

# Survey of Information Technology Occupations, 2000: Employer Survey

## INITIAL CONTACT

**Hello this is (interviewer) from Statistics Canada. We're conducting a survey on occupations specializing in information technology on behalf of Human Resources Development Canada.**

**NOTE TO PROGRAMMER:**  
Create a new variable called INITIAL as follows:  
If NAME = blank, then INITIAL = "May I please speak with the manager or supervisor of the information technology staff at your location?"  
Else INITIAL = "May I please speak with (NAME)?"

## (INITIAL)

## INTRODUCTION

**[Hello this is (interviewer) from Statistics Canada. We're conducting a survey on occupations specializing in information technology on behalf of Human Resources Development Canada.]**

**The use of information technology is growing very rapidly in many industries, therefore businesses and government need accurate information on employment conditions and trends for these occupations. We need your help in providing a perspective on the current situation in your industry.**

**While your participation is voluntary, your assistance is essential if the results are to be accurate. Your answers will be kept strictly confidential and used only for statistical purposes. My supervisor may listen in to evaluate the survey.**

## SECTION A – Screening Questions

**IA Throughout this interview we will be asking questions relating to the occupations you employ at this physical location ONLY.**

**QA1 Does your company (organization) have more than one physical location?**

- <1> Yes .....go to QA2
- <3> No .....go to QA2
- <8> Refused .....go to QA2
- <9> Don't Know .....go to QA2

**NOTE TO PROGRAMMER:**  
 Create a new variable called LOCATION as follows:  
 If QA1=3 then LOCATION = blank  
 Else LOCATION = “At this location “ and MLOCATION = “at this location”  
  
 NOTE:  
 Whenever the notation (\_\_\_\_) is used, it means that the space should be filled with the variable in the ( ).

**QA2 How many people does your company (organization) CURRENTLY employ (MLOCATION), excluding contract workers and volunteers?**

- <0> None ..... go to IA4
- <1-999995> Number ..... go to QA3
- <999998> Refused ..... go to IA4
- <999999> Don't Know ..... go to IA4

**NOTE TO PROGRAMMER:**  
 Please put the following definition on the same screen as QA2.  
  
**Contract workers (workers hired on contract):** are either employed by another company or are self-employed and a lump sum of money is paid for their services for a specified project or period of time.

**QA3 How many of these employees work in information technology occupations?**

- <0> None ..... go to IA4
- <1-999995> Number ..... go to IA4
- <999998> Refused ..... go to IA4
- <999999> Don't Know ..... go to IA4

**IA4 For our purposes, workers hired on contract are either employed by another company or are self-employed and a lump sum of money is paid for their services for a specified project or period of time.**

**NOTE TO PROGRAMMER:**  
 Please put the following definition on the same screen as QA4.  
  
**Information technology occupations:** For the purpose of this survey, information technology occupations are those whose primary functions are the management, design, development, analysis, implementation or maintenance of computer and telecommunications hardware, software, networks or information systems.

**QA4 (LOCATION) Does your company (organization) hire workers ON CONTRACT in information technology occupations?**

- <1> Yes ..... go to QA4a  
<3> No ..... go to SCREEN  
<8> Refused ..... go to SCREEN  
<9> Don't Know ..... go to SCREEN

**QA4a (LOCATION) How many information technology workers are CURRENTLY working ON CONTRACT with your company (organization)?**

- <0> None ..... go to SCREEN  
<1-999995> Number ..... go to SCREEN  
<999998> Refused ..... go to SCREEN  
<999999> Don't Know ..... go to SCREEN

**NOTE TO PROGRAMMER:**

Create a new variable called EMPTYTYPE as follows:

If QA3=0 and (QA4=(3 or RF or DK) or QA4a=0), then EMPTYTYPE = 0

If QA3=(1-999995 or RF or DK) and (QA4=(3 or RF or DK) or QA4a=0), then EMPTYTYPE = 1 (Employees only)

If QA3=0 and (QA4=1 and QA4a not equal 0), then EMPTYTYPE = 2 (Contract workers only)

If QA3=(1-999995 or RF or DK) and (QA4=1 and QA4a not equal 0), then EMPTYTYPE = 3 (Employees and contract workers)

**SCREEN**

**Screen:** The system will now screen out all of the companies who do not currently have information technology professionals.

