

Business ID	
Case ID	

CONFIDENTIAL when completed. Collected under authority of Statistics Act, Revised Statutes of Canada, 1985, Chapter S-19.

In all correspondence concerning this questionnaire, please quote the QID and Case ID numbers listed below.

Si vous préférez recevoir une version française de ce questionnaire, veuillez nous appeler au numéro de téléphone sans frais 1-877-679-2746.

Survey of Information Technology Occupations, 2000: Employee Survey

(Last Final – May 31, 2000)

The purpose of this survey:

Statistics Canada is conducting this survey on behalf of Human Resources Development Canada to collect statistical information on employment trends in information technology (IT) occupations.

As you may know, many employers have reported having difficulty finding skilled labour and have raised concerns about whether there are sufficient numbers of employees in these occupations to meet the demand. At the present time, there is very little data available to determine the nature and extent of this problem.

This survey will provide government and businesses with up-to-date labour-market information for IT occupations within various industries and regions. The results will be used to help shape policy relating to this important group of occupations.

The data you are reporting are confidential:

Statistics Canada is prohibited by law from publishing or releasing any statistics that reveal information obtained from this survey relating to any identifiable individual or business without your consent. The data reported on the questionnaire will be treated in strict confidence, used for statistical purposes and released in aggregated form only.

Your participation is important:

Participation in this survey is voluntary. However, your co-operation is important in order for the survey results to be reliable. The information you provide will help shape current and future programs and policies.

INTERNET VERSION

Please complete this survey and return it within 10 days.

If you require assistance in the completion of the survey or have any questions, please contact:

Small Business and Special Surveys Division, Statistics Canada

Phone number: 1-877-679-2746 E-mail: 1-877-679-2746 Info2000@statcan.ca

PAPER VERSION

Please complete and return this questionnaire within 10 days of receipt. Please send the completed questionnaire in the enclosed postage-paid envelope or if you wish to send it by facsimile, our FAX number is 1-877-792-9270.

If you require assistance in the completion of the questionnaire or have any questions regarding the survey, please contact:

Small Business and Special Surveys Division Statistics Canada Tunney's Pasture Ottawa, Ontario K1A 0T6

Phone number: 1-877-679-2746

E-mail: Info2000@statcan.ca

SECTION A OCCUPATIONAL HISTORY

The following questions ask about your current and previous work positions. For the purpose of this survey, a position refers to a job with a specific set of duties, performed for a specific employer.

1.	Including your current employer, how many different companies or organizations have you worked for as an employee within the last five years?							
	Please	e, do not consider a change of ownership in a company or orgower.	anization as a different					
		companies (organizations)						
2. At any time in the last 5 years, have you been self-employed ?								
		Yes						
		No						
Y(OUR C	URRENT POSITION						
3. Which of the following information technology (IT) occupations best describes ye position ? <i>(Mark only ONE)</i>								
		perform more than one function, then the occupation for whice of hours should be assigned.	h you spend the MOST					
		IT Training manager	For definitions of					
		Web manager	these occupations,					
		Computer and information systems manager	please refer to the					
		Information systems business analyst or consultant	enclosed guide.					
		Systems security analyst						
		Information systems quality assurance analyst						
		Systems auditor						
		Database administrator						
		Data administration analyst						
		Network systems and data communications specialist						
		Software engineer						
		Computer engineer, except software						
		Electrical and electronics engineer, except computer enginee	r					
		Computer programmer						
		Interactive media developer						
		Computer and network operator						
		Web technician						
		Technical support analyst						
		Systems testing technician						
		Technical writer						
		Graphic designer or illustrating artist						
		Other IT occupation, please specify						
4.	What	is the title of your current position?						

