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# Information and Communication Technologies (ICT)

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## Statistical Review 1990 - 1996

1997/1998 Edition

Spectrum, Information Technologies and Telecommunications Sector

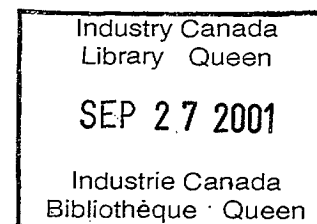
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Industry Canada

# INFORMATION AND COMMUNICATION TECHNOLOGIES STATISTICAL REVIEW: 1990 - 1996

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based on work carried out under the auspices of  
*Industry Canada,*  
*Canadian Radio-television and Telecommunications Commission (CRTC)*  
*and Statistics Canada*



An electronic version of this and other related documents can be found  
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## Note to Readers

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### Progress in measuring the ICT Sector

Industry Canada is pleased to provide the 1996 statistics for the Information and Communication Technologies (ICT) manufacturing and services sectors.

Industry Canada is working closely with Statistics Canada, other federal departments, industry associations, the industry itself, and with international organizations such as the OECD, to develop and improve statistics for the ICT sector and our understanding of the knowledge-based economy. Progress has been achieved over the last five years through agreements with Statistics Canada to revise current surveys and data sources associated with ICT and to introduce new surveys. This is also in keeping with the recommendations by the Information Highway Advisory Council. The definition of the ICT sector will continue to evolve as the 1997 North American Industrial Classification System (NAICS) is implemented. For this publication no significant differences have been incorporated in comparison to last year's edition.

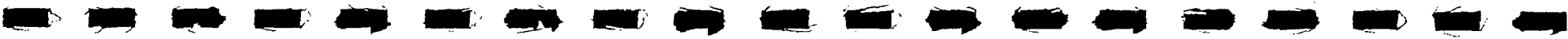
The reader will note that the summary charts for the ICT sector and data are organized into the **ICT manufacturing sector** which includes consumer electronics, communications and other electronic components, computer equipment, and instrumentation; and the **ICT services sector** consisting of software and computer services, telecommunications, and broadcasting.

### Caution

This publication includes revisions to earlier years' data published in the previous edition as reported by Statistics Canada. In addition, this publication, as in previous editions, provides estimates by Industry Canada. These estimates are underlined in the document. Please see sources and technical notes for further details.

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# Highlights



## HIGHLIGHTS

CANADA'S INFORMATION AND COMMUNICATION TECHNOLOGIES SECTOR - 1996  
SIGNIFICANT ACHIEVEMENTS

## Sector Definition

The Information and Communication Technologies (ICT) Sector comprises the following:

**ICT Manufacturing**

consumer electronics  
communications and other electronic components  
computer equipment  
instrumentation

**ICT Services**

software and computer services  
telecommunications  
broadcasting

Canada's Information and Communication Technologies sector continued to surge in 1996, although the growth is lower than 1995, most industries showed substantial increases. The highlights between 1995 and 1996 are:

The creation of more than **7,800 new jobs** for Canadians

A **6% increase** in ICT revenues to \$69.6 billion

A 4.8% increase in ICT's contribution to GDP - ICT accounted for **7.2% of total Canadian GDP** in 1996

A 5% increase in ICT research and development - **ICT R&D accounts for 37% of total Canadian private sector R&D**

A **6% increase in ICT manufacturing exports**, bringing the total to \$20.7 billion and 7.5% of total Canadian manufacturing exports

## Highlights

### Revenues

- ICT revenues reached \$69.6 billion in 1996, an increase of 6% from 1995.
- Services accounted for 63% of all ICT revenues, with telecommunications services making up 32% of total revenues and software and computer services another 22% in 1996.
- Revenues of the entire ICT sector have grown at a compound annual growth rate (CAGR) of 8.7% for the 1990-1996 period.
- Revenues for the electronic parts and components industry and the telecommunication equipment industry showed the strongest CAGR's over the 1990-1996 period at 27.7% and 15.4% respectively.
- Between 1995 and 1996, while most industries showed increases in their revenues, the computer equipment industry's revenues decreased by \$2.1 billion to \$5.5 billion, just below the 1994 level. This decrease in revenues is likely due to downward pressures on prices coupled with a more moderate growth in demand.

### Employment

- Total employment in the ICT sector was 417,975 in 1996, a net increase of 7,866 or nearly 2% from the previous year (compared to a 1.3% increase in total Canadian employment).
- ICT services industries employed 322,500 (77.2%) of the total ICT sector in 1996.
- Employment in the ICT sector has grown at a CAGR of 2.5% over the 1990-1996 period compared to 0.6% in the Canadian economy.
- Between 1995 and 1996, the largest increase in employment was in the software and computer services industry with nearly 14,000 new jobs\*, representing a rise of 11.3%.
- Employment in the telecommunications carriers industry dropped by 15,800 (a decline of 10.9% from 1995). This decrease was due in part to the industry's preparation for increased competition and the initial move to price cap regulation.

\* Includes full-time, part-time employees and self employed, as per the Labour Force Survey of Statistics Canada.

### Contribution to GDP

- The ICT sector accounted for 7.2% of Canada's entire GDP for 1996, this is up from 5.0% in 1990.
- The contribution to Canadian GDP by the ICT sector in 1996 was \$39.5 billion (in 1986 constant dollars). This represents a 4.8% increase from 1995 compared to a 1.7% increase for total Canadian GDP over the same period.
- With a GDP of \$19.7 billion (\$ of 1986), the telecommunications carriers industry accounted for 50% of the sector's GDP contribution.
- Between 1990 and 1996, GDP in the ICT sector has grown at a CAGR of 7.6% compared to 1.5% for the Canadian economy.

### Research and Development

- The ICT sector is one of the largest R&D performers in the Canadian economy. In 1996, total R&D expenditures in the ICT sector were \$3 billion (an increase of 5% from 1995). This represents more than 37% of total Canadian private sector R&D.
- With total R&D expenditures close to \$1.5 billion in 1996, the telecommunication equipment industry accounted for 48.6% of total R&D expenditures in the ICT sector and 18% of total Canadian private sector R&D.
- From 1990 to 1996, R&D expenditures in the ICT sector have grown at a CAGR of 8.2% compared to 7.7% in the Canadian economy.

### ICT Manufacturing Trade

- Total ICT manufacturing exports were up 6% in 1996 reaching some \$20.7 billion -- this represents 7.5% of total Canadian manufacturing exports.
- Despite a \$1.1 billion (13.5%) decrease in total exports from the previous year, the computer equipment industry continued to represent the largest proportion (32.4%) of ICT manufacturing exports with \$6.7 billion in 1996. Total exports of telecommunications equipment as well as electronic parts and components were both up by more than 20%.
- Telecommunications equipment still remains the only industry consistently running a trade surplus over the 1990-1996 period.
- ICT manufacturing imports reached \$36.5 billion in 1996 (a small increase of 2.6% from 1995). ICT manufacturing imports represented 15.6% of total Canadian manufacturing imports in 1996.
- Imports of electronic parts and components represented nearly 37% (\$13.4 billion) of total ICT manufacturing imports in 1996. Semiconductors accounted for 61% (\$8.2 billion) of these imports.