If EMPTYTYPE=0, then go to NO EMPLOYEES

If EMPTYTYPE =1 or 2 or 3, then go to IB

**NOTE TO PROGRAMMER:**

Create new variables called EMPTYTYPE1 and EMPTYTYPE2 and EMPTYTYPE3 as follows:

If EMPTYTYPE=1, then EMPTYTYPE1= "the number of people CURRENTLY employed" and EMPTYTYPE2 = "an employee" and EMPTYTYPE3 = "employees"

If EMPTYTYPE=2, then EMPTYTYPE1= "the number of people CURRENTLY working on contract" and EMPTYTYPE2 = "a contract worker" and EMPTYTYPE3= "people working on contract"

If EMPTYTYPE=3, then EMPTYTYPE1= "both the number of people CURRENTLY employed, and the number of people working on contract" and EMPTYTYPE2= "an employee or contract worker" and EMPTYTYPE3 = "employees or people working on contract"

**NOTE:**

If EMPTYTYPE = 1, interviewers will not need column 2

If EMPTYTYPE = 2, interviewers will not need column 1

**SECTION B – Occupation Selection**

**IB** We will be asking you to indicate **(EMPTYE1)** in specific information technology occupations **(MLOCATION)**. From now on, we will refer to these as IT occupations.

**PLEASE NOTE: if (EMPTYE2) performs more than one job, then the occupation for which they spend the MOST NUMBER of hours should be assigned.**

	<b><u>QB1_</u></b> Number of <b><u>Employees</u></b>	<b><u>QB2_</u></b> Number of <b><u>Contract workers</u></b>
<b><u>(LOCATION)</u> How many <u>(EMPTYE3)</u> do you have in the following occupations:</b>		
1 IT Training managers (0115)	_____	_____
2 Web managers (0611.5)	_____	_____
3 Computer and information systems managers (0213)	_____	_____
4 Information systems business analysts and consultants (2171.1)	_____	_____
5 Systems security analysts (2171.2)	_____	_____
6 Information systems quality assurance analysts (2171.3)	_____	_____
7 Systems auditors (2171.4)	_____	_____
8 Database administrators (2172.1)	_____	_____
9 Data administration analysts (2172.2)	_____	_____
10 Network systems and data communications specialists (2175)	_____	_____
11 Software engineers (2173)	_____	_____
12 Computer engineers, except software (2147)	_____	_____
13 Electrical and electronics engineers, except computer engineers (2133)	_____	_____
14 Computer programmers (2174.1)	_____	_____
15 Interactive media developers (2174.2)	_____	_____
16 Computer and network operators (2281.1)	_____	_____
17 Web technicians (2281.2)	_____	_____
18 Technical support analysts (2282)	_____	_____
19 Systems testing technicians (2283)	_____	_____
20 Technical writers (5121.2)	_____	_____
21 Graphic designers and illustrating artists (5241)	_____	_____

- <0> None go to next occupation, then A
- <1-999995> Number ..... flag and go to next occupation, then A
- <999998> Refused ..... go to next occupation, then A
- <999999> Don't Know ..... go to next occupation, then A

**NOTE TO PROGRAMMER:** Only occupations in the first column (QB1\_) should be flagged for later random selection.

**NOTE TO PROGRAMMER:**  
 Create a new variable called NUMOCCS as follows:  
 If no occupations (from QB1\_1 to QB1\_21) were flagged then NUMOCCS=0  
 If only 1 occupation (from QB1\_1 to QB1\_21) was flagged then NUMOCCS = 1  
 If 2 occupations (from QB1\_1 to QB1\_21) were flagged then NUMOCCS = 2  
 If more than 2 occupations (from QB1\_1 to QB1\_21) were flagged then NUMOCCS =3

**A (LOCATION) Does your company (organization) have (EMPTYE3) in any other information technology occupation?**

- <1> Yes ..... go to A\_1
- <3> No ..... go to FLOW B
- <8> Refused ..... go to FLOW B
- <9> Don't Know ..... go to FLOW B

**A\_1 Please specify the occupation or kind of work:**

\_\_\_\_\_ go to A\_2

**A\_2 What are the most important activities or duties of this occupation?**

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_ go to A\_3

**QB1\_**  
**Employees**

**QB2\_**  
**Contract workers**

**A\_3 How many of these (EMPTYE3) do you have at your location?**

\_\_\_\_\_

\_\_\_\_\_

- <1-999995> Number ..... go to B
- <999998> Refused ..... go to B
- <999999> Don't Know ..... go to B

