National Survey of Information Technology Occupations, 2002: Employer Survey (Private sector)

INITIAL CONTACT

Hello this is (interviewer) from Statistics Canada. We're conducting a survey on occupations specializing in information technology on behalf of the Software Human Resource Council.

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.]

Your answers will be kept strictly confidential and used only for statistical purposes. My supervisor may listen in to evaluate the survey.

PRE-CONTACT - CD-ROM

NOTE TO PROGRAMMER:

Match QID to check if the CD-ROM was received and what are the selected occupation(s)

Create two new variables called CDOCC1, CDOCC2

If CDOCC1 = blank, then go to QP1

Else, go to IC

NOTE TO PROGRAMMER:

Please put the following definition on the same screen as QP1 and QA3.

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.

	you the best person to talk to about the best person to talk the best person to talk the best person to be talk to about the best person to be talk the best person the best person to be talk the best pers	ut Information Technology occupations in
No.		go to CONTACT SCREEN (from the pre-contact file)
	uld you like to fill-in the questionn Fer to do it as part of this interview	aire using the CD-ROM or would you?
CD a	application	go to QP3
	rview	S
Refu	ısed	go to REFUSAL SCREEN
D 1	h 17	then QP2 if convinced
Don	't Know	go to QP3
		• • • =
No	't Know	go to QP3_B
No	"t Know	go to QP3_B
No Don' QP3	"t Know	go to QP3_Bgo to END
No Don'	"t Know	go to QP3_B go to
No Don' QP3	"t Know	go to QP3_B

QP1 Recently, we have sent you a package containing information on the survey as

QP3_B We will send you the information again. Our file shows that your location's address is (ADDRESS). Is this the right address?

N	OTE	TO	PRO	GRA	M	AER:

Create a variable called ADDRESS, which should be linked with the pre-contact file. Read the complete address of this location to the interviewee to avoid possible errors. If this is not the right address, permit the interviewer to change the contact address.

<1>	Yes	go to END
	No	
		then END
<8>	Refused	go to REFUSAL SCREEN,
		then QP3 B if convinced
<9>	Don't Know	go to END

SECTION A – Screening Questions

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

NOTE TO PROGRAMMER:

Read the complete address of this location to the interviewee to avoid possible errors

OA1	Does your company	(organization) have	more than one	nhysical location?
$\mathbf{O}I\mathbf{M}$	Does your combany	1 VI ZAIIIZALIVII / 11A 1	. more chair one	Direction in the control of the cont

<1>	Yes	go to QA2
<3>	No	go to QA2
<8>	Refused	go to QA2
<9>	Don't Know	go to OA2

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?

<0-5>	None or less than 6 employees	go to LESS THAN 6
		EMPLOYEES
<6-999995>	Number	go to QA3
<999998>	Refused	go to QA3
<999999>	Don't Know	go to QA3

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
	Number	
	Refused	•
<999999>	Don't Know	go to Contact Screen

- 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.
- 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
	Number	•
	Refused	•
	Don't Know	_

QA4b (LOCATION), how many of the information technology workers CURRENTLY working ON CONTRACT with your company (organization) would you like to hire as permanent employees of your company (organization)?

<1>	All	go to SCREEN
	More than half	
<3>	Half	go to SCREEN
	Less than half	_
	None	_
<8>	Refused	go to SCREEN
	Don't Know	

NOTE TO PROGRAMMER:

Create a new variable called EMPTYPE as follows:

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

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

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

If QA3=(1-999995 or RF or DK) and (QA4=1 and QA4a not equal 0), then EMPTYPE = 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 EMPTYPE=0, then go to NO EMPLOYEES

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

NOTE TO PROGRAMMER:

Create new variables called EMPTYPE1 and EMPTYPE2 and EMPTYPE3 as follows:

If EMPTYPE=1, then EMPTYPE1= "the number of people CURRENTLY employed" and EMPTYPE2 = "an employee" and EMPTYPE3 = "employees"

If EMPTYPE=2, then EMPTYPE1= "the number of people CURRENTLY working on contract" and EMPTYPE2 = "a contract worker" and EMPTYPE3= "people working on contract"

If EMPTYPE=3, then EMPTYPE1= "both the number of people CURRENTLY employed, and the number of people working on contract" and EMPTYPE2= "an employee or contract worker" and EMPTYPE3 = "employees or people working on contract"

NOTE:

If EMPTYPE = 1, interviewers will not need column 2

If EMPTYPE = 2, interviewers will not need column 1

SECTION B – Occupation Selection

IB We will be asking you to indicate (EMPTYPE1) in specific information technology occupations (MLOCATION). From now on, we will refer to these as IT occupations.

