
DK	17	11.18

c. Is the intranet or network:

Q5cintranetvalue

Q5cintranetvalue	Frequency	Percent
	105	69.08
Absolutely necessary	30	19.74
Very important	10	6.58
Important	6	3.95
Marginal benefit	1	0.66

6. Do you use a computerized accounting system?

Q6useaccounting

Q6useaccounting	Frequency	Percent
	27	17.76
Yes	90	59.21
No	35	23.03

a. Is it :

Q6atypeaccounting

Q6atypeaccounting	Frequency	Percent
	62	40.79
Off the shelf	74	48.68
Custom made	14	9.21
DK	2	1.32

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b. Do you use inventory and sales tracking on your computer system?

Q6buseinventory

Q6buseinventory	Frequency	Percent
	27	17.76
Yes	43	28.29
No	81	53.29
DK	1	0.66

c. Is it:

Q6ctypeinventory

Q6ctypeinventory	Frequency	Percent
	109	71.71
Off the shelf	19	12.50
Custom made	23	15.13
DK	1	0.66

d. Do you typically purchase your accounting or inventory and sales tracking software

Q6dwherebuyaccounting

Q6dwherebuyaccounting	Frequency	Percent
	56	36.84
Yukon	52	34.21
Outside	38	25.00
DK	6	3.95

e. Last year, how much did your business spend on accounting and inventory and sales tracking software?

Q6espendinventory

Q6espendinventory	Frequency	Percent
NR/NA MISSING	56	36.84
\$0	31	20.39
LT \$100	1	0.66
\$100-\$499	26	17.11
\$500-\$999	7	4.61
\$1,000-\$1,999	6	3.95
\$2,000-\$4,999	4	2.63
\$10,000 +	1	0.66
DK	20	13.16

f. In the support and maintenance for your accounting and inventory and sales tracking software primarily done

Q6fsupportinventory

Q6fsupportinventory	Frequency	Percent
	56	36.84
In house	33	21.71
Yukon firm	32	21.05
Outside firm	27	17.76
DK	4	2.63

g. How much do you typically spend per year for support and maintenance of your accounting and inventory and sales tracking software?

Q6gspendinventory

Q6gspendinventory	Frequency	Percent
NR/NA MISSING	56	36.84
\$0	36	23.68
LT \$100	3	1.97
\$100-\$499	25	16.45
\$500-\$999	4	2.63
\$1,000-\$1,999	7	4.61
\$2,000-\$4,999	1	0.66
DK	20	13.16

h. Is the accounting and inventory and sales tracking software:

Q6hvalueinventory

Q6hvalueinventory	Frequency	Percent
	56	36.84
Absolutely necessary	56	36.84
Very important	18	11.84
Important	10	6.58
Helps somewhat	6	3.95
Marginal benefit	4	2.63
DK	2	1.32

7. Do you use any specialized computer hardware needed specifically for your type of business?

Q7specializedhardware

Q7specializedhardware	Frequency	Percent
	27	17.76
Yes	27	17.76
No	98	64.47

a. Do you typically purchase your specialized hardware

Q7abuyspecialized

Q7abuyspecialized	Frequency	Percent
	125	82.24
Yukon	12	7.89
Outside	15	9.87

b. Last year, how much did your business spend on specialized hardware?

Q7bspendspecializedhardware

Q7bspendspecializedhardware	Frequency	Percent
NR/NA MISSING	125	82.24
\$0	8	5.26
\$100-\$499	6	3.95
\$500-\$999	1	0.66
\$1,000-\$1,999	1	0.66
\$5,000-\$9,999	1	0.66
\$10,000 +	2	1.32
DK	8	5.26

c. In the support and maintenance for your specialized hardware primarily done:

Q7csupportspecialized

Q7csupportspecialized	Frequency	Percent
	125	82.24
In house	11	7.24
Yukon firm	10	6.58
Outside firm	6	3.95

d. How much do you typically spend per year for support and maintenance of your specialized hardware?

Q7dspendspecialized

Q7dspendspecialized	Frequency	Percent
NR/NA MISSING	125	82.24
\$0	9	5.92
LT \$100	1	0.66
\$100-\$499	4	2.63
\$500-\$999	1	0.66
\$10,000 +	2	1.32
DK	10	6.58

e. Is the specialized hardware:

Q7evaluatespecializedhardware

Q7evaluatespecializedhardware	Frequency	Percent
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	Frequency	Percent
Absolutely necessary	125	82.24
Very important	21	13.82
Important	4	2.63
	2	1.32

8. Does your business use any specialized software specific for your type of business or custom software you had written especially for your business?

Q8customsoftware

Q8customsoftware	Frequency	Percent
Yes	28	18.42
No	41	26.97
DK	82	53.95
	1	0.66

a. What types of specialized software do you use?