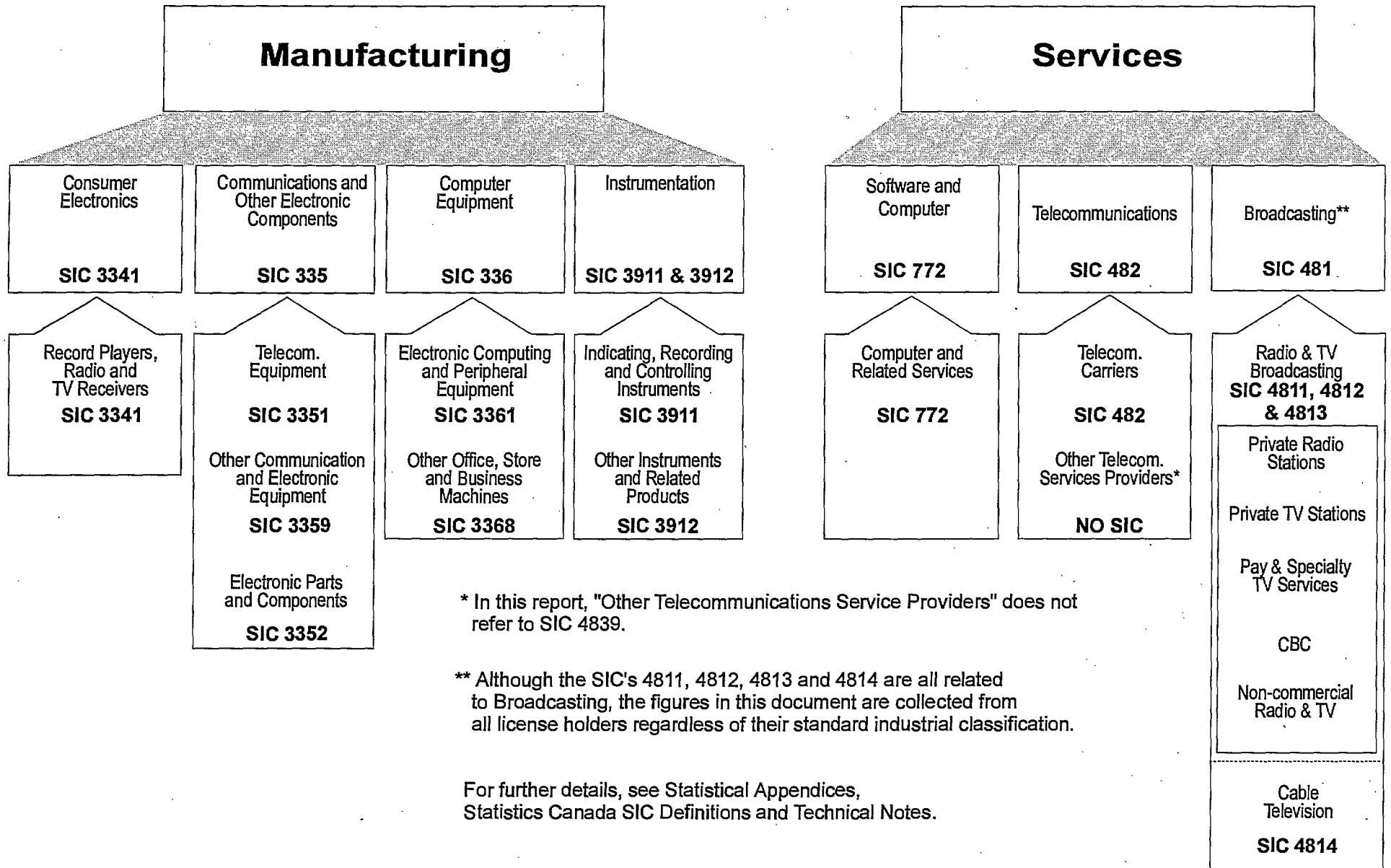


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# Section 1 Legend

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# Information and Communication Technologies Legend



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## **Section 2**

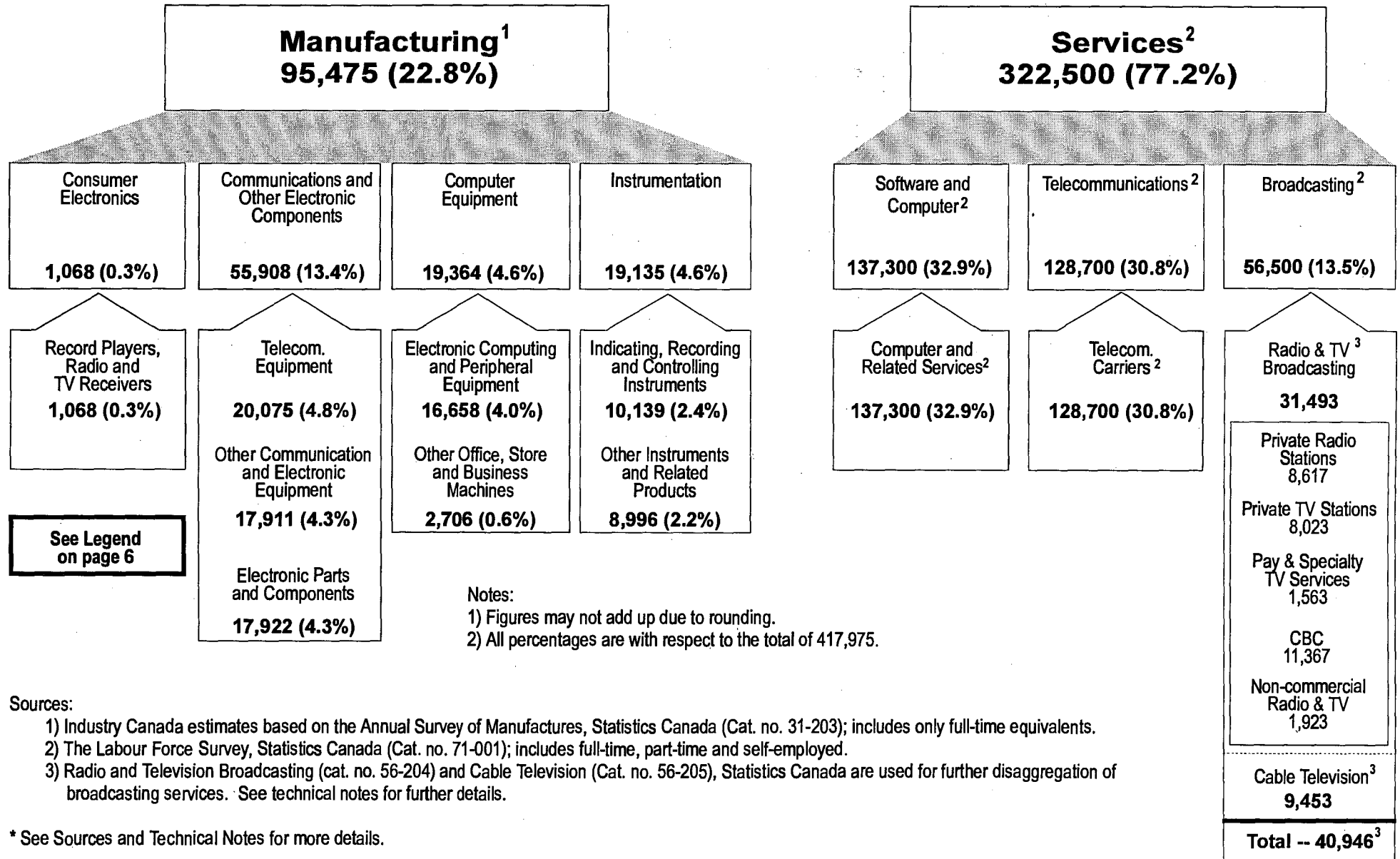
# **ICT Sector: 1996 at a Glance**

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# Information and Communication Technologies

## Figure 1 - Total Employment: 1996

### 417,975\*



## Sources:

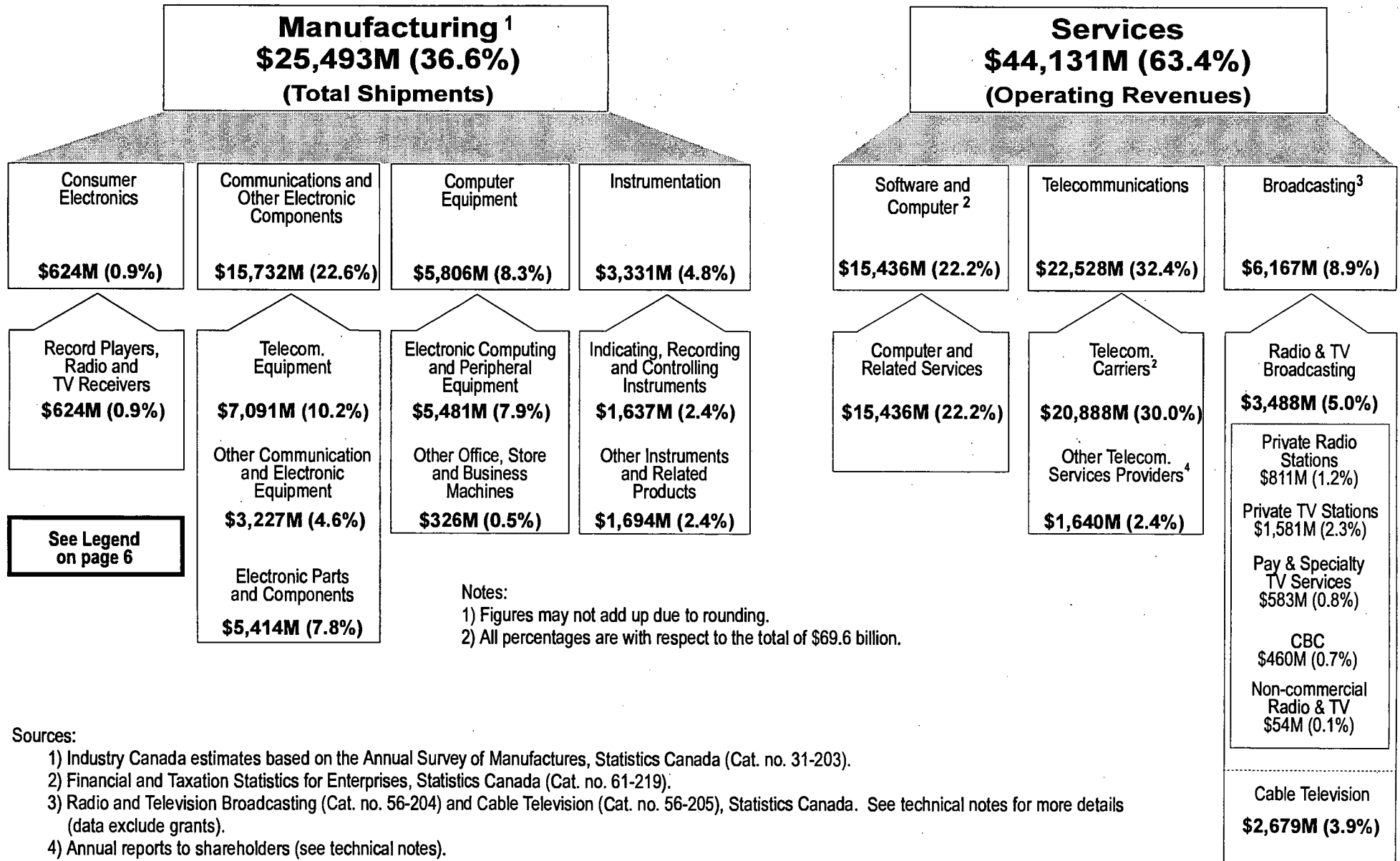
- 1) Industry Canada estimates based on the Annual Survey of Manufactures, Statistics Canada (Cat. no. 31-203); includes only full-time equivalents.
- 2) The Labour Force Survey, Statistics Canada (Cat. no. 71-001); includes full-time, part-time and self-employed.
- 3) Radio and Television Broadcasting (cat. no. 56-204) and Cable Television (Cat. no. 56-205), Statistics Canada are used for further disaggregation of broadcasting services. See technical notes for further details.