PLEASE NOTE: if <u>(EMPTYPE2)</u> performs more than one job, then assign the occupations where most hours are spent.

(LOCATION), how many (EMPTYPE3) do you have in the following occupations:

		QB1_ Number of employees_ (excluding contract workers and volunteers)	QB2_ Number of contract workers
1.	Computer and information systems		
	managers (0213)		
2.	IT Project managers (0213.1)		
	E-commerce managers (0611.5)		
	Electrical and electronics engineers, except		
	computer engineers (2133)		
5.	Computer and telecommunications hardware		
	engineers (2147.1)		
6.	Network system and data communication		
	engineers (2147.2)		
7.	Information systems business analysts and		
	consultants (2171.1)		
8.	Systems security analysts (2171.2)		
9.	Information systems quality assurance		
	analysts (2171.3)		
10.	Systems auditors (2171.4)		
11.	Database analysts (2172.1)		
12.	Data administrators (2172.2)		
13.	Software engineers (2173)		
14.	Computer programmers (2174.1)		
15.	Interactive media developers (2174.2)		
16.	Web designers and developers (2175)		
17.	Electrical and electronics engineering technologists		
	and technicians (2241)		
18.	Computer and network operators (2281.1)		
	Web technicians (2281.2)		
	User support technicians (2282)		
	Systems testing technicians (2283)		
	IT Trainers (4131.2)		
	Technical writers (5121.2)		
24.	Graphic designers (5241.1)		

			employees (excluding contract workers and volunteers)	<u>contract workers</u>
25.	Illustrators (52	(41.2)		
	<0>	None	<u> </u>	
	<1-999995> <999998>	Number Refused	2 2	± '
	<999999>	Don't Know		
	NOTE TO PRO	GRAMMER: Only occupations in the	he first column (QB1_) should be f	lagged for later
	NOTE TO PRO	OGRAMMER:		
		riable called NUMOCCS as follo	ws:	
		as (from QB1 1 to QB1 25) were		
	1	ation (from QB1 1 to QB1 25) w		
		(from QB1 1 to QB1 25) were f		
	1	eccupations (from QB1 1 to QB1		CS =3
	II more than 2 o	companions (nom QB1_1 to QB1_	_22) were magged them it onless	
	information <1> Yes <3> No <8> Refused <9> Don't K	ON), does your company (organ technology occupation? go to A_1 go to FLOW B go to FLOW B mowgo to FLOW B		3) in any other
	1	t are the most important activ		ation?
	5		go to A 3	

QB2_ Number of

QB1_ Number of

	QB1_ Employees	QB2_ Contract workers
A_3 How many of these (EMPTYPE3) do you have at your location?		
<0-999995> Numbergo to B <999998> Refusedgo to B <999999> Don't Knowgo to B		
B (LOCATION), does your company (organization formation technology occupation?	tion) have (<u>EMPT)</u>	YPE3) in any other
<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: so to B_2	
B_2 What are the most important activities of	or duties of this occ	cupation?
2 3 4		
5	go to B_3 QB1	QB2
	Employees	Contract workers
B_3 How many of these (<u>EMPTYPE3</u>) do you have at your location?		
<0-999995> Number	W B	

NOTE TO PROGRAMMER:

Create two new variables called TOTALIT and TOTALCW as follows:

```
\begin{aligned} & 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 + QB1\_22 + QB1\_23 + QB1\_24 + QB1\_25 \text{ (not including RF and DK)} \end{aligned}
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$$\begin{aligned} & \text{TOTALCW} = \text{QB2}_1 + \text{QB2}_2 + \text{QB2}_3 + \text{QB2}_4 + \text{QB2}_5 + \text{QB2}_6 + \text{QB2}_7 + \text{QB2}_8 + \text{QB2}_9 + \\ & \text{QB2}_10 + \text{QB2}_11 + \text{QB2}_12 + \text{QB2}_13 + \text{QB2}_14 + \text{QB2}_15 + \text{QB2}_16 + \text{QB2}_17 + \text{QB2}_18 + \text{QB2}_19 \\ & + \text{QB2}_20 + \text{QB2}_21 + \text{QB2}_22 + \text{QB2}_23 + \text{QB2}_24 + \text{QB2}_25 \text{ (not including RF and DK)} \end{aligned}$$

FLOW B

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

If EMPTYPE=2, then go to QG5

If EMPTYPE=(1 or 3) and NUMOCCS = 0 and A=1, then go to QG5

If EMPTYPE=(1 or 3) and NUMOCCS = 0 and A=3, 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_25 and:

If NUMOCCS = 1, select the flagged occupation 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:

Occupation1: 2172.1 Database Analysts Number of employees: 7

Occupation2: 2147.1 Computer and telecommunications hardware engineers

Number of employees: 2

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 QC1 to QF5 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 two new variables called INTRO and CEPROF as follows:

If CDOCC1=blank and NUMOCCS = 1, then INTRO= "We will now ask you some questions about the (occupation1) who work at this location." and CEPROF = « this occupation »

If CDOCC1=blank and NUMOCCS = 2, then INTRO = "We will now ask you some questions about the <u>(occupation1)</u> and <u>(occupation2)</u> who work at this location." and CEPROF = « these occupations »

If CDOCC1=blank and 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." and CEPROF = « these occupations »

If CDOCC1 not blank and NUMOCCS = 1, then INTRO= "Recently, you were sent a package that included a CD application to collect data on your employees in information technology occupations. We would like to thank you for providing the requested information to us. At the same time, you were told that Statistics Canada would be contacting you to conduct a more in-depth interview. We will now ask you some questions on the occupation chosen by the CD application, that is the (CDOCC1) who work at this location." and CEPROF = « this occupation »

If CDOCC1 not blank and (NUMOCCS = 2 or NUMOCCS = 3), then INTRO = "Recently, you were sent a package that included a CD application to collect data on your employees in information technology occupations. We would like to thank you for providing the requested information to us. At the same time, you were told that Statistics Canada would be contacting you to conduct a more in-depth interview. We will now ask you some questions on the 2 occupations chosen by the CD application, that is the (CDOCC1) and the (CDOCC2) who work at this location." and CEPROF = « these occupations »

When CDOCC1 is not blank, CDOCC1 = Occupation1 When CDOCC2 is not blank, CDOCC2 = Occupation2

IC <u>(INTRO)</u> The remainder of the interview will cover the occupation profile, the hiring, retention and training of employees in this (these) occupation(s).

NOTE TO PROGRAMMER

Create two new variables called SELOCC and DESC as follows:

(organization) give to (SELOCC) (MLOCATION)? 1			Y (Occupation 1)	Z	
(organization) give to (SELOCC) (MLOCATION)? 1	C1	What job titles does your comp	<u></u>	<u>ı</u> (<u>U</u>	ccupation2)
Refused		• • •	•		
Refused		(MLOCATION)?			
Refused			2		
Refused			3		
Refused			5		
The following questions are about the full-time and part-time nature of (CEPROF). 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. Y Z (Occupation1) (Occupation2) (LOCATION), how many (SELOCC) are: QC2_1 PERMANENT, FULL-TIME employees? QC2_2 TEMPORARY, FULL-TIME employees? QC2_3 PERMANENT, PART-TIME employees?					
(CEPROF). 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. Y Z (Occupation1) (Occupation2) (LOCATION), how many (SELOCC) are: QC2_1 PERMANENT, FULL-TIME employees? QC2_2 TEMPORARY, FULL-TIME employees? QC2_3 PERMANENT, PART-TIME employees?		Don't Know	go to IC2		