**B (LOCATION) Does your company (organization) have (EMPTY3) in any other information technology occupation?**

- <1> Yes .....go to B\_1
- <3> No .....go to FLOW B
- <8> Refused .....go to FLOW B
- <9> Don't Know .....go to FLOW B

**B\_1 Please specify the occupation or kind of work:**

\_\_\_\_\_ go to B\_2

**B\_2 What are the most important activities or duties of this occupation?**

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_ go to B\_3

**QB1\_**  
**Employees**

**QB2\_**  
**Contract workers**

**B\_3 How many of these (fill EMPTY3) do you have at your location?**

\_\_\_\_\_

\_\_\_\_\_

- <1-999995> Number .....go to FLOW B
- <999998> Refused .....go to FLOW B
- <999999> Don't Know .....go to FLOW B

**NOTE TO PROGRAMMER:**

Create two new variables called TOTALIT and TOTALCW as follows:

TOTALIT = QB1\_1 + QB1\_2 + QB1\_3 + QB1\_4 + QB1\_5 + QB1\_6 + QB1\_7 + QB1\_8 + QB1\_9 + QB1\_10 + QB1\_11 + QB1\_12 + QB1\_13 + QB1\_14 + QB1\_15 + QB1\_16 + QB1\_17 + QB1\_18 + QB1\_19 + QB1\_20 + QB1\_21 + QB1A\_3 + QB1B\_3 (not including RF and DK)

TOTALCW = QB2\_1 + QB2\_2 + QB2\_3 + QB2\_4 + QB2\_5 + QB2\_6 + QB2\_7 + QB2\_8 + QB2\_9 + QB2\_10 + QB2\_11 + QB2\_12 + QB2\_13 + QB2\_14 + QB2\_15 + QB2\_16 + QB2\_17 + QB2\_18 + QB2\_19 + QB2\_20 + QB2\_21 + QB2A\_3 + QB2B\_3 (not including RF and DK)

## **FLOW B**

The system will now determine the questionnaire flow based on the responses given so far.

If EMPTYTYPE=2, then go to QG6

If EMPTYTYPE=(1 or 3) and NUMOCCS = 0 and (QB1\_A = 1 or QB2\_A=1), then go to QG6

If EMPTYTYPE=(1 or 3) and NUMOCCS = 0 and QB1\_A=3 and TOTALCW=0, then go to NO EMPLOYEES.

Else, go to RANDOMIZE

## **RANDOMIZE**

The system will now take all of the “flagged” occupations from QB1\_1 to QB1\_21 and:

If NUMOCCS = 1, select the flagged occupations for further questions.

If NUMOCCS = 2, select both flagged occupations for further questions .

If NUMOCCS = 3, the system will randomly select 2 of the flagged occupations for further questions .

NOTE: The system should keep the NOC code, the occupation title and the number of employees reported for each selected occupation. These variables should be named NOC1, NOC2, Occupation1, Occupation2, Number1 and Number2.

*For example, from the randomized selection we have:*

<i>Occupation1:</i>	<i>2171</i>	<i>Database Administrators</i>	<i>Number of employees:</i>	<i>7</i>
<i>Occupation2:</i>	<i>2147</i>	<i>Computer hardware engineers</i>	<i>Number of employees:</i>	<i>2</i>

\*\*\*\*\*

## **SECTION C – Occupational Profile**

### **NOTE TO PROGRAMMER:**

The system should be set up with 2 columns – one for each occupation. Each of the questions from \*\*\*\* to \*\*\*\* will be asked about each selected occupation.

NOTE: If NUMOCCS=1, then the interviewers will not need column 2

Where the notation (     ) exists, the space should be filled with the variable indicated in the ( ).

### **NOTE TO PROGRAMMER:**

Create a new variable called INTRO as follows:

If NUMOCCS = 1, then INTRO= “We will now ask you some questions about the (occupation1) who work at this location.”

If NUMOCCS = 2, then INTRO = “We will now ask you some questions about the (occupation1) and (occupation2) who work at this location.”

If NUMOCCS = 3, then INTRO = “The computer has randomly selected two of the information technology occupations present in your company (organization). It has selected (occupation1) and (occupation2). We will now ask you some questions about these occupations.”