\* See Sources and Technical Notes for more details.

# Information and Communication Technologies

## Figure 2 - Total Revenues: 1996

### \$69.6 billion



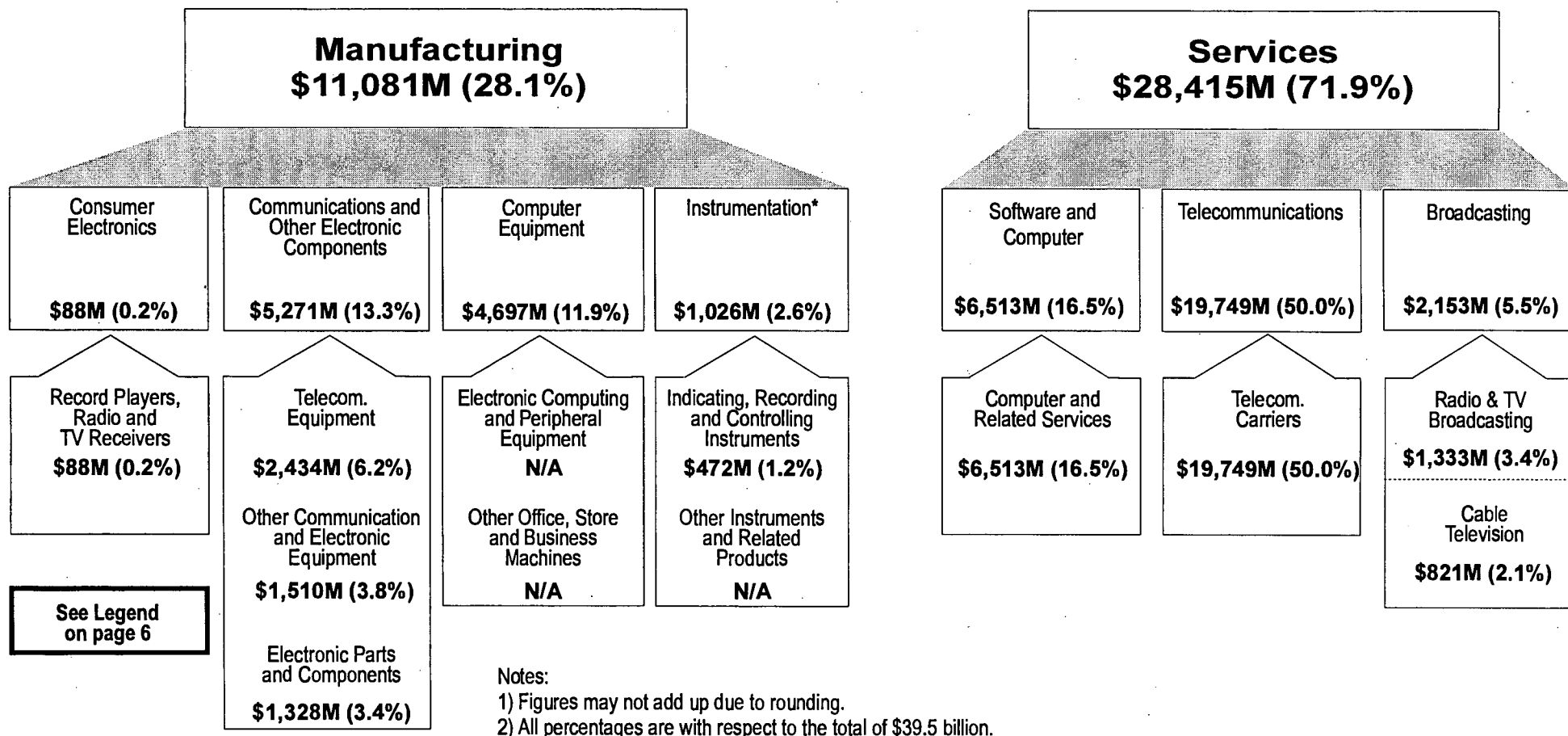
Sources:

- 1) Industry Canada estimates based on the Annual Survey of Manufactures, Statistics Canada (Cat. no. 31-203).
- 2) Financial and Taxation Statistics for Enterprises, Statistics Canada (Cat. no. 61-219).
- 3) Radio and Television Broadcasting (Cat. no. 56-204) and Cable Television (Cat. no. 56-205), Statistics Canada. See technical notes for more details (data exclude grants).
- 4) Annual reports to shareholders (see technical notes).

# Information and Communication Technologies

## Figure 3 - Total GDP: 1996

### \$39.5 billion (in 1986 dollars)



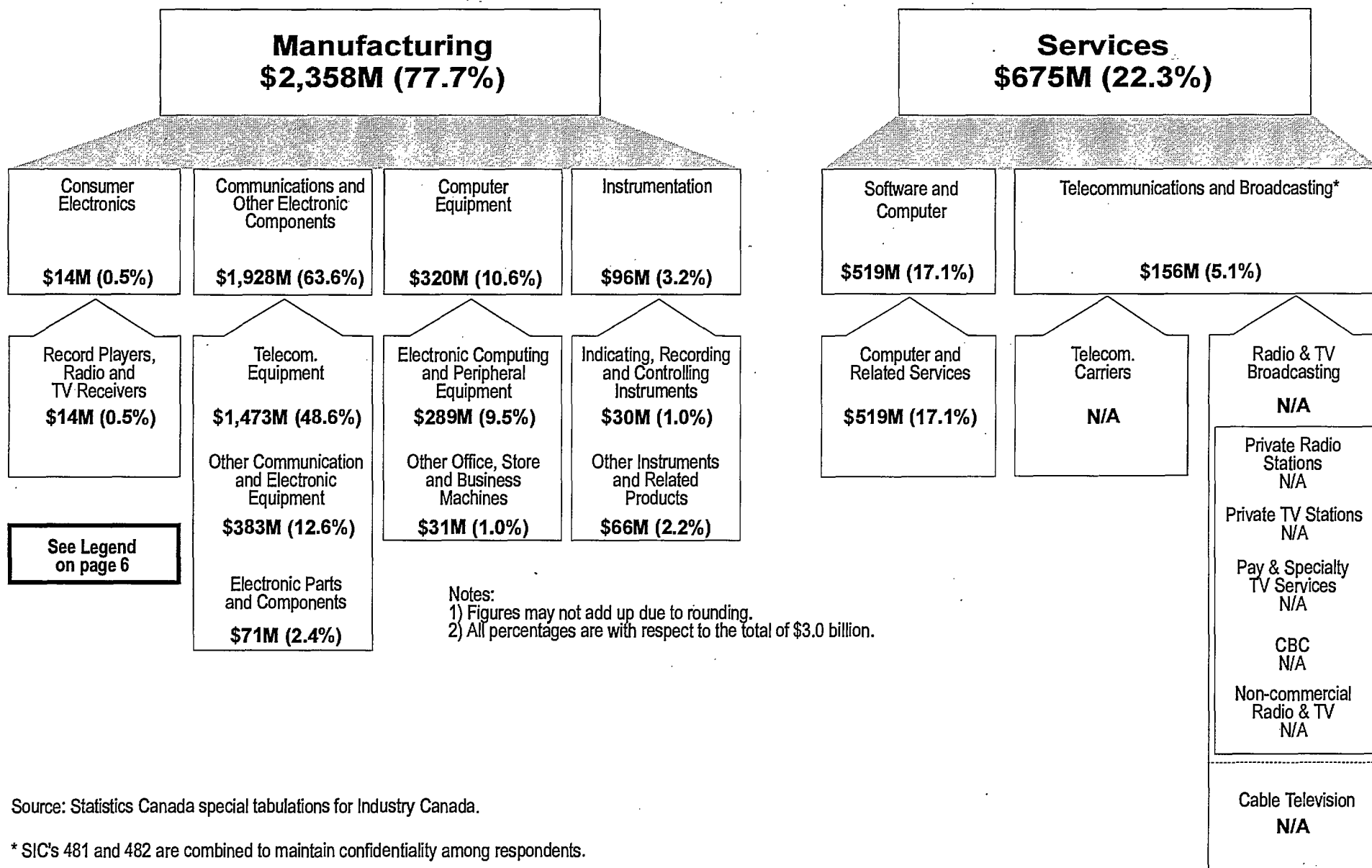
Source: Gross Domestic Product by Industry, Statistics Canada (Cat. no. 15-001).