(Occupation1) (Occupation2) (LOCATION), how many (SELOCC) are: QC2_1 PERMANENT, FULL-TIME employees? QC2_2 TEMPORARY, FULL-TIME employees? QC2_3 PERMANENT, PART-TIME employees?					
QC2_1 PERMANENT, FULL-TIME employees? QC2_2 TEMPORARY, FULL-TIME employees? QC2_3 PERMANENT, PART-TIME employees?		(CEPROF). For our purposes, hours or more per week, and pa	full-time employees are de	fined as wo	rking 30
QC2_1 PERMANENT, FULL-TIME employees? QC2_2 TEMPORARY, FULL-TIME employees? QC2_3 PERMANENT, PART-TIME employees?		(CEPROF). For our purposes, hours or more per week, and pa	full-time employees are de art-time employees work lo	fined as wo ess than 30 l	rking 30 hours per
QC2_2 TEMPORARY, FULL-TIME employees? QC2_3 PERMANENT, PART-TIME employees?		(CEPROF). For our purposes, hours or more per week, and paweek.	full-time employees are de art-time employees work le Y (<u>Occi</u>	fined as wo ess than 30 l	rking 30 hours per
- <u>- </u>		(CEPROF). For our purposes, hours or more per week, and paweek. (LOCATION), how many (SEI	full-time employees are deart-time employees work le Y (Occu	efined as wo less than 30 l Zupation1) (O	orking 30 hours per occupation2)
QC2_4 TEMPORARY, PART-TIME employees?		(CEPROF). For our purposes, hours or more per week, and paweek. (LOCATION), how many (SEI QC2_1 PERMANENT, FULL-QC2_2 TEMPORARY, FULL-	full-time employees are deart-time employees work leart-time employees work leart-time employees work leart-time employees? TIME employees?	efined as wo ess than 30 l Z upation1) (O	rking 30 hours per eccupation2)
		(CEPROF). For our purposes, hours or more per week, and paweek. (LOCATION), how many (SEI) QC2_1 PERMANENT, FULL-QC2_2 TEMPORARY, FULL-QC2_3 PERMANENT, PART-	full-time employees are deart-time employees work leart-time employees work leart-time employees? TIME employees? TIME employees?	efined as wo	rking 30 hours per
	2	(CEPROF). For our purposes, hours or more per week, and paweek. (LOCATION), how many (SEL QC2_1 PERMANENT, FULL-QC2_2 TEMPORARY, FULL-QC2_3 PERMANENT, PART-QC2_4 TEMPORARY, PART-	full-time employees are deart-time employees work leart-time employees work leart-time employees? TIME employees? TIME employees? TIME employees? TIME employees?	efined as wo	rking 30 hours per
<1-999995> Numbergo to ID		(CEPROF). For our purposes, hours or more per week, and paweek. (LOCATION), how many (SEI) QC2_1 PERMANENT, FULL-QC2_2 TEMPORARY, FULL-QC2_3 PERMANENT, PART-QC2_4 TEMPORARY, PART-QC2_4 TEMPORARY, PART-	full-time employees are deart-time employees work leart-time employees work leart-time employees? TIME employees? TIME employees? TIME employees? TIME employees?	efined as wo	rking 30 hours per
8 10 = 1	2	(CEPROF). For our purposes, hours or more per week, and paweek. (LOCATION), how many (SEL QC2_1 PERMANENT, FULL-QC2_2 TEMPORARY, FULL-QC2_3 PERMANENT, PART-QC2_4 TEMPORARY, PART-QC2_5 TEMPORARY, PA	Y (Occi OCC) are: TIME employees? -TIME employees? -TIME employees? -TIME employees? -TIME employees? -TIME omployees? -TIME omployees? -TIME omployees? -TIME omployees?	efined as wo	rking 30 hours per

SECTION D – Hiring and recruitment

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

		Y	${f Z}$
		(Occupation1)	(Occupation2)
	CATION), how many (SELOCC) been hired within the last 6 months?		
<0>	Noneif $QD1Y = 0$,	•	
<1-999995>		•	
		go to QD1bZ	
		Y	Z
		(Occupation1)	(Occupation2)
QD1a	require competency or skills upgrading training, excluding orientation after being hired?		
<1><3><8><9>	Yes		
		Y (Occupation1)	Z (Occupation2)
QD11	How many of these new (SELOCC) required competency or skills upgrade training excluding orientation after being hired?	ling 	
<1><3><8><9>	None go to QD2 Number go to QD1c Refused go to QD2 Don't Know go to QD2		

			Y (Occupation1)	Z (Occupation2)
	QD1c	On average, how many days of training, excluding orientation, did it take for these employees to acquire these competencies or skills?		
	<1><2><3><4><6><6><8><9><	1 to 4 days go to QD2 5 to 9 days go to QD2 10 to 14 days go to QD2 15 to 19 days go to QD2 20 to 24 days go to QD2 25 days or more go to QD2 Refused go to QD2 Don't Know go to QD2		
QD2	(LOC.	ATION), when staffing for (<u>SELOCC)</u>	Y (Occupation1)	Z (Occupation2)
	does y	outside of the company (organization), our company (organization) recruit all that apply) (READ THE LIST)		