**IC (INTRO) The remainder of the interview will cover the hiring, retention and training of employees in this (these) occupation(s).**

(Are you still the best person to talk to about this? - *If no, go to CONTACT SCREEN*)

**NOTE TO PROGRAMMER**

Create three new variables called SELOCC, SELOCC1 and DESC as follows:

If NUMOCCS = 1, then SELOCC= (occupation1), SELOCC1= “qualified (occupation1) and DESC = (occupation1)

If NUMOCCS = 2, then SELOCC= “employees in each of these occupations”, SELOCC1= “qualified employees in each of these occupations” and DESC = “each of these occupations”

	<b>Y</b> <b>(Occupation1)</b>	<b>Z</b> <b>(Occupation2)</b>
<b>QC1 What job titles does your company (organization) give to <u>(SELOCC)</u> <u>(MLOCATION)</u>?</b>		
	1 _____	_____
	2 _____	_____
	3 _____	_____
	4 _____	_____
	5 _____	_____

- <8> Refused ..... go to ICA
- <9> Don't Know ..... go to ICA

**ICA The following questions are about the full- and part-time nature of this (these) occupation(s). For our purposes, full-time employees are defined as working 30 hours or more per week, and part-time employees work less than 30 hours per week.**

	<b>Y</b> <b>(Occupation1)</b>	<b>Z</b> <b>(Occupation2)</b>
<b>QC2 (LOCATION) How many (SELOCC) are:</b>		
<b>QC2_1 PERMANENT, FULL-TIME employees?</b>	_____	_____
<b>QC2_2 TEMPORARY, FULL-TIME employees?</b>	_____	_____
<b>QC2_3 PERMANENT, PART-TIME employees?</b>	_____	_____
<b>QC2_4 TEMPORARY, PART-TIME employees?</b>	_____	_____

- <0> None ..... go to ID
- <1-999995> Number ..... go to ID
- <999998> Refused ..... go to ID
- <999999> Don't Know ..... go to ID



**SECTION D – Hiring and recruitment**

**ID** The following questions are about hiring and recruitment practices at your location.

**Y**  
**(Occupation1)**

**Z**  
**(Occupation2)**

**QD1 (LOCATION) How many (SELOCC) have been hired within the last 12 months?** \_\_\_\_\_

- <0> None ..... go to FLOW D1
- <1-999995> Number ..... if QD1Y + QD1Z = 1, go to QD1a;  
if QD1Y+QD1Z > 1, go to QD1b
- <999998> Refused ..... go to FLOW D1
- <999999> Don't Know ..... go to FLOW D1

**QD1a Did this new employee require competency or skills training after being hired?** \_\_\_\_\_

- <1> Yes ..... go to FLOW D1
- <3> No ..... go to FLOW D1
- <8> Refused ..... go to FLOW D1
- <9> Don't Know ..... go to FLOW D1

**QD1b Did these new employees require competency or skills training after being hired?** \_\_\_\_\_

- <1> Yes (all) ..... go to FLOW D1
- <3> No (none) ..... go to FLOW D1
- <4> Some ..... go to FLOW D1
- <8> Refused ..... go to FLOW D1
- <9> Don't Know ..... go to FLOW D1

**FLOW D1**

The system will now determine the questionnaire flow based on the responses given so far.  
If QA1=3, then go to QD2a  
Else if QA1=1 or RF or DK, then go to QD2b

**Y**  
**(Occupation1)**

**Z**  
**(Occupation2)**

**QD2a** How are new or vacant positions for  
**(DESC)** usually staffed...  
*(mark only the most frequently used method)*  
*(READ THE LIST)*

\_\_\_\_\_

\_\_\_\_\_

- <1> **From within this location** .....go to QD3
- <3> **From outside the company** .....go to QD3
- <7> Not applicable .....go to QD5
- <8> Refused .....go to QD5
- <9> Don't Know .....go to QD5

**QD2b** **(LOCATION)** How are new or vacant  
positions for **(DESC)** usually staffed...  
*(mark only the most frequently used method)*  
*(READ THE LIST)*

\_\_\_\_\_

\_\_\_\_\_

- <1> **From within this location** .....go to QD3
- <2> **From another location within your company**.....go to QD3
- <3> **From outside the company** .....go to QD3
- <7> Not applicable .....go to QD5
- <8> Refused .....go to QD5
- <9> Don't Know .....go to QD5

**QD3** **(LOCATION)** Which of the following recruitment methods does your company  
(organization) use to fill available positions for **(DESC)**? *(mark all that apply)*  
*(READ THE LIST)*