5.	What are the most important duties or activities of your current position?
6.	Since you began in your current position, have the duties of this position changed:
	(Mark only ONE)□ a great deal?□ somewhat?□ slightly?
7	not at all? How long have you been working at this current position?
1.	Trow long have you been working at this current position:
	months OR years
8.	Is your current position permanent or temporary?
	Permanent (no set termination date) Temporary (a set termination date)
9.	Is your current position full time or part time?
	☐ Full time (30 hours or more per week) ☐ Part time (less than 30 hours per week)
10.	How many weeks per year do you usually work at this position? (Please include paid vacation and other paid leave) weeks
11.	Not counting overtime, how many paid hours, on average, do you work per week at this position? hours
12.	In your current position, during the past year, how frequently have you worked overtime ? <i>(Mark only ONE)</i>
	Regularly Often Occasionally Rarely Never GO TO QUESTION 16
13.	How are you compensated for your overtime? (Mark ALL that apply)
	 □ Paid at straight time (at your regular rate of pay) □ Paid at overtime rate (at a higher rate of pay than your regular rate) □ Given time off at straight time (the amount of time off is the same as the number of extra hours worked)
	Given time off at overtime rate (the amount of time off is greater than the number of extra hours worked)
	☐ Informal arrangement ☐ Not compensated

14.	How many hours of paid overtime , on average, do you work per week?
	hours
15.	How many hours of unpaid overtime , on average, do you work per week?
	hours
16.	In your current position, what is your annual salary before taxes and other deductions? (Please DO NOT include bonuses or overtime.)
	□ Less than \$30,000 □ \$30,000 - \$34,999 □ \$35,000 - \$39,999 □ \$40,000 - \$44,999 □ \$45,000 - \$49,999 □ \$50,000 - \$54,999 □ \$55,000 - \$59,999 □ \$60,000 - \$64,999 □ \$65,000 - \$69,999 □ \$70,000 - \$74,999 □ \$75,000 - \$79,999 □ \$80,000 - \$84,999 □ \$85,000 - \$89,999 □ \$90,000 - \$94,999 □ \$95,000 - \$99,999 □ \$100,000 or more
17.	In the last 12 months, what were your estimated earnings from overtime payments for your current position?
	\$
18.	In the last 12 months, what were your estimated total earnings from shift premiums, commissions or piecework payments?
19.	Which of the following financial incentives does your employer provide to you? (Mark ALL that apply)
	Bonuses Profit-sharing Stock options Other, please specify None GO TO QUESTION 20 GO TO QUESTION 21
20.	In the last 12 months, what were your estimated total earnings from any bonuses, profit sharing or stock options?

1	provid	e to you? (Mark ALL that a	apply)		
[[[Life or disability insurance Medical or dental plan Pension plan (not includin Employment insurance su Other, please specify None	ng CPP/QPP or group lapplements for maternia	ity leave or layoffs	
		of the following other ben <i>ALL that apply)</i>	efits does your employ	yer provide to you?	
] [[[Recreation facilities Day care facilities Club memberships Flexible working hours Working from home (televother, please specify None	= :		
		you were originally hired basicion? (Mark only ONE)	by this company or org	ganization, how did you find	out abou
]] []		Directly recruited by empthelp wanted ad Personal initiative Word-of-mouth Informal networking University or college recruiting agency The company's (organizate Government employment Head-hunter or personnel Other, please specify	uitment tion's) Web site centres		
		liately before working at yo only ONE)	our current position, w	vere you mainly :	
25. 1	Did yo	working as a paid employ self-employed? going to school? unemployed? other? please specifyou work as a paid employee	}	GO TO QUESTION 27 GO TO QUESTION bloyed at any time prior to of	
3	your c	urrent position?			
			(GO TO QUESTION (GO TO QUESTION		

21. Which of the following non-salary benefits does your employer fully or partially pay for and

Your LAST position is the job you held b	before your current p	osition.	
months	OR	year	S
YOUR LAST TWO POSITIONS			
The next questions ask about your last two perfore your current position. Your SECON LAST position.			•
27. Which of the following occupations bes your last two positions ? (Mark only Of		Your LAST position	Your SECOND LAST position
If you perform more than one function, a occupation for which you spent the MOs hours should be assigned.			
IT Training manager			
Web manager			
Computer and information systems managed	ger		
Information systems business analyst or c	onsultant		
Systems security analyst			
Information systems quality assurance and	alyst		
Systems auditor			
Database administrator			
Data administration analyst			
Network systems and data communication	ns specialist		
Software engineer			
Computer engineer, except software			
Electrical and electronics engineer, excep	t computer engineer		
Computer programmer			
Interactive media developer			
Computer and network operator			
Web technician			
Technical support analyst			
Systems testing technician			
Technical writer			
Graphic designer or illustrating artist			
Other IT occupation, please specify			
Non-IT occupation, please specify			
Not applicable			
20 10 1 1 1 1 1 1 1 1 1 1	Your SECC	OND LAST position	
28. What was the title of each of your last two positions?	Your LAST position ☐ Not applicable		Not applicable