	2 Ac 3 Ac 4 Fr 5 Fr 6 Fr	om within your region exclusively cross the province cross Canada om the United States om Europe om Asia her		
	<3> N <8> F	Yes go to next No go to next Refused go to next Don't Know go to next	region, then go to QD2 region, then go to QD2	3

QD3 (LOCATION), which of the following external recruitment methods does your company (organization) use to fill available positions for (DESC)?

(Mark all that apply) (READ THE LIST)

(www. wpp.vy) (1.22.12 11.12 22.21)	Y	${f Z}$
		(Occupation1)	(Occupation2)
1	Employee referrals		
2	Help wanted ads (print media)		-
3	Unsolicited résumés		
4	Word-of-mouth		
5	Informal networking		
6	University, college or IT institutes		
7	Job fairs		
8	Internet recruiting agency		
9	Internet jobs and ads web sites		
10	Your firms' Web site		
11	Government employment centres		
	Head-hunter or personnel agency		
	User groups and professional associations		
	email list		
14	Other		
	14_t Please specify this (these) other		
	method(s)		
15	Not applicable (don't recruit)		
<12	> Yesgo to next	method, then FLOW	D3
	> Nogo to next to	*	
	> Refusedgo to next		
<92	> Don't Knowgo to next	method, then FLOW	D3

FLOW D3

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

If $QD3_15 = 1$, then go to QD5.

If each of $(QD3_1 \text{ to } QD3_14) = 3 \text{ or RF or DK}$, then go to QD5.

If any of (QD3 1 to QD3 14) =1, then go to QD4.

	Y	${f Z}$
	(Occupation1)	(Occupation2)
QD4 Of the external recruitment methods just list which one do you find MOST effective, in terms of finding qualified (SELOCC)? (mark only one) (DO NOT READ LIST)		
<01> Employee referrals	go to QD5	
<02> Help wanted ads (print media)	go to QD5	
<03> Unsolicited résumés		
<04> Word-of-mouth	go to QD5	
<05> Informal networking	go to QD5	
<06> University, college or IT institutes	go to QD5	
<07> Job fairs	go to QD5	
< 08 > Internet recruiting agency	go to QD5	
<09> Internet jobs and ads web sites		
<10> Your firms' Web site	•	
<11> Government employment centres	•	
<12> Head-hunter or personnel agency 13 User groups and professional	go to QD5	
associations email list	go to QD5	
<14> Other	go to QD5	
<98> Refused	go to QD5	
<99> Don't Know	go to QD5	
	Y	Z
	(Occupation1)	(Occupation2)
QD5 How many (DESC) positions are vacant at (MLOCATION)?		
<0> None go to QD6		
<1-999995> Number go to QD5a		
<999998> Refused go to QD6		
<999999> Don't Know		

		Y	\mathbf{Z}
		(Occupation1)	(Occupation2)
	QD5a How many of these vacant (DESC) positions have remained vacant for four months or longer because of lack of qualified candidates?	κ	
	<0> None go to QD6 <1-999995> Number go to QD6 <999998> Refused go to QD6 <999999> Don't Know go to QD6		
QD6	Which of the following factors make it especially challenging to staff positions for (MLOCATION)? (mark ALL that apply) (READ THE LIST)	DESC)	
	1 Lack of applicants with relevant		
	experience		
	2 Lack of applicants with relevant level		
	education (Bachelor's, Masters, etc.)		
	3 Lack of applicants with required skills		
	4 Other employers offer better salaries,		
	incentives or benefits		
	5 Other employers offer better opportunit	ies	
	for career development or growth		
	6 Other employers offer more challenging		
	or interesting projects		
	7 Other employers provide the opportunit	y	
	to use leading-edge technology		
	8 Other employers have a more enticing		
	location		
	9 Lack of communication skills/		
	Language barriers		
	10 Better conditions in the U.S. or overseas		
	11 Other		
	11_t Please specify the other factors		
	12 Not applicable		
	<1> Yes go to next factor	r, then QD7	
	<3> Nogo to next factor	r, then QD7	
	<8> Refusedgo to next factor	r, then QD7	
	<9> Don't know	then OD7	

		Y	Z
		(Occupation1)	(Occupation2)
QD7	When hiring (SELOCC), how much		
~ 2.	importance does your company (organization	n)	
	place on experience compared to education?	•	
	(mark only one)(READ THE LIST)		
<1>	More importance	go to QD8	
<2>	Same importance	go to QD8	
<3>	Less importance	go to QD8	
<4>	No importance	go to QD8	
<8>	Refused	go to QD8	
<9>	Don't know	go to QD8	
	does your company (organization) provide to (SELOCC) (MLOCATION)? (mark ALL that apply) (READ THE LIST)	Y (<u>Occupation1)</u>	Z (Occupation2)
	1 Bonuses		