- 1 Advertising in newspapers \_\_\_\_\_
- 2 Unsolicited resumés \_\_\_\_\_
- 3 Employee referrals \_\_\_\_\_
- 4 Word-of-mouth \_\_\_\_\_
- 5 Informal networking \_\_\_\_\_
- 6 University or college recruitment \_\_\_\_\_
- 7 Job fairs \_\_\_\_\_
- 8 Internet recruiting agency \_\_\_\_\_
- 9 Your firms' Web site \_\_\_\_\_
- 10 Employment centres \_\_\_\_\_
- 11 Head-hunter or personnel agency \_\_\_\_\_
- 12 Other \_\_\_\_\_
- 12\_t Please specify this (these) other  
        method(s) \_\_\_\_\_
- 13 Not applicable (don't recruit) \_\_\_\_\_

- <1> Yes .....go to next method, then FLOW D3
- <3> No .....go to next method, then FLOW D3
- <8> Refused .....go to next method, then FLOW D3

<9> Don't Know .....go to next method, then FLOW D3

### **FLOW D3**

The system will now determine the questionnaire flow based on the responses given so far.

If QD3\_13 = 1, then go to QD5.

If each of (QD3\_1 to QD3\_12) = 3 or RF or DK, then go to QD5.

If any of (QD3\_1 to QD3\_12) =1, then go to QD4.

	<b>Y</b> <b>(Occupation1)</b>	<b>Z</b> <b>(Occupation2)</b>
<b>QD4 Of the recruitment methods just listed, which one did you find to be the MOST effective, in terms of finding qualified (SELOCC)? (mark only one) (DO NOT READ LIST)</b>	_____	_____
<1> Advertising in newspapers ..... go to QD5		
<2> Unsolicited resumés ..... go to QD5		
<3> Employee referrals ..... go to QD5		
<4> Word-of-mouth ..... go to QD5		
<5> Informal networking ..... go to QD5		
<6> University or college recruitment . go to QD5		
<7> Job fairs ..... go to QD5		
<8> Internet recruiting agency ..... go to QD5		
<9> Your firms' Web site ..... go to QD5		
<10> Employment centres..... go to QD5		
<11> Head-hunter or personnel agency . go to QD5		
<12> Other ..... go to QD5		
<13> Not applicable (don't recruit) ..... go to QD5		
<98> Refused ..... go to QD5		
<99> Don't Know ..... go to QD5		
<b>QD5 (LOCATION) Are there any new or vacant positions for (DESC) that you are currently trying to fill?</b>	_____	_____
<1> Yes ..... go to QD6		
<3> No..... go to QD7		
<7> Not applicable ..... go to QD7		
<8> Refused ..... go to QD7		
<9> Don't Know ..... go to QD7		

Y  
(Occupation1)

Z  
(Occupation2)

**QD6 In total, how many vacant positions are currently unfilled for (DESC ) (MLOCATION)?**

\_\_\_\_\_

\_\_\_\_\_

- <0> None ..... go to QD6b
- <1-999995> Number ..... go to QD6a
- <999998> Refused ..... go to QD7
- <999999> Don't Know ..... go to QD7

**QD6a How many of these vacant positions have remained vacant for four months or longer?**

\_\_\_\_\_

\_\_\_\_\_

- <0> None ..... go to QD6b
- <1-999995> Number ..... go to QD6b
- <999998> Refused ..... go to QD6b
- <999999> Don't Know ..... go to QD6b

**QD6b In total, how many NEW positions would you create and fill if you could find (SELOCC1)?**

\_\_\_\_\_

\_\_\_\_\_

- <0> None ..... go to QD7
- <1-999995> Number ..... go to QD7
- <999997> Not applicable ..... go to QD7
- <999998> Refused ..... go to QD7
- <999999> Don't know ..... go to QD7

**QD7 How much difficulty does your company (organization) have in finding (SELOCC1) (MLOCATION)? (mark only one) (READ THE LIST)**

\_\_\_\_\_

\_\_\_\_\_

- <1> A lot of difficulty ..... go to QD8
- <2> Some difficulty ..... go to QD8
- <3> No difficulty ..... go to QD9
- <7> Not applicable ..... go to QD9
- <8> Refused ..... go to QD9
- <9> Don't Know ..... go to QD9

Y  
(Occupation1)

Z  
(Occupation2)

**QD8** Which of the following factors make it difficult to fill positions for (DESC ) (MLOCATION)? (mark ALL that apply) (READ THE LIST)