1. CAD
2. GIS
3. Graphic design/photo
4. Other Specify

Q8aCAD

Q8aCAD	Frequency	Percent
No	148	97.37
Yes	4	2.63

Q8aGIS

Q8aGIS	Frequency	Percent
No	147	96.71
Yes	5	3.29

Q8agraphic

Q8agraphic	Frequency	Percent
No	146	96.05
Yes	6	3.95

Q8aother

Q8aother	Frequency	Percent
No	124	81.58
Yes	28	18.42

Q8aotherspecify

Q8aotherspecify	Frequency	Percent
	124	81.58
Act 2000	1	0.66
DDC/PLC	1	0.66
Databases	1	0.66
Flightstar	1	0.66
Goods Inventory Management	1	0.66
Hora	1	0.66
IG advantage	1	0.66
POS	1	0.66
Pace	1	0.66
Quick books	1	0.66
accounting(accounts [payable, receaveable	1	0.66
autocad	1	0.66
cars pluf	1	0.66
cash register program	1	0.66
cosignment program	1	0.66
emfsyss	1	0.66
engraving software	1	0.66
entire system bound together	1	0.66
fire preventtion	1	0.66
image inn	1	0.66
income tax prep, cheque cashing special made	1	0.66
internet satelite tracking,2 way service,	1	0.66
inventory and tracking, invoicing	1	0.66
ms Acess	1	0.66
pharmacy	1	0.66
real estate	1	0.66
retail program	1	0.66
sewing software	1	0.66

□

For your CAD is it

Q8bCADtype

Q8bCADtype	Frequency	Percent
	148	97.37
Off the shelf	3	1.97
Custom made	1	0.66

For your GIS is it :

Q8bGIStype

Q8bGIStype	Frequency	Percent
	147	96.71
Off the shelf	5	3.29

For your Graphic design/photo is it

Q8bgraphicstype

Q8bgraphicstype	Frequency	Percent
	147	96.71
Off the shelf	4	2.63
Custom made	1	0.66

For your other specify is it

Q8botherspecifytype

Q8botherspecifytype	Frequency	Percent
	124	81.58
Off the shelf	15	9.87
Custom made	13	8.55

d. Do you typically purchase your specialized software

Q8dbuyspecializedsoftware

Q8dbuyspecializedsoftware	Frequency	Percent
	109	71.71
Yukon	11	7.24
Outside	31	20.39
DK	1	0.66

e. Last year, how much did your business spend on specialized software?

Q8espendspecializedsoftware

Q8espendspecializedsoftware	Frequency	Percent
NR/NA MISSING	112	73.68
\$0	13	8.55
\$100-\$499	4	2.63
\$1,000-\$1,999	3	1.97
\$2,000-\$4,999	3	1.97
\$5,000-\$9,999	2	1.32
\$10,000 +	3	1.97
DK	12	7.89

f. In the support and maintenance for your specialized software primarily done:

Q8fsupportspecializedsoftware

Q8fsupportspecializedsoftware	Frequency	Percent
	111	73.03
In house	11	7.24
Yukon firm	9	5.92
Outside firm	21	13.82

g. How much do you typically spend per year for support and maintenance of your specialized software?

Q8gspendsupportsoftware

Q8gspendsupportsoftware	Frequency	Percent
NR/NA MISSING	111	73.03
\$0	17	11.18
\$100-\$499	7	4.61
\$500-\$999	3	1.97
\$1,000-\$1,999	1	0.66
\$2,000-\$4,999	2	1.32
\$5,000-\$9,999	1	0.66
DK	10	6.58

h. Is the specialized software:

Q8hvaluespecializedsoftware

Q8hvaluespecializedsoftware	Frequency	Percent
	109	71.71
Absolutely necessary	33	21.71
Very important	6	3.95
Important	2	1.32
Helps somewhat	1	0.66
Marginal benefit	1	0.66

9. Are there any other types of computer or Internet systems you use that we haven't covered yet? (OPEN ENDED)

Q9othertypesystems

-
- Macintosh systems
 - Remanco, bar + restaurant system
 - STP site, where an office in Edmonton downloads information on their site, and we can download it off of their site and use it
 - We all have access to Intranet system that can reach the parish and congregation a Salon 2000 program
 - arts net
 - database
 - mass 90
 - palm pilots
 - scanner, printer, digital camera
 - software for use SAT phones
 - Web site is customized

10. In total for 2002, how much did your business spend for computer hardware, software, Internet access and Website design and maintenance?