	2 Profit sharing		
	3 Stock options and/or shares		
	4 Other financial incentives, except salary		
	4_t Please specify these other financial incentives		
	5 Not applicable		
	<1> Yesgo to next incent	tives, then OD9	
	<3> Nogo to next incent	, ,	
	<8> Refusedgo to next incent	tives, then QD9	
	<9> Don't Know go to next incent		

QD9 Does your company (organization) provide any of the following types of non-financial benefits to (SELOCC) (MLOCATION)?

(mark ALL that apply) (READ THE LIST)

		Y	${f Z}$
		(Occupation1)	(Occupation2)
1	Recreation facilities and/or memberships		
2	Professional memberships		
3	Day care facilities and/or support		
4	Flexible working hours		
5	Organized social activities		
6	Possibility to work from outside the office, provide Internet access, computer,	/	
	cellular phone, etc.		
7	Free or reduced parking fee or mass		
	transit subsidy	<u></u>	
8	Complimentary beverages and food		
9	Other non-financial benefits		
	9_t Please specify these other		
	non-financial benefits		
10	Not applicable		
~1	> Yesgo to next type, the	on IE	
	> Nogo to next type, the substitution of		
	> Refusedgo to next type, the		
	> Don't Knowgo to next type, the		
\ フ	/ Don't Knowgo to next type, ti	ICH IE	

SECTION E – Employee retention

IE	The following	questions a	are about e	mplovee	retention	(MLOCATION
LL	THE TUHUWING	questions a	are about e	mpioyee	I CICIIIIOII	(MILOCATIO)

				Y (Occupation1)	Z (Occupation2)
QE1		CATION), how many (vacated their positions of the contract the contrac			
<0>		None			
		Number	if QE1Y>=1, go if QE1Z>=1, go	to QE2_1Y	
<9999 <9999		Refused Don't Know	•		
QE2	who	CATION), how many ovacated their positions ook an IT job outside in CANADA ook an IT job outside in the UNITED ST ook an IT job outside in another country USA aployee created his ownployee is returning to eft the IT field for a car different field tired or left the labour aployee terminated / fift for other reasons 9t Please specify the other reasons	your company, your company, ATES your company, other than the n company school areer in a	nths:	
	<0> <1-99 <9999	9995> Number 998> Refused	go to next reaso go to next reaso go to next reaso go to next reaso	on, then IF on, then IF	

SECTION F – Training and Development

QF1				
A)	Who is responsible for determining the nature of training needed by employees? (mark ALL that apply)			
		Y	${f z}$	
		(Occupation1)	(Occupation2)	
	1 Human resources manager			
	2 Information technology manager			
	3 Chief information officer			
	4 General manager			
	5 Direct reporting manager			
	6 Employee			
	7 Other			
	<9> Don't Know go to next re	sponsible person then (sponsible person then (_	
В)	<9> Don't Know go to next re Who is responsible for determining which	sponsible person then the sponsible person the sponsible person then the sponsible person t		
В)	<9> Don't Know go to next re	sponsible person then the sponsible person the sponsible person then the sponsible person t	_	
В)	<9> Don't Know go to next re Who is responsible for determining which	sponsible person then the sponsible person the sponsible person then the sponsible person then the sponsible person the sponsible per	QF1_B Z	
B)	<9> Don't Know	sponsible person then the sponsible person the sponsible person then the sponsible person the sponsible pers	QF1_B Z	
В)	 Vho is responsible for determining which receive this training? (mark ALL that appl) Human resources manager Information technology manager 	sponsible person then the sponsible person the sponsible person then the sponsible person the sponsible pers	QF1_B Z	
В)	 Vho is responsible for determining which receive this training? (mark ALL that appl) Human resources manager Information technology manager Chief information officer 	sponsible person then the sponsible person the sponsible person then the sponsible person the sponsible pers	QF1_B Z	
В)	 Vho is responsible for determining which receive this training? (mark ALL that appl) Human resources manager Information technology manager Chief information officer General manager 	sponsible person then the sponsible person the sponsible person then the sponsible person the sponsible pers	QF1_B Z	