\* Somewhat overstated due to the inclusion of SIC 3913 and 3914 (see Sources and Technical notes for more details).

# Information and Communication Technologies

## Figure 4 - Total R&D Expenditures: 1996

### \$3.0 billion



Source: Statistics Canada special tabulations for Industry Canada.

\* SIC's 481 and 482 are combined to maintain confidentiality among respondents.





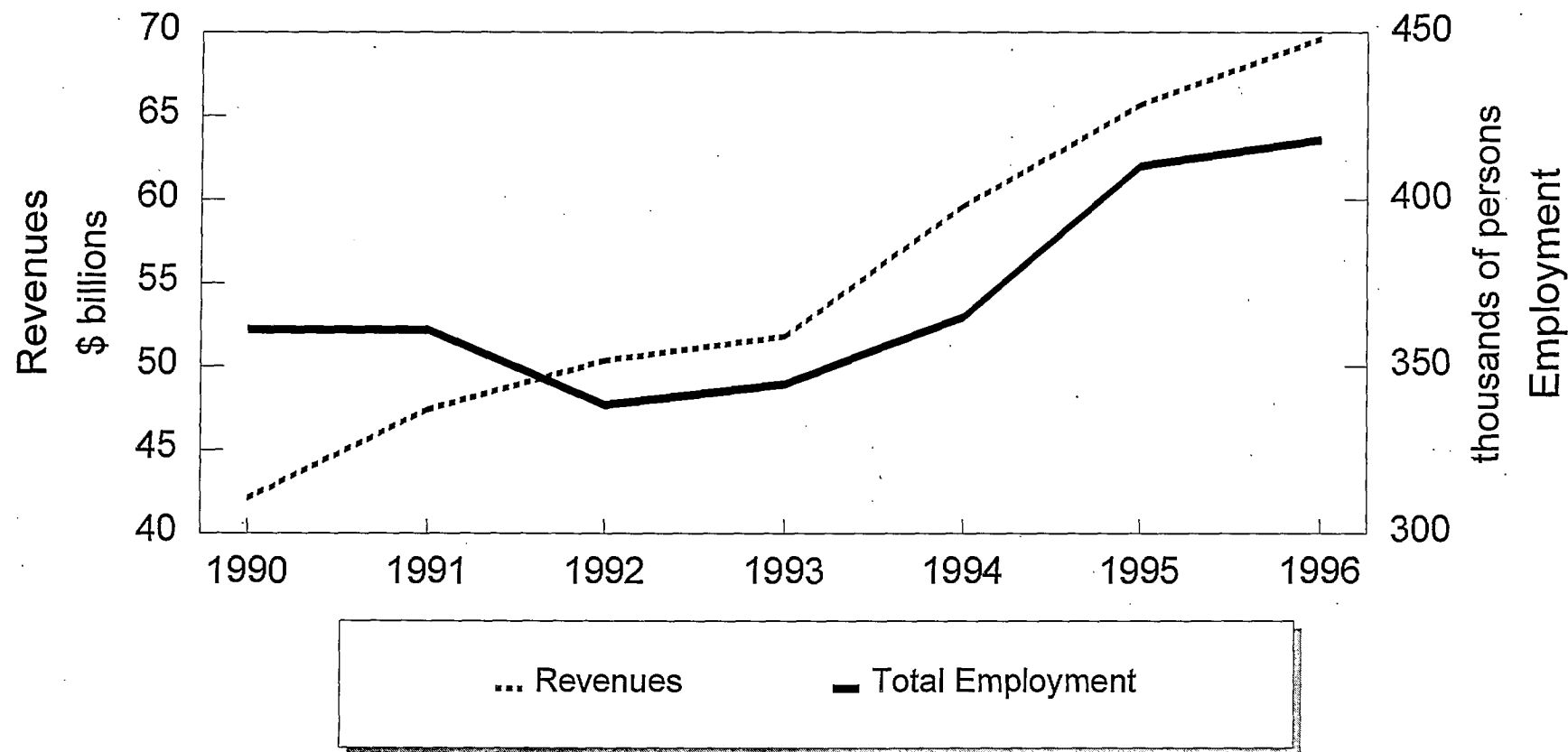
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**Section 3**  
**Trends in the ICT Sector:**  
**1990 - 1996**

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Figure 5

## Total ICT Sector: 1990 - 1996 (Manufacturing and Services) Revenues and Employment



## Sources:

Annual Survey of Manufactures, Statistics Canada (Cat. no. 31-203) with 1996 estimates by Industry Canada for both employment and revenues.

The Labour Force Survey, Statistics Canada (Cat. no. 71-001).

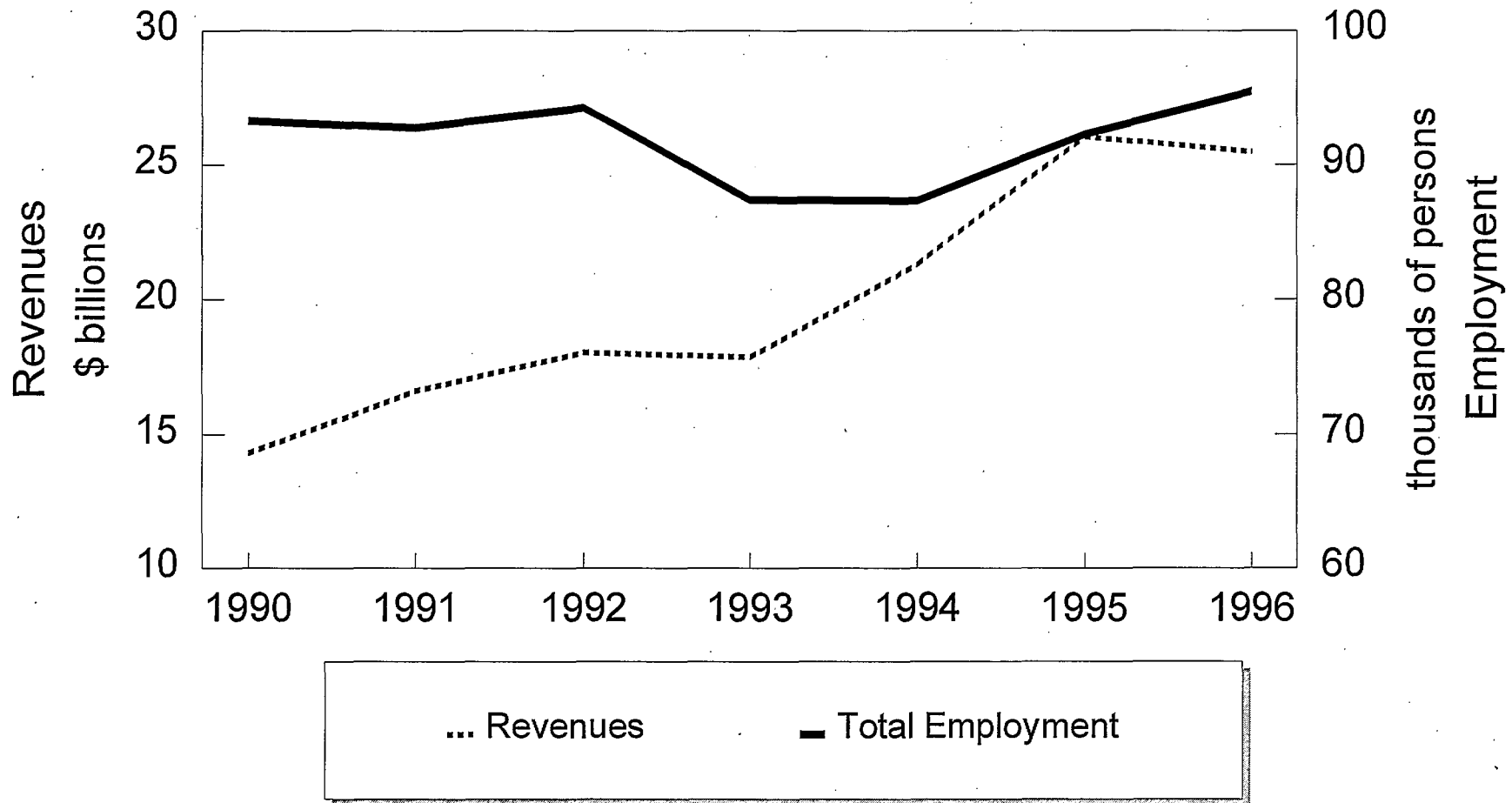
Financial and Taxation Statistics for Enterprises, Statistics Canada (Cat. no. 61-219).