26. How much time was there between your LAST position and your CURRENT position?

29. What were the most important duties or activities of each of these positions? Not applicable
these positions?
30. Were each of these previous positions in Canada? Yes No No Not applicable Your LAST position Your SECOND LAST position Months OR OR
30. Were each of these previous positions in Canada? Yes No No Not applicable Your LAST position Your SECOND LAST position Months OR OR
30. Were each of these previous positions in Canada? Yes No No Not applicable Your LAST position Your SECOND LAST position Months OR OR
30. Were each of these previous positions in Canada? Yes No No Not applicable Your LAST position Your SECOND LAST position Months OR OR
30. Were each of these previous positions in Canada? Yes No No Not applicable Your LAST position Your SECOND LAST position Months OR OR
No N
Not applicable Not applicable Your LAST position Your SECOND LAST position Months OR OR OR
31. How long were you working in each of these positions? Your LAST position Your SECOND LAST position Months months
each of these positions? OR OR OR
each of these positions? OR OR OR
OR OR
Vacan
Years years
☐ Not applicable ☐ Not applicable
32. What was the main reason for leaving each of your Your LAST Position LAST position
previous positions? (Mark only ONE per column) position LAST position
Better salary, incentives or benefits
Better opportunities for career development or growth
More challenging or interesting projects
The opportunity to use leading-edge technology
Quality of management
Change of ownership
Better working hours
Wanted to change occupation
Better working environment
Leaving self-employment
Downsizing
Lay-off \Box
Other, please specify
Other, please speeny
Not applicable
33. Were you working at your SECOND LAST position immediately before your LAST
position?
☐ Yes GO TO QUESTION 35
☐ No GO TO QUESTION 34
☐ Not applicable GO TO QUESTION 35
34. How much time was there between your SECOND LAST position and your LAST position?
34. How much time was there between your SECOND LAST position and your LAST position?
months OR years

YOUR FIRST IT OCCUPATION

35.	5. Is your CURRENT position, your first IT position?					
	☐ Ye	· · · · · · · · · · · · · · · · · · ·				
36.	Was ye	our first IT position:				
	you	ur LAST position? Ur SECOND LAST position? GO TO QUESTION 38 Or to your SECOND LAST position? GO TO QUESTION 37				
37.		of the following occupations best describes your first IT position ? <i>only ONE</i>)				
		performed more than one function, then the occupation for which you spent the MOST of hours should be assigned.				
		Web manager Computer and information systems manager Information systems business analyst or consultant Systems security analyst Information systems quality assurance analyst Systems auditor Database administrator Data administration analyst Network systems and data communications specialist Software engineer Computer engineer, except software Electrical and electronics engineer, except computer engineer Computer programmer Interactive media developer Computer and network operator Web technician Technical support analyst Systems testing technician Technical writer Graphic designer or illustrating artist Other, please specify				
38.	Was y	our first IT position your first job after completing your education?				
		Yes No				
39.		lid you get your first IT position? ALL that apply)				
		You were a co-op student You were recruited out of college or university You applied for the position You were transferred from within the company or organization Other, please specify				

SECTION B EDUCATION

The following questions ask about your educational background.