В)	 Vho is responsible for determining which receive this training? (mark ALL that appl) Human resources manager Information technology manager Chief information officer General manager Direct reporting manager 	sponsible person then the sponsible person the sponsible person then the sponsible person the sponsible pers	QF1_B Z	
В)	 Vho is responsible for determining which receive this training? (mark ALL that appl) Human resources manager Information technology manager Chief information officer General manager Direct reporting manager Employee 	sponsible person then the sponsible person the sponsible person then the sponsible person the sponsible pers	QF1_B	
В)	 Vho is responsible for determining which receive this training? (mark ALL that appl) Human resources manager Information technology manager Chief information officer General manager Direct reporting manager 	sponsible person then the sponsible person the sponsible person then the sponsible person the sponsible pers	QF1_B Z	
В)	 Who is responsible for determining which receive this training? (mark ALL that apply) Human resources manager Information technology manager Chief information officer General manager Direct reporting manager Employee Other 	h employees Y (Occupation1)	Z (Occupation2)	
В)	Who is responsible for determining which receive this training? (mark ALL that apply 1) Human resources manager Information technology manager Chief information officer General manager Direct reporting manager Employee Other Second to next remark the second	h employees y) Y (Occupation1) ———————————————————————————————————	Z (Occupation2)	
B)	 Who is responsible for determining which receive this training? (mark ALL that apply) Human resources manager Information technology manager Chief information officer General manager Direct reporting manager Employee Other 	h employees y) Y (Occupation 1) sponsible person then because the person the person then because the person the pe	Z (Occupation2) ———————————————————————————————————	

IFA Now, 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. It EXCLUDES computer-based training and on-line courses.

		\mathbf{Y}	${f Z}$
		(Occupation1)	(Occupation2)
QF2	(LOCATION), within the last 6 mormany (SELOCC) received formal tr was paid for in full or in part OR pr by your company (organization)?	aining that	
<0>	Noneif QF2Y=0		
<1-99	if QF2Z=0 99995> Numberif QF2Y>= if QF2Z>=	=1 go to QF3_1Y	
<9999 <9999	998> Refusedgo to IFB	28000 (00_1	
		Y (<u>Occupation1)</u>	Z (<u>Occupation2)</u>
QF3	Which of the following types of form did your company (organization) pa or in part OR provide for (SELOCO (mark ALL that apply) (READ THE LI	y for in full <u>')</u> ?	
	1 Management2 Systems software		
	3 Applications software		
	4 Telecommunications or compute network	<u></u>	
	5 Computer language and/or prog	ramming	
	6 Computer hardware		
	7 Communication or interpersonal skills	<u></u>	
	8 Your company's Products		
	9 Language training (e.g. French,	English)	
	10 Other training 10_t Please specify this other tra	 ining	
	<1> YesGo to next	type, then QF4	
	<3> NoGo to next		
	<8> RefusedGo to next		
	<9> Don't knowGo to next	t type, then QF4	

		Y	Z
QF4	On average, how many days of company-sponsored formal training did each employee in (CEPROF) receive, within the last 6 months?	(Occupation1)	(Occupation2)
<0> <1-36 <998> <999>	Refusedgo to IFB		
IFB	We will now ask some questions about INF survey, INFORMAL or ON-THE-JOB TR and can provide the employee with information THE-JOB TRAINING may involve confercomputer-based or on-line training.	AINING is acquired ation, skills and apti	d as part of doing the jolitudes. INFORMAL or
		Y	Z
		(Occupation1)	(Occupation2)
QF5	Within the last 6 months, did the (<u>SELOCC</u>) working at this location acquire new IT skills or knowledge through INFORMAL or ON-THE-JOB training?		
	the (<u>SELOCC)</u> working at this location acquire new IT skills or knowledge through INFORMAL		
<1> <3>	the (SELOCC) working at this location acquire new IT skills or knowledge through INFORMAL or ON-THE-JOB training? Yes go to IG1 No go to IG1		
<1> <3> <8>	the (SELOCC) working at this location acquire new IT skills or knowledge through INFORMAL or ON-THE-JOB training? Yes go to IG1 No go to IG1 Refused go to IG1		
<1> <3> <8>	the (SELOCC) working at this location acquire new IT skills or knowledge through INFORMAL or ON-THE-JOB training? Yes go to IG1 No go to IG1		