- 1 Lack of applicants with relevant experience \_\_\_\_\_
- 2 Lack of applicants with required skills \_\_\_\_\_
- 3 Other firms offer better salaries, incentives or benefits \_\_\_\_\_
- 4 Other firms offer better opportunities for career development or growth \_\_\_\_\_
- 5 Other firms offer more challenging or interesting projects \_\_\_\_\_
- 6 Other firms provide the opportunity to use leading-edge technology \_\_\_\_\_
- 7 Other firms have a more enticing location \_\_\_\_\_
- 8 Other \_\_\_\_\_
- 8\_t Please specify the other factors \_\_\_\_\_
- 9 Not applicable \_\_\_\_\_

- <1> Yes ..... go to next method, then QD9
- <3> No ..... go to next method, then QD9
- <8> Refused ..... go to QD9
- <9> Don't know ..... go to QD9

**QD9** Which of the following financial incentives does your company (organization) provide to (SELOCC) (MLOCATION)? (mark ALL that apply) (READ THE LIST)

- 1 Bonuses \_\_\_\_\_
- 2 Profit sharing \_\_\_\_\_
- 3 Stock options \_\_\_\_\_
- 4 Other financial incentives, except salary \_\_\_\_\_
- 4\_t Please specify these other financial incentives \_\_\_\_\_
- 5 Not applicable \_\_\_\_\_

- <1> Yes ..... go to QD9a
- <3> No ..... go to QD10
- <8> Refused ..... go to QD10
- <9> Don't Know ..... go to QD10

Y  
(Occupation1)

Z  
(Occupation2)

**QD9a Are the employees who work in non-information technology occupations offered the same financial incentives as.... ?**

\_\_\_\_\_

\_\_\_\_\_

- <1> Yes (all)..... go to QD10
- <3> No (none) ..... go to QD10
- <4> Some ..... go to QD10
- <8> Refused ..... go to QD10
- <9> Don't Know ..... go to QD10

**QD10 Does your company (organization) provide any of the following types of non-financial benefits to (SELOCC) (MLOCATION)?**  
*(mark ALL that apply) (READ THE LIST)*

**1 Recreation facilities**

\_\_\_\_\_

\_\_\_\_\_

**2 Club memberships**

\_\_\_\_\_

\_\_\_\_\_

**3 Day care facilities**

\_\_\_\_\_

\_\_\_\_\_

**4 Flexible working hours**

\_\_\_\_\_

\_\_\_\_\_

**5 Other non-financial benefits**

\_\_\_\_\_

\_\_\_\_\_

**5\_t Please specify these other non-financial benefits**

\_\_\_\_\_

\_\_\_\_\_

**6 Not applicable**

\_\_\_\_\_

\_\_\_\_\_

- <1> Yes ..... go to QD10a
- <3> None ..... go to IE
- <8> Refused ..... go to IE
- <9> Don't Know ..... go to IE

**QD10a Are the employees who work in non-information technology occupations offered the same non-financial benefits as.... ?**

\_\_\_\_\_

\_\_\_\_\_

- <1> Yes (all)..... go to IE
- <3> No (none) ..... go to IE
- <4> Some ..... go to IE
- <8> Refused ..... go to IE
- <9> Don't Know ..... go to IE

**SECTION E – Employee retention**

**IE The following questions are about employee retention (MLOCATION).**

	<b>Y</b> <b>(Occupation1)</b>	<b>Z</b> <b>(Occupation2)</b>
<b>QE1 (<u>LOCATION</u>), How many (<u>SELOCC</u>) have vacated their positions in the past 12 months?</b>	_____	_____
<0> None .....go to IF		
<1-999995> Number .....go to QE2		
<999998> Refused .....go to IF		
<999999> Don't Know .....go to IF		
<b>QE2 Of the (<u>SELOCC</u>) who vacated their positions, how many:</b>		
<b>QE2_1 Were promoted or relocated within the company (organization)</b>	_____	_____
<b>QE2_2 Took an information technology job outside your company, in CANADA</b>	_____	_____
<b>QE2_3 Took an information technology job outside your company, in the UNITED STATES</b>	_____	_____
<b>QE2_4 Left the information technology field for a career in a different field</b>	_____	_____
<b>QE2_5 Retired or left the labour force</b>	_____	_____
<b>QE2_6 Left for other reasons</b>	_____	_____
<b>QE2_6a Please specify these other reasons</b>	_____	_____
<0> None .....go to QE3		
<1-999995> Number .....go to QE3		
<999998> Refused .....go to QE3		
<999999> Don't Know .....go to QE3		