W	that is the highest level of education that you have comple <i>Mark only ONE</i>)		vate training institute,
	Below the high school or secondary school level Some high school or secondary school education A high school or secondary school diploma Some community college or CEGEP education A community college or CEGEP diploma or certificate Some university education A university certificate, diploma or degree Other, please specify	}	TO QUESTION 52 GO TO QUESTION 46 TO QUESTION 41
UNIV	VERSITY EDUCATION		
	Which of the following university certificates, diplomas or of Mark ALL that apply)	degrees	have you received?
	University certificate or diploma (below the Bachelor's Bachelor's degree Master's degree Earned Doctorate (Ph.D., D.Sc.or D.Ed.) or Degree in remedicine or optometry (M.D., D.D.S., D.M.D., D.V.M., No certificate, diploma or degree	nedicino	e, dentistry, veterinary
42. W	Vere you enrolled in a university co-op program?		
_	Yes No		

43. What was (were) your main field(s) of study for each of these university levels, whether you graduated or not ? (Mark ALL that apply)	University Program Below the Bachelor's Level	Bachelor's Level	Master's Level	Doctorate Level
Arts, Education, Humanities or Social Sciences				
Business, Commerce, Management and Administrative Studies			□ MBA □ Other	٥
Computer Science				
Engineering				
Computer Engineering				
Systems Engineering				
Electrical or Electronic Engineering				
Other Engineering, please specify				
Health and Natural Sciences				
Mathematics and Pure and Applied Sciences (except Computer Science)				
Other, please specify				
	University Program Below the Bachelor's Level	Bachelor's Level	Master's Level	Doctorate Level
44. How long ago did you receive this university education?	months ORyears	months ORyears	months ORyears	months ORyears
45. Where did you receive this university education? (Mark ALL that apply)	University Program Below the Bachelor's Level	Bachelor's Level	Master's Level	Doctorate Level
In Canada				
Outside Canada				

COMMUNITY COLLEGE OR CEGEP EDUCATION (excluding private business schools and other private training institutes)

46. Ha	ve you received:				
	a community college or CEGl some community college or C no community college or CEG	EGEP educat	tion?	GO TO	GO TO QUESTION 47 O QUESTION 52
	w long was the college or CEGE (ark only ONE)	EP program th	at you were en	nrolled	in?
	1 year				
48. W	ere you enrolled in a co-op progr	am during yo	ur community	college	e or CEGEP education?
	Yes No				
	nat was (were) your main field(s fark ALL that apply)) of study at c	ommunity col	lege or	CEGEP?
	Arts, Humanities and Social Business and Commerce Computer Science	Engineering anology		and Eng	gineering)
50. Ho	w long ago did you receive this	community co	ollege or CEG	EP edu	cation?
	months nere did you receive this communark ALL that apply) In Canada Outside Canada	OR nity college o	r CEGEP educ	eation?	years
	ATE BUSINESS SCHOOL AN	D OTHER I	PRIVATE TR	AININ	NG INSTITUTE
	ve you earned a certificate or dipining institute? (Please include		-		ol or other private
_		QUESTION 5 QUESTION 5			

53.	other p	rivate trai	d you receive ning institute eived more tha)	•	•		he most recent.)
			months	OR		yea	ars	
54.	Were y institut		ed in a co-op p	orogram in t	his private bus	siness scho	ol or other	private training
		Yes No						
55.		did you r ALL that	eceive this cerapply)	tificate or di	ploma?			
		In Canad Outside (
CE	RTIFI	CATION	S AND PRO	FESSIONA	L DESIGNA	TIONS		
56.	Which	of the fol	lowing certific	cations do yo	ou have? (Mar	·k ALL that	t apply)	
		Certified Certified Cisco Ce Microsof Microsof	Lotus Profess Novell Admir Novell Engin ertified Network Certified Syst Certified Profit Certified Syst ease specify	nistrator (CNeer (CNE) ck Administratems Engin ofessional (Nestems Devel	rator (CCNA) eer (MCSE) MCP) oper (MCSD)			
57.		of the fol ALL that	lowing profes apply)	sional crede	ntials or desig	nations do	you have?	
		Certified Certified Certified Engineer Informat Profession Registere Technolo	Engineering Technician (Coronal Engineering Tomal Engineering Toma	Technician (Fechnologist C Tech) Training (For Tech) Training (For Technologist C Technologist	CET) t (CET) EIT, MIT) (ISP)) ist (RET) Quebec only)			

SECTION C TRAINING

The following are questions about the training that you have received in the last 12 months.