QF5 <1> <3> <8> <9>	the (SELOCC) working at this location acquire new IT skills or knowledge through INFORMAL or ON-THE-JOB training? Yes go to IG1 No go to IG1 Refused go to IG1	******	*******
<1> <3> <8> <9>	the (SELOCC) working at this location acquire new IT skills or knowledge through INFORMAL or ON-THE-JOB training? Yes go to IG1 No go to IG1 Refused go to IG1 Don't Know go to IG1		*********
<1> <3> <8> <9> *****	the (SELOCC) working at this location acquire new IT skills or knowledge through INFORMAL or ON-THE-JOB training? Yes go to IG1 No go to IG1 Refused go to IG1 Don't Know go to IG1 ************************************		********

IG1 Over the next few weeks, we will be conducting a survey of EMPLOYEES in information technology occupations on behalf of the Software Human Resource Council. We are counting on the employers of these workers to assist us with this survey.

		ou be willing to provide a list of the roof your employees in the same select contacted directly regarding this sur	ted IT occupation(s) so that they
<1>	Yes		go to OG3
<3>			<u> </u>
<8>			E
<9>	Don't Kn	ow	go to QG2
QG2	Would yo	ou be willing to distribute survey ma <u>F)</u> ?	aterial to some of your employees in
<1>	Yes		go to IG2
<3>			
			then IG2 if convinced
<8>	Refused		go to REFUSAL SCREEN,
			then IG2 if convinced
<9>	Don't Kn	ow	go to REFUSAL SCREEN,
			then IG2 if convinced
	don't hes	itate to contact us at the number inc	• 0
QG3	don't hes		licated in the packagego to QG5 curn Facility contained in the CD-
	Could yo	u please use the Electronic Data Retovided to transmit this information of	licated in the packagego to QG5 curn Facility contained in the CD- electronically?
	Could yo ROM pro	u please use the Electronic Data Retovided to transmit this information of	licated in the packagego to QG5 curn Facility contained in the CD- electronically?go to IG3
	Could yo ROM pro	u please use the Electronic Data Retovided to transmit this information	licated in the packagego to QG5 curn Facility contained in the CD- electronically?go to IG3go to QG3_A
<1> <3>	Could yo ROM pro Yes Don't Kn	u please use the Electronic Data Retovided to transmit this information of	licated in the packagego to QG5 curn Facility contained in the CD- electronically?go to IG3go to QG3_Ago to QG3_A
<1> <3>	Could yo ROM pro Yes Don't Kn IG3 Pleas the "EM	u please use the Electronic Data Retovided to transmit this information o	licated in the packagego to QG5 curn Facility contained in the CD- electronically?go to IG3go to QG3_Ago to QG3_Ago to QG3_A

	IG3_A A paper form was provided in the package you received earlier to fill in the names and business phone numbers of the employees in the selected occupation(s). Please use this form to transmit the information to us. The fax number is indicated on the form.
Pı	rogrammer: Please create a file containing the contact information of each employee for (Occupation1) and (Occupation2). (If only 1 occupation selected, there is no need for a file for (Occupation2).
<2 <2 <4	1> Last Name 2> First Name 3> Telephone Number 4> Extension Number 5> Specific Address (e.g. building, floor, and/or section number)
QG4	I will now take the contact information for each <u>(SELOCC)</u> . (Interviewer: ask questions <1> to <5> for each employee in each selected occupation).
<1> <2> <3> <4> <4> <5>	Last Name? First Name? Telephone Number? Extension Number? Specific Address (e.g. building, floor, and/or section number)?go to QG5
QG5 <1> <3>	The interview is now finished. Do you have any comments about this survey? Yes
QG5_	t Comments: go to END
<u>LESS</u>	THAN 6 EMPLOYEES
Since y	your company (organization) has less than 6 employees, we have no further questions. <i>END</i>)

LES

NO EMPLOYEES

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

END

Thank you for your time.

REFUSAL SCREEN

Your co-operation is important because the survey will provide businesses and government with up-to-date data on the labour market for those information technologies (IT) occupations.

The results will be used to shape programs and policies relating to help IT occupations. Your participation is essential in order for survey results to be reliable.

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.