**Y**  
**(Occupation1)**

**Z**  
**(Occupation2)**

**QE3 (LOCATION) Which of the following factors have made it difficult for your company (organization) to retain (SELOCC)?**  
*(mark ALL that apply) (READ THE LIST)*

- |  |       |       |
|--|-------|-------|
| <b>1 Other firms offer better salaries, incentives or benefits</b>               | _____ | _____ |
| <b>2 Other firms offer better opportunities for career development or growth</b> | _____ | _____ |
| <b>3 Other firms offer more challenging or interesting projects</b>              | _____ | _____ |
| <b>4 Other firms provide the opportunity to use leading-edge technology</b>      | _____ | _____ |
| <b>5 Other firms have a more enticing location</b>                               | _____ | _____ |
| <b>6 Employees are changing occupations</b>                                      | _____ | _____ |
| <b>7 Employees are returning to school</b>                                       | _____ | _____ |
| <b>8 Other</b>   | _____ | _____ |
| <b>8_t Please specify these other factors</b>                                    | _____ | _____ |
| <b>9 Not applicable</b>  | _____ | _____ |

- <1> Yes ..... go to next method, then FLOW E3  
<3> No ..... go to next method, then FLOW E3  
<8> Refused ..... go to next method, then FLOW E3  
<9> Don't know ..... go to next method, then FLOW E3

**FLOW E3**

The system will now determine the questionnaire flow based on the responses given so far.  
If QE3\_9 = 1, then go to IF  
If each of (QE3\_1 to QE3\_8) = (3 or 7 or RF or DK), then go to IF.  
If any of (QE3\_1 to QE3\_8) = 1, then go to QE4.



<b>Y</b>	<b>Z</b>
<u>(Occupation1)</u>	<u>(Occupation2)</u>

**QE4 Which of the factors just listed causes the MOST difficulty in retaining (SELOCC) (MLOCATION)? (DO NOT READ LIST)**

_____	_____
-------	-------

- <1> Other firms offer better salaries, incentives or benefits .....go to IF
- <2> Other firms offer better opportunities for career development or growth go to IF
- <3> Other firms offer more challenging or interesting projects .....go to IF
- <4> Other firms provide the opportunity to use leading-edge technology .....go to IF
- <5> Other firms have a more enticing location.....go to IF
- <6> Employees are changing occupations .....go to IF
- <7> Employees are returning to school.....go to IF
- <8> Other .....go to IF
- <9> Not applicable .....go to IF
- <98> Refused .....go to IF
- <99> Don't know .....go to IF

**SECTION F – Training and Development**

**IF The following questions deal with the nature and extent of training.**

**IFA First, we will ask some questions about FORMAL TRAINING. For our purposes, FORMAL TRAINING includes all types of training intended to develop your employees' skills or knowledge through a STRUCTURED FORMAT, whether it takes place inside or outside your location.**

<b>Y</b>	<b>Z</b>
<u>(Occupation1)</u>	<u>(Occupation2)</u>

**QF1 Within the last 12 months, did your company (organization) pay for OR provide any FORMAL training for (SELOCC) working at this location?**

_____	_____
-------	-------

- <1> Yes .....go to QF2
- <3> No .....go to IFB
- <8> Refused .....go to IFB
- <9> Don't Know .....go to IFB

Y  
(Occupation1)

Z  
(Occupation2)

**QF2 Which of the following types of formal training did your company (organization) pay for OR provide for (SELOCC)? (mark ALL that apply) (READ THE LIST)**

- 1 Management training \_\_\_\_\_
- 2 Systems software training \_\_\_\_\_
- 3 Applications software training \_\_\_\_\_
- 4 Computer programming training \_\_\_\_\_
- 5 Computer hardware training \_\_\_\_\_
- 6 Communication or interpersonal skills training \_\_\_\_\_
- 7 Other training \_\_\_\_\_
- 7\_t Please specify this other training \_\_\_\_\_
- 8 Not applicable \_\_\_\_\_

- <1> Yes .....go to next type, then QF3
- <3> No.....go to next type, then QF3
- <8> Refused .....go to next type, then QF3
- <9> Don't know .....go to next type, then QF3

**QF3 (LOCATION), within the last 12 months, how many (SELOCC) received formal training that was paid for OR provided by your company (organization)?**

- <0> None .....go to IFB
- <1-999995> Number .....go to QF4
- <999998> Refused .....go to QF4
- <999999> Don't Know .....go to QF4

**QF4 On average, how many days of company-sponsored formal training did each employee in this (these) occupation(s) receive, within the last 12 months?**

- <0> None .....go to IFB
- <1-365> Number .....go to IFB
- <998> Refused .....go to IFB
- <999> Don't Know .....go to IFB

**IFB** We will now ask some questions about **INFORMAL** training. For our purposes, employees who participate in **ON-THE-JOB** or **INFORMAL TRAINING** acquire various skills or knowledge as part of doing the job.