Radio and Television Broadcasting, (Cat. no. 56-204), Cable Television, (Cat. no. 56-205), Statistics Canada.

Industry Canada estimates for Other Telecommunications Services Providers revenues.

Figure 6

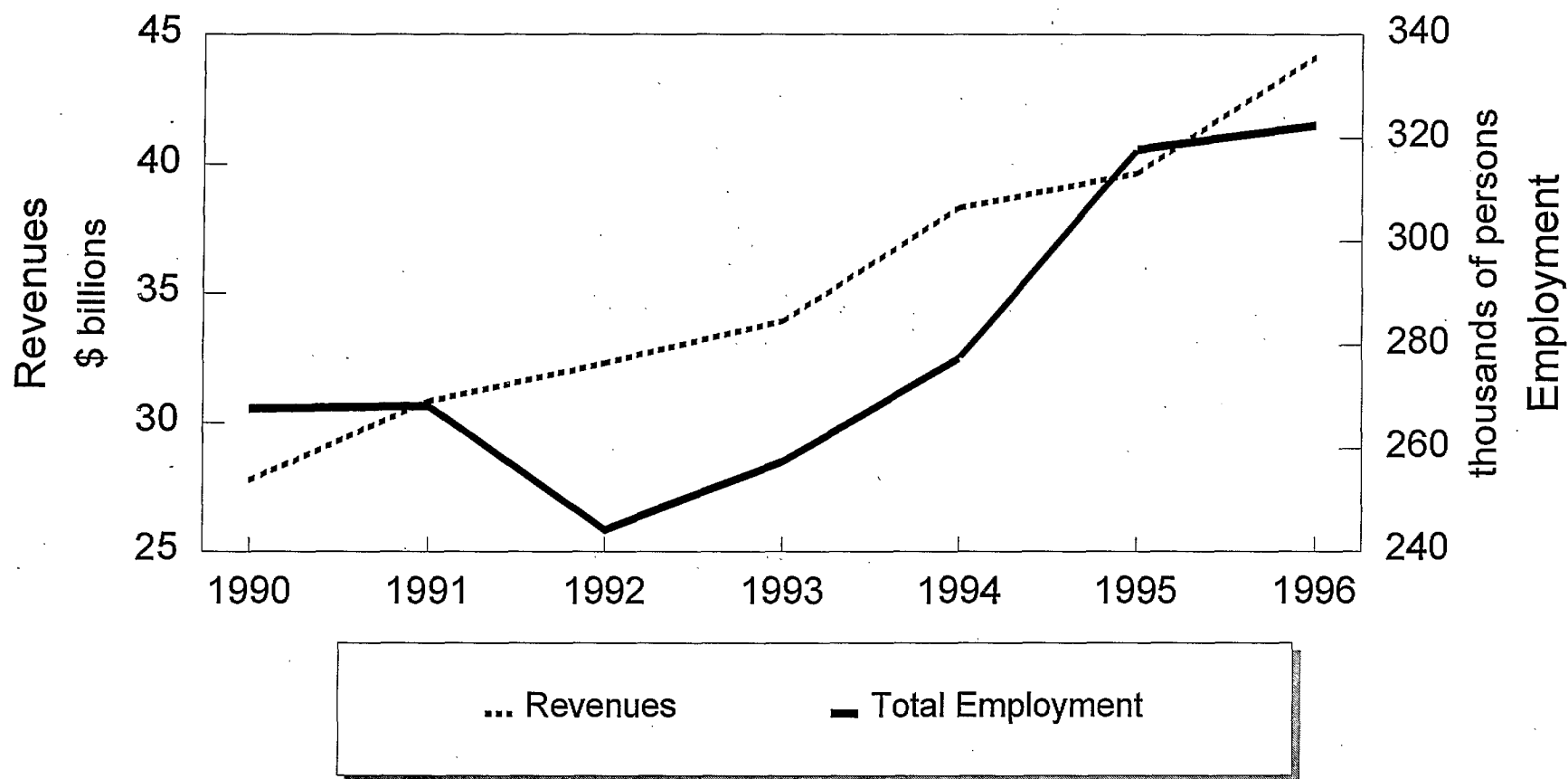
# ICT Manufacturing: 1990 - 1996 Revenues and Employment



Source: Annual Survey of Manufactures, Statistics Canada (Cat. no. 31-203) with 1996 estimates by Industry Canada.

Figure 7

## ICT Services: 1990 - 1996 Revenues and Employment



## Sources:

The Labour Force Survey, Statistics Canada (Cat. no. 71-001).

Financial and Taxation Statistics for Enterprises, Statistics Canada (Cat. no. 61-219).

Radio and Television Broadcasting, (Cat. no. 56-204), Cable Television, (Cat. no. 56-205), Statistics Canada.

Industry Canada estimates for Other Telecommunications Services Providers revenues.