Q10spendtotal2002

Q10spendtotal2002	Frequency	Percent
NR/NA MISSING	34	22.37
\$0	10	6.58
\$100-\$499	9	5.92
\$500-\$999	12	7.89
\$1,000-\$1,999	17	11.18
\$2,000-\$4,999	25	16.45
\$5,000-\$9,999	10	6.58
\$10,000 +	10	6.58
DK	24	15.79
150000	1	0.66

11. In the near future are you expecting your business will likely grow or are you planning for growth in the near future?

Q11growth

Q11growth	Frequency	Percent
	2	1.32
Yes	81	53.29
No	65	42.76
DK	4	2.63

a. Which of the following do you think will contribute to the growth of your business

Tourism

Outside sales or exporting

Sales to Yukoners

Change in type of sales you do, like Wholesale vs. retail

Adding new products

Other specify

Q11atourism

Q11atourism	Frequency	Percent
No	123	80.92
Yes	29	19.08

Q11aexporting

Q11aexporting	Frequency	Percent
No	131	86.18
Yes	21	13.82

Q11ayukonsales

Q11ayukonsales	Frequency	Percent
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No	92	60.53
Yes	60	39.47

Q11achangesales

Q11achangesales	Frequency	Percent
No	142	93.42
Yes	10	6.58

Q11aaddnewproducts

Q11aaddnewproducts	Frequency	Percent
No	111	73.03
Yes	41	26.97

Q11other

Q11other	Frequency	Percent
No	133	87.50
Yes	19	12.50

Q11aotherspecify

Q11aotherspecify	Frequency	Percent
	133	87.50
Different facility	1	0.66
Economy gets better, private industry	1	0.66
Mining Industry	1	0.66
New Rules on Placer Mining	1	0.66
New businesses came in with families would help	1	0.66
Service	1	0.66
Targeting market more closely	1	0.66
church	1	0.66
contracting, more contracts	1	0.66
contractual negotiations	1	0.66
economic growth	1	0.66
inventory	1	0.66
legislative amendments	1	0.66
mining/ forestry if gov't permits it to return	1	0.66
more advertising	1	0.66
more projects	1	0.66
networking and community involvement	1	0.66
people moving in and out	1	0.66
the 2007 games	1	0.66

12. Earlier, you mentioned you did not use some of the items I mentioned. For each one, please tell me if you are likely to, or plan to use it in the future. Are you likely to start using:

Internet

Q12internet

Q12internet	Frequency	Percent
	117	76.97
Yes	19	12.50
No	16	10.53

Website

Q12Website

Q12Website	Frequency	Percent
	53	34.87
Yes	40	26.32
No	59	38.82

PC

Q12PC

Q12PC	Frequency	Percent
	121	79.61
Yes	13	8.55
No	18	11.84

Non-pc server

Q12NONPC

Q12NONPC	Frequency	Percent
	20	13.16
Yes	5	3.29
No	127	83.55

Intranet

Q12intranet

Q12intranet	Frequency	Percent
	52	34.21
Yes	14	9.21
No	86	56.58

Accounting/inventory

Q12accounting

Q12accounting	Frequency	Percent
	95	62.50
Yes	19	12.50
No	38	25.00

Specialized Hardware

Q12hardware

Q12hardware	Frequency	Percent
	32	21.05
Yes	20	13.16
No	100	65.79

Specialized Software

Q12software

Q12software	Frequency	Percent
	48	31.58
Yes	28	18.42
No	76	50.00

13. Looking to the future, how interested would your business be in a Yukon-wide business portal Website that would potentially offer economies of scale for marketing to both the Yukon and Outside, and services within the portal such as Web-based accounting and inventory systems, Web page design etc. How interested are you in learning more about such a portal?

Q13learnportal

Q13learnportal	Frequency	Percent
	6	3.95
Extremely interested	12	7.89
Somewhat interested	52	34.21
Neutral	20	13.16
Not very interested	28	18.42
Not at all interested	34	22.37

14. Now I am going to read a few features a portal might offer. Using a scale from a low of 1 to a high of 5, please tell me how helpful you think each feature might be to your business. How useful would it be:

a. To have a central Website where all Yukon businesses could be listed and linked from
 Q14acentralWebsiteinterest

Q14acentralWebsiteinterest	Frequency	Percent
	68	44.74
1. Not at all useful	4	2.63
2. Not very useful	2	1.32
3. Neutral	29	19.08
4. Somewhat useful	18	11.84
5. Extremely useful	31	20.39

b. To have that Website advertised outside the Yukon
 Q14badvertiseoutsideinterest

Q14badvertiseoutsideinterest	Frequency	Percent
	68	44.74
1. Not at all useful	10	6.58
2. Not very useful	11	7.24
3. Neutral	10	6.58
4. Somewhat useful	15	9.87
5. Extremely useful	38	25.00

c. To have a standard accounting system set up that your business could use
 Q14cstandardaccountinginterest