**Y** \_\_\_\_\_ **Z** \_\_\_\_\_  
**(Occupation1)** **(Occupation2)**

**QF5** Within the last 12 months, did the (SELOCC) working at this location acquire new IT skills or knowledge through **ON-THE-JOB** or **INFORMAL** training?

\_\_\_\_\_

- <1> Yes ..... go to QF6
- <3> No ..... go to IG
- <8> Refused ..... go to IG
- <9> Don't Know ..... go to IG

**QF6** For (SELOCC), on average, what percentage of total IT training is on-the-job or informal training?

\_\_\_\_\_

- <0> None ..... go to IG
- <1-100> Number ..... go to IG
- <998> Refused ..... go to IG
- <999> Don't Know ..... go to IG

\*\*\*\*\*

## **SECTION G – Employee survey participation and data-sharing**

**IG Over the next few months, we will be conducting a survey of EMPLOYEES in information technology occupations on behalf of Human Resources Development Canada. We are counting on the employers of these workers to assist us with this survey.**

**QG1 Would you be willing to provide a list of the names and business telephone numbers of your employees in information technology occupations so that they could be contacted directly regarding this new survey?**

- <1> Yes ..... go to QG3  
<3> No ..... go to QG2  
<8> Refused ..... go to QG2  
<9> Don't Know ..... go to QG2

**QG2 Would you be willing to distribute survey material to some of your employees in these occupations?**

- <1> Yes ..... go to QG3  
<3> No ..... go to QG6  
<8> Refused ..... go to QG6  
<9> Don't Know ..... go to QG6

**QG3 Thank you for agreeing to assist us. I would like to confirm your mailing address and telephone number so that you may be contacted regarding this new survey of employees.**

(Programmer: Please fill with contact information from file)

- <1> Name .....  
<2> Position .....  
<3> Address .....  
<4> City .....  
<5> Province .....  
<6> Postal code .....  
<7> Telephone Number .....  
<8> Extension ..... go to QG4

**QG4 Would you prefer to be contacted by post or e-mail?**

- <1> Post ..... go to QG5  
<2> E-Mail ..... go to QG4a  
<3> No preference ..... go to QG4a  
<8> Refused ..... go to QG5  
<9> Don't know ..... go to QG5

**QG4a What is your e-mail address? \_\_\_\_\_ go to QG5**

**QG5 Do your employees in information technology occupations have access to the Internet at their work location?**

- <1> Yes (all).....go to QG6
- <3> No (none) .....go to QG6
- <4> Some .....go to QG6
- <8> Refused .....go to QG6
- <9> Don't Know .....go to QG6

**QG6 Statistics Canada has entered into a data-sharing agreement under Section 12 of the Statistics Act with Human Resources Development Canada. All your information will be kept strictly confidential by Human Resources Development Canada and used only for statistical purposes. Do you agree to share the information you've provided?**

- <1> Yes .....go to QG7
- <3> No.....go to QG7
- <8> Refused .....go to QG7
- <9> Don't know .....go to QG7

**QG7 The interview is now finished. Do you have any comments about this survey?**

- <1> Yes .....go to QG7\_t
- <3> No.....go to END

**QG7\_t Comments:** \_\_\_\_\_go to END

**NO EMPLOYEES**

Since your company does not have any employees or contract workers in information technology occupations, we have no further questions. (*go to END*)

**END**

Thank you for your time.

**REFUSAL SCREEN**

The results of the survey will provide both businesses and government with much needed information on this important group of occupations. The results will also help shape policy. Your participation is essential in order to have reliable information.

Stress:

- Importance of the respondent's information
- That the respondent's data will represent the responses of many other businesses
- Need for co-operation in order to produce reliable information
- Importance of these occupations and their industry
- Address confidentiality issues
- Users and uses: The results will provide both businesses and government with much needed information on this important group of occupations.