# ICT Manufacturing and Services

## Figure 8 - Revenues and Employment Shares 1990, 1996

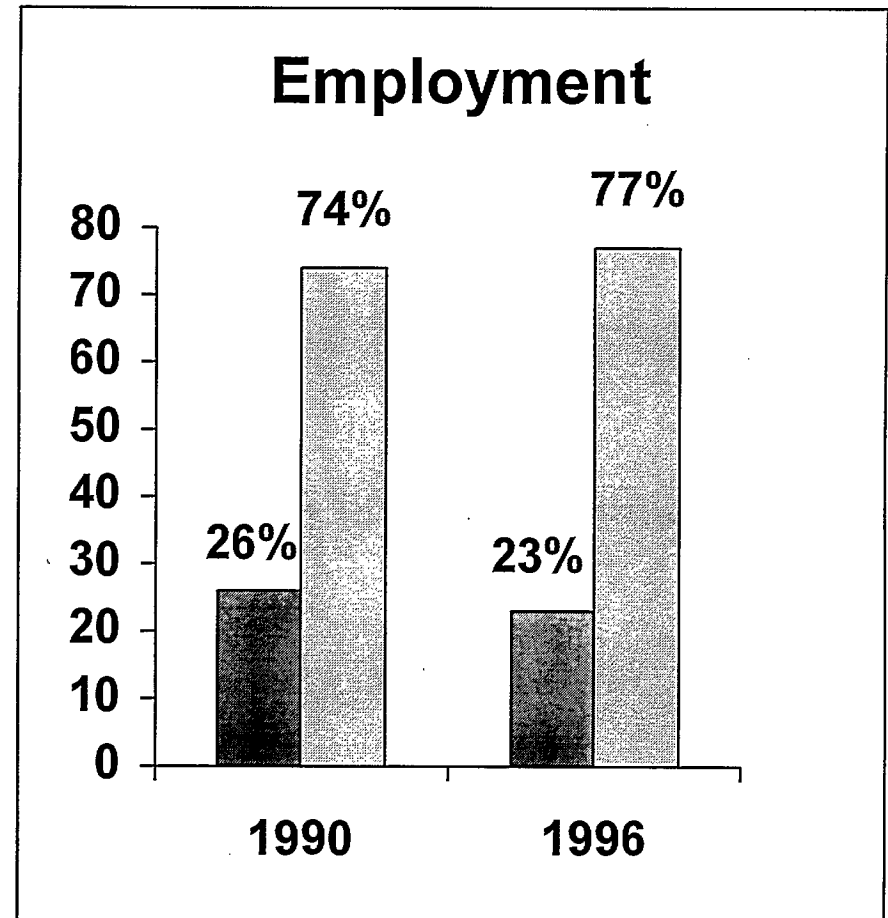
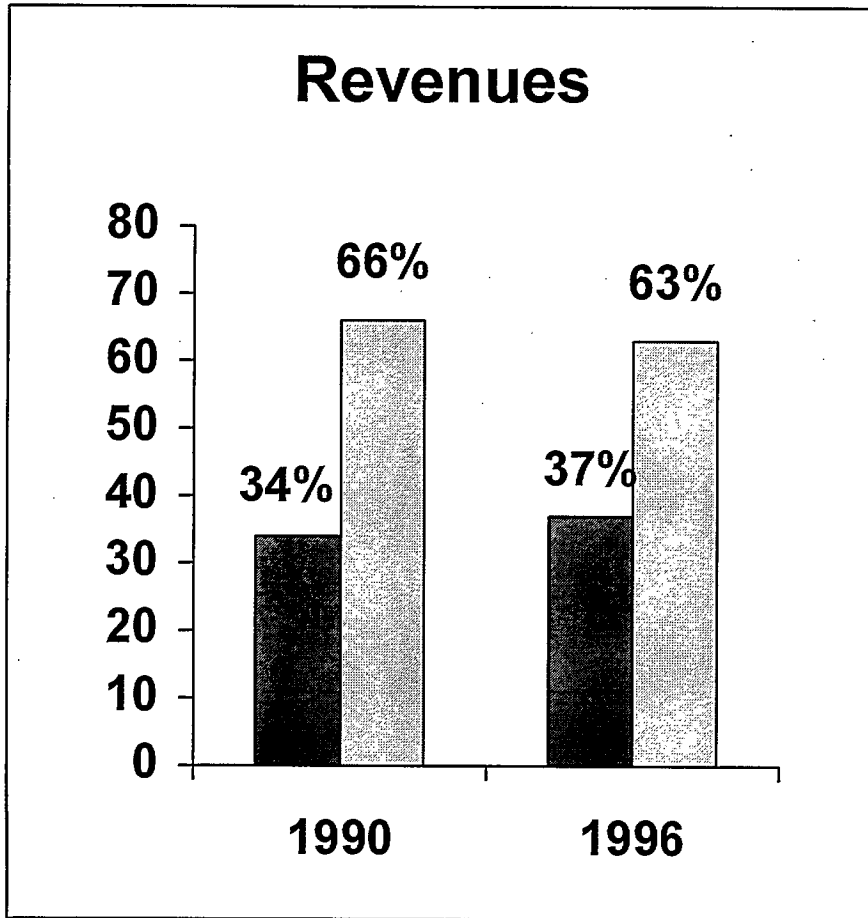
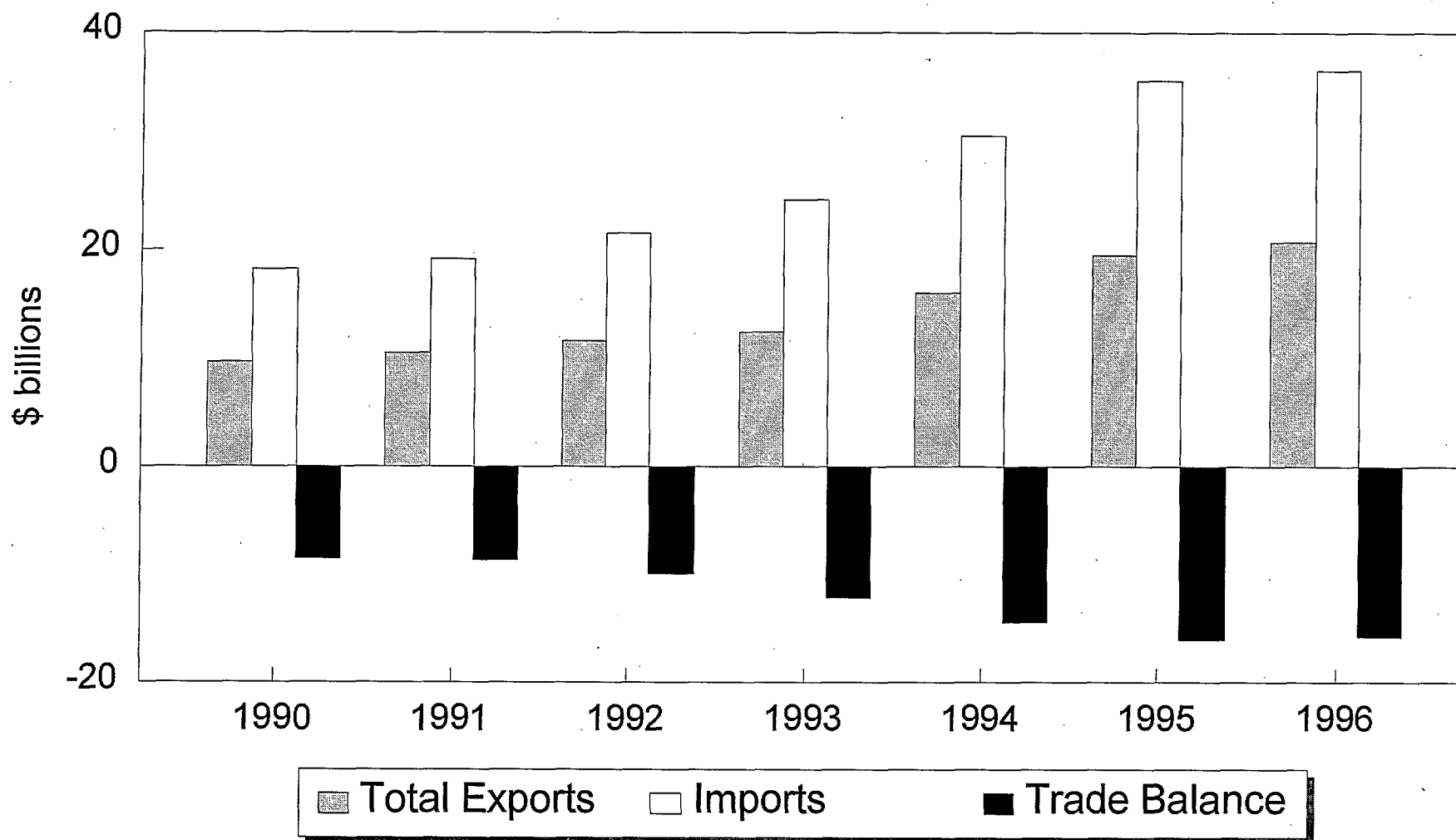


Figure 9

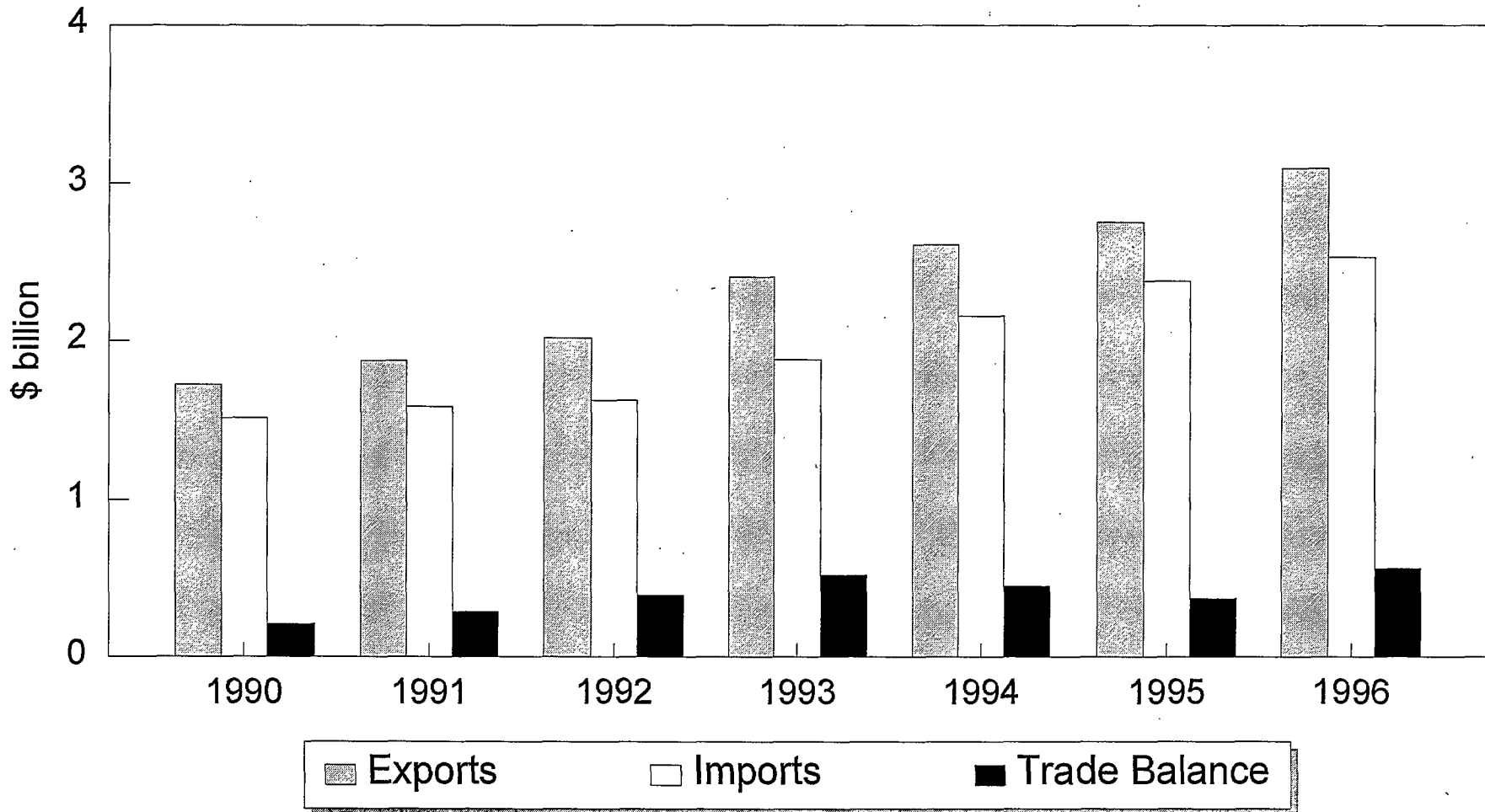
## ICT Manufacturing: 1990 - 1996 Total Exports, Imports and Trade Balance



Source: Trade Information Enquiry Retrieval System, International Trade Division, Statistics Canada.