FORMAL TRAINING

For the purpose of this survey, FORMAL TRAINING is intended to develop an employee's skills or knowledge through a structured format, whether it takes place inside or outside the company's (organization's) location. It EXCLUDES computer-based training and on-line courses.

58.		last 12 mor employed?	ths, did you receive any formal training related to your position while
		Yes	GO TO QUESTION 59
		No	GO TO QUESTION 63
		110	GO TO QUESTION US
59.	In the	past 12 mo	nths, how many days of formal training did you receive?
		days	
60.		h of the follow ALL that a	owing types of formal training did you receive within the last 12 months? <i>oply</i>)
		_	ent training
			oftware training
			ns software training
			unication or computer network training
		_	language and/or programming training
		-	hardware training
			cation or interpersonal skills training
	_	Otner tran	ning, please specify
61.		e was this fo ALL that a	rmal training given? oply)
		In Canada Outside C	anada
62.		paid for this	formal training? oply)
		You	
		Your emp	over
		-	rganization
			ase specify
		7 1	
IN	FORM	IAL OR O	N-THE-JOB TRAINING
doi on-	ing the the-joi	job and car b training d	is survey, INFORMAL or ON-THE-JOB training is acquired as part of provide the employee with information, skills and attitudes. Informal or ses not use a structured format, rather it may involve attending ag, self-study, networking and computer-based or on-line training.
63.	In the	past 12 mo	nths, have you had any informal or on-the-job training?
		Yes	GO TO QUESTION 64
		No	GO TO QUESTION 65

64. What methods of informal or on-the-job to (Mark ALL that apply)	raining did yo	u use in the la	ast 12 months?	?			
Networking with colleagues or men Computer-based training or on-line Self-study Conferences, seminars or informal p Other, please specify	courses						
SECTION D SKILLS							
The following questions ask about the skills you current level of ability.	u need for you	r CURRENT	POSITION ar	ıd your			
65. How did you acquire the IT skills that are n (Mark ALL that apply)	needed for you	r current po	sition?				
□ Employer-paid formal training □ Self-paid formal training □ On-the-job or informal training (co- □ Private business school or training i □ Community college or university □ Other, please specify	Employer-paid formal training Self-paid formal training On-the-job or informal training (co-workers, supervisors, resource people, friends) Private business school or training institute Community college or university Other, please specify Other, please specify How important are each of the following IT skills for your current position?						
	Level of importance for your CURRENT POSITION						
	,		I POSITION				
	Very Important	Somewhat	Less	Not Required			
Analytical skills	Very Important	•		Not Required			
Analytical skills Design skills	Important	Somewhat Important	Less Important	Required			
•	Important	Somewhat Important	Less Important	Required			
Design skills	Important	Somewhat Important	Less Important	Required			
Design skills Programming skills	Important	Somewhat Important	Less Important	Required			
Design skills Programming skills Maintenance skills	Important	Somewhat Important	Less Important	Required			
Design skills Programming skills Maintenance skills Documentation (technical writing) skills	Important	Somewhat Important	Less Important	Required □ □ □			
Design skills Programming skills Maintenance skills Documentation (technical writing) skills Quality assurance (validation, release) skills	Important O O O O O O O O O O O O O O O O O O	Somewhat Important	Less Important	Required			
Design skills Programming skills Maintenance skills Documentation (technical writing) skills Quality assurance (validation, release) skills System operation skills	Important O O O O O O O O O O O O O O O O O O	Somewhat Important	Less Important	Required □ □ □ □ □ □ □ □ □ □ □ □ □			
Design skills Programming skills Maintenance skills Documentation (technical writing) skills Quality assurance (validation, release) skills System operation skills System administration skills	Important O O O O O O O O O O O O O O O O O O	Somewhat Important	Less Important	Required			
Design skills Programming skills Maintenance skills Documentation (technical writing) skills Quality assurance (validation, release) skills System operation skills System administration skills Technical support skills	Important O O O O O O O O O O O O O O O O O O	Somewhat Important	Less Important	Required			
Design skills Programming skills Maintenance skills Documentation (technical writing) skills Quality assurance (validation, release) skills System operation skills System administration skills Technical support skills Sales and marketing skills	Important O O O O O O O O O O O O O O O O O O	Somewhat Important	Less Important	Required			
Design skills Programming skills Maintenance skills Documentation (technical writing) skills Quality assurance (validation, release) skills System operation skills System administration skills Technical support skills Sales and marketing skills Testing skills	Important O O O O O O O O O O O O O O O O O O	Somewhat Important	Less Important	Required			