Q14cstandardaccountinginterest	Frequency	Percent
	69	45.39
1. Not at all useful	41	26.97
2. Not very useful	13	8.55
3. Neutral	19	12.50
4. Somewhat useful	5	3.29
5. Extremely useful	5	3.29

d. To have a standard inventory and sales tracking system set up that your business could use
 Q14dstandardinventoryinterest

Q14dstandardinventoryinterest	Frequency	Percent
	69	45.39
1. Not at all useful	42	27.63
2. Not very useful	13	8.55
3. Neutral	14	9.21
4. Somewhat useful	7	4.61
5. Extremely useful	7	4.61

e. To have a Web design service you could access

Q14eWebdesigninterest

Q14eWebdesigninterest	Frequency	Percent
	68	44.74
1. Not at all useful	23	15.13
2. Not very useful	13	8.55
3. Neutral	19	12.50
4. Somewhat useful	16	10.53
5. Extremely useful	13	8.55

f. To have E-commerce on that site selling your Yukon products or services

Q14fecommerceinterest

Q14fecommerceinterest	Frequency	Percent
	69	45.39
1. Not at all useful	20	13.16
2. Not very useful	9	5.92
3. Neutral	18	11.84
4. Somewhat useful	19	12.50
5. Extremely useful	17	11.18

g. Providing you with statistics on usage such as reports back on user visits, number of people hitting pages, and actual sales items)

Q14gstatisticsinterest

Q14gstatisticsinterest	Frequency	Percent
	68	44.74
1. Not at all useful	16	10.53
2. Not very useful	10	6.58
3. Neutral	26	17.11
4. Somewhat useful	17	11.18
5. Extremely useful	15	9.87

15. Are there any other features you would like such a portal to include? (SPECIFY) TEXT

Q15specifyotherportalfeatures

Q15specifyotherportalfeatures	Frequency	Percent
No response	143	94.08
• Business info Centre		
• Probably sharing of information on the Yukon businesses		
• Web cameras, coming events		
• access to academic services		
• better business bureau listing		
• location information		
• see where clients come from		
• system tied in that is normal speed		
• useful info on		

□

16. Based on the features you would be interested in, how much, per year, would your business be willing to pay in order to be included on this portal site?

Q16willingtopay

Q16willingtopay	Frequency	Percent
NR/NA MISSING	73	48.03
\$0	5	3.29
LT \$100	10	6.58
\$100-\$499	21	13.82
\$500-\$999	5	3.29
\$1,000-\$1,999	3	1.97
\$2,000-\$4,999	1	0.66
DK	34	22.37

17. Do you think it is appropriate for the Yukon Government to invest in such a site?

Q17YTGinvest

Q17YTGinvest	Frequency	Percent
	67	44.08
Yes	59	38.82
No	12	7.89
DK	14	9.21

18. What type of business/industry do you mainly operate in

Q18businessstype

Q18businessstype	Frequency	Percent
N/A	1	0.66
Other Natural resources	3	1.97
Construction	14	9.21
Manufacturing	5	3.29
Transportation & warehousing	11	7.24
Wholesale trade	3	1.97
Retail sales	22	14.47
Travel & tour operators	5	3.29
Information & cultural industries	5	3.29
Arts entertainment & recreation	2	1.32
Other Services to consumers/individuals	29	19.08
Professional & technical services	10	6.58
Other services to business	11	7.24
Food Service & accommodation	15	9.87
Health Care	3	1.97
Social Service	12	7.89
Other	1	0.66

19. Last Year, how many employee positions (including the owners) did you have who were:

Full time, more than 30 hours a week and permanent or year round

Q19fulltimepermanent

Q19fulltimepermanent	Frequency	Percent
.	2	1.32
0-None	10	6.58
1 staff	41	26.97
1.5	1	0.66
2-5	65	42.76
6-10	17	11.18
10 +	13	8.55
DK	3	1.97

Full time, more than 30 hours a week and seasonal (part of the year)

Q19fulltimeseasonal

Q19fulltimeseasonal	Frequency	Percent
.	2	1.32
0-None	92	60.53
0.5	1	0.66
1 staff	13	8.55
2-5	24	15.79
6-10	8	5.26
10 +	9	5.92
DK	3	1.97

Part time permanent

Q19parttimepermanent

Q19parttimepermanent	Frequency	Percent
.	2	1.32
0-None	92	60.53
1 staff	33	21.71
2-5	20	13.16
6-10	2	1.32
10 +	1	0.66
DK	2	1.32
28		

Part time seasonal

Q19parttimeseasonal

Q19parttimeseasonal	Frequency	Percent
.	2	1.32
0-None	101	66.45
1 staff	15	9.87
2-5	19	12.50
6-10	7	4.61
10 +	4	2.63
DK	4	2.63

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