Figure 10

## ICT Services: 1990 - 1996 Exports, Imports and Trade Balance



Source: Canada's International Transactions in Services (Cat. no. 67-203), Statistics Canada.  
Note: Includes Telecommunications services and Postal and Courier services, but excludes Broadcasting. User requirement for redesign of trade data on ICT services are being discussed.





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**Section 4**  
**ICT Sector Aggregate Statistics:**  
**1990 - 1996**

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Table 4.0  
Total ICT Sector  
Aggregate Statistics: 1990 - 1996

Employment	1990	1991	1992	1993	1994	1995	1996	% change 1995-1996	% change 1990-1996	CAGR 1990-1996
	(number of persons)							(percent)		
ICT Manufacturing	<u>93,294</u>	<u>92,775</u>	<u>94,271</u>	87,367	87,330	92,274	<u>95,475</u>	3.5	2.3	0.4
ICT Services	267,790	268,311	244,201	257,481	277,588	317,835	322,500	1.5	20.4	3.1
<b>Total ICT Sector</b>	<b>361,084</b>	<b>361,086</b>	<b>338,472</b>	<b>344,848</b>	<b>364,918</b>	<b>410,109</b>	<b>417,975</b>	<b>1.9</b>	<b>15.8</b>	<b>2.5</b>

Revenues	1990	1991	1992	1993	1994	1995	1996	% change 1995-1996	% change 1990-1996	CAGR 1990-1996
	(in millions of dollars)							(percent)		
ICT Manufacturing	<u>14,315</u>	<u>16,611</u>	<u>18,054</u>	17,881	21,313	26,049	<u>25,493</u>	-2.1	78.1	10.1
ICT Services	<u>27,784</u>	<u>30,838</u>	<u>32,324</u>	<u>33,963</u>	<u>38,335</u>	<u>39,656</u>	<u>44,131</u>	11.3	58.8	8.0
<b>Total ICT Sector</b>	<b>42,099</b>	<b>47,449</b>	<b>50,378</b>	<b>51,844</b>	<b>59,648</b>	<b>65,705</b>	<b>69,624</b>	<b>6.0</b>	<b>65.4</b>	<b>8.7</b>

Gross Domestic Product - GDP	1990	1991	1992	1993	1994	1995	1996	% change 1995-1996	% change 1990-1996	CAGR 1990-1996
	(in millions of dollars - 1986 constant \$)							(percent)		
ICT Manufacturing	6,071	6,371	6,958	7,220	9,223	11,373	11,081	-2.6	82.5	10.5
ICT Services	19,355	20,467	21,322	22,317	24,296	26,306	28,415	8.0	46.8	6.6
<b>Total ICT Sector</b>	<b>25,426</b>	<b>26,838</b>	<b>28,280</b>	<b>29,537</b>	<b>33,519</b>	<b>37,679</b>	<b>39,496</b>	<b>4.8</b>	<b>55.3</b>	<b>7.6</b>

Research and Development (R&D)	1990	1991	1992	1993	1994	1995	1996	% change 1995-1996	% change 1990-1996	CAGR 1990-1996
	(in millions of dollars)							(percent)		
ICT Manufacturing	1,522	1,588	1,614	1,766	2,027	2,242	2,358	5.2	54.9	7.6
ICT Services	368	378	453	570	673	647	675	4.3	83.4	10.6
<b>Total ICT Sector</b>	<b>1,890</b>	<b>1,966</b>	<b>2,067</b>	<b>2,336</b>	<b>2,700</b>	<b>2,889</b>	<b>3,033</b>	<b>5.0</b>	<b>60.5</b>	<b>8.2</b>

All underlined figures are Industry Canada estimates.  
See Sources and Technical Notes for more details.

**Table 4.1**  
**Total ICT Employment: 1990 - 1996**  
**(Manufacturing and Services)**

		(persons)						
SIC	Industry	1990	1991	1992	1993	1994	1995	1996
3341	Record Player, Radio and Television Receiver Industry	2,628	2,279	2,664	1,433	1,516	1,173	1,068
3351	Telecommunication Equipment Industry	<u>14,861</u>	<u>16,267</u>	17,673	18,704	19,287	20,706	<u>20,075</u>
3352	Electronic Parts and Components Industry	14,963	<u>16,389</u>	<u>14,681</u>	13,065	<u>14,293</u>	17,670	<u>17,922</u>
3359	Other Communication and Electronic Equipment Industries	26,312	23,458	24,408	21,564	19,095	18,036	<u>17,911</u>
3361	Electronic Computing and Peripheral Equipment Industry	12,159	11,011	11,895	10,983	13,749	13,499	<u>16,658</u>
3368	Electronic and Other Office, Store and Business Machine Industries	4,037	4,669	4,840	4,444	2,103	2,198	<u>2,706</u>
3911	Indicating, Recording and Controlling Instruments Industry	11,452	10,843	10,484	9,678	9,429	10,139	<u>10,139</u>
3912	Other Instruments and Related Products Industry	6,882	7,859	7,626	7,496	7,858	8,853	<u>8,996</u>
	<b>Total ICT Manufacturing</b>	<b><u>93,294</u></b>	<b><u>92,775</u></b>	<b><u>94,271</u></b>	<b><u>87,367</u></b>	<b><u>87,330</u></b>	<b><u>92,274</u></b>	<b><u>95,475</u></b>
481	Broadcasting*	53,973	48,675	51,960	51,550	51,003	50,023	56,500
482	Telecommunications Carriers*	142,157	129,621	120,217	126,910	127,529	144,500	128,700
772	Computer and Related Services*	71,660	90,015	72,024	79,021	99,056	123,312	137,300
	<b>Total ICT Services*</b>	<b><u>267,790</u></b>	<b><u>268,311</u></b>	<b><u>244,201</u></b>	<b><u>257,481</u></b>	<b><u>277,588</u></b>	<b><u>317,835</u></b>	<b><u>322,500</u></b>
	<b>Total ICT</b>	<b><u>361,084</u></b>	<b><u>361,086</u></b>	<b><u>338,472</u></b>	<b><u>344,848</u></b>	<b><u>364,918</u></b>	<b><u>410,109</u></b>	<b><u>417,975</u></b>

		(percent)		
SIC	Industry	% change 1995-1996	% change 1990-1996	CAGR 1990-1996
3341	Record Player, Radio and Television Receiver Industry	-9.0%	-59.4%	-13.9%
3351	Telecommunication Equipment Industry	-3.0%	35.1%	5.1%
3352	Electronic Parts and Components Industry	1.4%	19.8%	3.1%
3359	Other Communication and Electronic Equipment Industries	-0.7%	-31.9%	-6.2%
3361	Electronic Computing and Peripheral Equipment Industry	23.4%	37.0%	5.4%
3368	Electronic and Other Office, Store and Business Machine Industries	23.1%	-33.0%	-6.4%
3911	Indicating, Recording and Controlling Instruments Industry	0.0%	-11.5%	-2.0%
3912	Other Instruments and Related Products Industry	1.6%	30.7%	4.6%
	<b>Total ICT Manufacturing</b>	<b>3.5%</b>	<b>2.3%</b>	<b>0.4%</b>
481	Broadcasting*	12.9%	4.7%	0.8%
482	Telecommunications Carriers*	-10.9%	-9.5%	-1.6%
772	Computer and Related Services*	11.3%	91.6%	11.4%
	<b>Total ICT Services*</b>	<b>1.5%</b>	<b>20.4%</b>	<b>3.1%</b>
	<b>Total ICT</b>	<b>1.9%</b>	<b>15.8%</b>	<b>2.5%</b>

\* Includes full-time, part-time and self-employed.  
All underlined figures are Industry Canada estimates.  
See Sources and Technical Notes for more details.