67. Please indicate your **current level of ability** for each of the following IT skills. *(Mark only ONE per row)*

	Your current level of ability				
	Very Good	Good	Fair	Poor	Not Applicable
Analytical skills					
Design skills					
Programming skills					
Maintenance skills					
Documentation (technical writing) skills					
Quality assurance (validation, release) skills					
System operation skills					
System administration skills					
Technical support skills					
Sales and marketing skills					
Testing skills					
Training skills					
Client support skills					
Other IT skills, please specify					
88. For your current position, in which of the factorial (Mark ALL that apply) Database Web, Internet, Intranet Software Hardware Hardware Network (excluding Web) Systems (excluding systems security) Systems Security E-commerce Multimedia (interactive and animated) Other, please specify	following a	areas do y	ou work?		

69. How important are each of the following business or management skills for your **current position**? (Mark only ONE per row)

	your CURRENT POSITION					
	Very Important	Somewhat Important	Less Important	Not Required		
Financial management skills						
People management skills						
Time management skills						
Planning skills						
Project management skills						
Client/vendor relations						
E-business skills						
Product release skills						
Negotiation skills						
Cost estimation skills						

70. Please indicate your **current level of ability** for each of the following business or management skills. (Mark only ONE per row)

	Your current level of ability				
	Very Good	Good	Fair	Poor	Not applicable
Financial management skills					
People management skills					
Time management skills					
Planning skills					
Project management skills					
Client/vendor relations					
E-business skills					
Product release skills					
Negotiation skills					
Cost estimation skills					

	Level of importance for your CURRENT POSITION				
	Very Important		ewhat ortant	Less Important	Not Required
Written communication skills					
Oral communication skills)	<u> </u>	
Team work skills)		
Leadership skills			1		
Presentation skills			1		
72. Please indicate your current level o skills. <i>(Mark only ONE per row)</i>	f ability for				-
		Your c	urrent ie	evel of ability	
	Very Good	Good	Fair	Poor	Not applicable
Written communication skills					
Oral communication skills					
Team work skills					
Leadership skills					
Presentation skills					
SECTION E The next few questions ask for basic den 73. What is your age? Under 20 years 20 to 24 years 25 to 29 years 30 to 34 years 35 to 39 years 40 to 49 years 50 to 59 years 60 years and over 74. What is your gender? Male Female				ATION	

71. How important are each of the following personal/interpersonal skills for your **current position**? *(Mark only ONE per row)*

75. Aı	re you an Aboriginal pe	erson (that is, North America	in Indian/First Nations, Métis, Inuit)?				
	Yes No						
76. Aı	re you a person with a c	lisability?					
"Persons with disabilities" includes people who have a long-term or recurring phy mental, sensory, psychiatric or learning impairment and who consider themselves disadvantaged in employment by reason of that impairment, or believe that an emp potential employer is likely to consider them to be disadvantaged in employment by that impairment, and includes persons whose functional limitations owing to their impairment have been accommodated in their current job or workplace.							
_	Yes No						
SEC	CTION F	DATA-SHARING	AGREEMENT				
da De	nta-sharing agreement u evelopment Canada. A	nder Section 12 of the Statis	g, Statistics Canada has entered into a tics Act with Human Resources tept strictly confidential by Human attistical purposes.				
Do	Do you agree to share the information you have provided?						
	Yes No						
SEC	CTION G	RESPONDENT IN	FORMATION				
C ON	TACT PERSON:						
This is	nformation will only be	used if we need to clarify th	e information that you have provided.				
Name	e of person completing t	his questionnaire:					
First 1	Name:	Last Name:					
			Extension:				
E-mai	il:						
СОМ	IMENTS:						

Thank you for your participation.