Table 4.2  
Total ICT Revenues: 1990 - 1996  
(Manufacturing and Services)

(thousands of dollars)

SIC	Industry	1990	1991	1992	1993	1994	1995	1996
3341	Record Player, Radio and Television Receiver Industry	831,455	726,534	915,371	668,585	821,370	811,951	<u>623,943</u>
3351	Telecommunication Equipment Industry	<u>3,003,561</u>	<u>3,511,093</u>	4,018,624	4,192,552	4,871,576	6,267,300	<u>7,091,099</u>
3352	Electronic Parts and Components Industry	1,250,912	<u>3,084,722</u>	<u>3,568,802</u>	3,636,628	3,917,958	4,975,857	<u>5,413,705</u>
3359	Other Communication and Electronic Equipment Industries	3,153,017	3,028,259	3,019,827	2,776,864	2,825,966	2,876,691	<u>3,227,013</u>
3361	Electronic Computing and Peripheral Equipment Industry	2,954,501	2,964,656	3,321,023	3,316,961	5,645,716	7,626,920	<u>5,480,747</u>
3368	Electronic and Other Office, Store and Business Machine Industries	784,958	821,601	775,650	745,497	431,305	387,707	<u>325,532</u>
3911	Indicating, Recording and Controlling Instruments Industry	1,317,861	1,286,427	1,282,708	1,313,436	1,405,389	1,505,970	<u>1,636,535</u>
3912	Other Instruments and Related Products Industry	1,019,109	1,187,977	1,151,648	1,230,694	1,393,310	1,596,530	<u>1,693,998</u>
	<b>Total ICT Manufacturing</b>	<b><u>14,315,374</u></b>	<b><u>16,611,269</u></b>	<b><u>18,053,653</u></b>	<b><u>17,881,217</u></b>	<b><u>21,312,590</u></b>	<b><u>26,048,926</u></b>	<b><u>25,492,572</u></b>
481	Broadcasting	4,458,660	4,644,385	4,957,793	5,144,482	5,420,641	5,771,955	6,166,875
482	Telecommunications Carriers (other providers included)	<u>15,010,484</u>	<u>15,927,259</u>	<u>16,534,520</u>	<u>17,213,512</u>	<u>18,330,855</u>	<u>19,549,847</u>	<u>22,528,204</u>
772	Computer and Related Services	8,315,311	10,266,406	10,831,564	11,605,200	14,583,107	14,334,180	15,436,000
	<b>Total ICT Services</b>	<b><u>27,784,455</u></b>	<b><u>30,838,050</u></b>	<b><u>32,323,877</u></b>	<b><u>33,963,194</u></b>	<b><u>38,334,603</u></b>	<b><u>39,655,982</u></b>	<b><u>44,131,079</u></b>
	<b>Total ICT</b>	<b><u>42,099,829</u></b>	<b><u>47,449,319</u></b>	<b><u>50,377,530</u></b>	<b><u>51,844,411</u></b>	<b><u>59,647,193</u></b>	<b><u>65,704,908</u></b>	<b><u>69,623,651</u></b>

(percent)

SIC	Industry	% change 1995-1996	% change 1990-1996	CAGR 1990-1996
3341	Record Player, Radio and Television Receiver Industry	-23.2%	-25.0%	-4.7%
3351	Telecommunication Equipment Industry	13.1%	136.1%	15.4%
3352	Electronic Parts and Components Industry	8.8%	332.8%	27.7%
3359	Other Communication and Electronic Equipment Industries	12.2%	2.3%	0.4%
3361	Electronic Computing and Peripheral Equipment Industry	-28.1%	85.5%	10.8%
3368	Electronic and Other Office, Store and Business Machine Industries	-16.0%	-58.5%	-13.6%
3911	Indicating, Recording and Controlling Instruments Industry	8.7%	24.2%	3.7%
3912	Other Instruments and Related Products Industry	6.1%	66.2%	8.8%
	<b>Total ICT Manufacturing</b>	<b>-2.1%</b>	<b>78.1%</b>	<b>10.1%</b>
481	Broadcasting	6.8%	38.3%	5.6%
482	Telecommunications Carriers (other providers included)	15.2%	50.1%	7.0%
772	Computer and Related Services	7.7%	85.6%	10.9%
	<b>Total ICT Services</b>	<b>11.3%</b>	<b>58.8%</b>	<b>8.0%</b>
	<b>Total ICT</b>	<b>6.0%</b>	<b>65.4%</b>	<b>8.7%</b>

All underlined figures are Industry Canada estimates.  
See Sources and Technical Notes for more details.

**Table 4.3**  
**Total ICT GDP (in 1986 dollars): 1990 - 1996**  
**(Manufacturing and Services)**

		(thousands of dollars)						
SIC	Industry	1990	1991	1992	1993	1994	1995	1996
3341	Record Player, Radio and Television Receiver Industry	159,000	132,400	147,100	75,200	108,700	117,800	87,500
3351	Telecommunication Equipment Industry	1,337,900	1,328,300	1,558,600	1,555,800	1,762,200	2,262,700	2,433,500
3352	Electronic Parts and Components Industry	680,900	753,000	834,200	868,900	983,800	1,182,300	1,327,700
3359	Other Communication and Electronic Equipment Industries	1,274,400	1,241,600	1,277,300	1,238,800	1,340,600	1,373,000	1,510,200
336	Office Store and Business Machine Industry	1,815,100	2,067,700	2,291,700	2,622,700	4,106,400	5,459,600	4,696,500
3361	Electronic Computing and Peripheral Equipment Industry	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3368	Electronic and Other Office, Store and Business Machine Industries	N/A	N/A	N/A	N/A	N/A	N/A	N/A
391	Scientific and Professional Equipment*	804,000	847,700	849,000	858,900	921,200	977,100	1,025,700
	<b>Total ICT Manufacturing*</b>	<b>6,071,300</b>	<b>6,370,700</b>	<b>6,957,900</b>	<b>7,220,300</b>	<b>9,222,900</b>	<b>11,372,500</b>	<b>11,081,100</b>
481	Broadcasting	1,999,200	2,103,600	2,075,500	2,025,500	2,056,500	2,136,600	2,153,400
482	Telecommunications Carriers	13,663,000	14,248,000	14,687,000	15,361,000	16,753,000	18,188,000	19,749,000
772	Computer and Related Services	3,693,000	4,115,000	4,559,000	4,930,000	5,486,000	5,981,000	6,512,500
	<b>Total ICT Services</b>	<b>19,355,200</b>	<b>20,466,600</b>	<b>21,321,500</b>	<b>22,316,500</b>	<b>24,295,500</b>	<b>26,305,600</b>	<b>28,414,900</b>
	<b>Total ICT</b>	<b>25,426,500</b>	<b>26,837,300</b>	<b>28,279,400</b>	<b>29,536,800</b>	<b>33,518,400</b>	<b>37,678,100</b>	<b>39,496,000</b>
	<b>TOTAL CANADIAN GDP</b>	<b>503,660,700</b>	<b>494,543,900</b>	<b>497,603,900</b>	<b>510,690,400</b>	<b>531,599,000</b>	<b>542,006,600</b>	<b>551,115,800</b>

		(percent)		
SIC	Industry	% change 1995-1996	% change 1990-1996	CAGR 1990-1996
3341	Record Player, Radio and Television Receiver Industry	-25.7%	-45.0%	-9.5%
3351	Telecommunication Equipment Industry	7.5%	81.9%	10.5%
3352	Electronic Parts and Components Industry	12.3%	95.0%	11.8%
3359	Other Communication and Electronic Equipment Industries	10.0%	18.5%	2.9%
336	Office store and Business Machine Industry	-14.0%	158.7%	17.2%
3361	Electronic Computing and Peripheral Equipment Industry	N/A	N/A	N/A
3368	Electronic and Other Office, Store and Business Machine Industries	N/A	N/A	N/A
391	Scientific and Professional Equipment*	5.0%	27.6%	4.1%
	<b>Total ICT Manufacturing*</b>	<b>-2.6%</b>	<b>82.5%</b>	<b>10.5%</b>
481	Broadcasting	0.8%	7.7%	1.2%
482	Telecommunications Carriers	8.6%	44.5%	6.3%
772	Computer and Related Services	8.9%	76.3%	9.9%
	<b>Total ICT Services</b>	<b>8.0%</b>	<b>46.8%</b>	<b>6.6%</b>
	<b>Total ICT</b>	<b>4.8%</b>	<b>55.3%</b>	<b>7.6%</b>
	<b>TOTAL CANADIAN GDP</b>	<b>1.7%</b>	<b>9.4%</b>	<b>1.5%</b>

\* Somewhat overstated due to the inclusion of SIC 3913 and 3914 which are not included in the definition of ICT.

Data are not available for SIC 3912. See below for GDP figures for SIC 3911.

See Sources and Technical Notes for more details.

		(thousands of dollars)						
SIC	Industry	1990	1991	1992	1993	1994	1995	1996
3911	Indicating, Recording and Controlling Instruments Industry	408,900	394,700	399,800	389,200	408,600	442,500	472,400

Table 4.4  
Total ICT R&D Expenditures: 1990 - 1996  
(Manufacturing and Services)

		(thousands of dollars)						
SIC	Industry	1990	1991	1992	1993	1994	1995	1996
3341	Record Player, Radio and Television Receiver Industry	3,182	7,164	9,519	10,662	11,787	13,399	14,481
3351	Telecommunication Equipment Industry	738,517	773,383	735,085	906,052	1,109,731	1,378,664	1,473,208
3352	Electronic Parts and Components Industry	42,588	41,436	49,036	48,542	50,260	59,012	71,469
3359	Other Communication and Electronic Equipment Industries	374,027	373,585	408,517	421,977	449,809	387,114	383,104
3361	Electronic Computing and Peripheral Equipment Industry	274,982	301,985	319,526	281,160	294,869	290,703	288,880
3368	Electronic and Other Office, Store and Business Machine Industries	23,834	27,117	25,027	28,049	30,226	30,802	31,282
3911	Indicating, Recording and Controlling Instruments Industry	25,347	23,595	24,495	26,580	28,342	25,856	29,838
3912	Other Instruments and Related Products Industry	39,515	39,778	42,740	43,107	52,140	56,307	65,702
	<b>Total ICT Manufacturing</b>	<b>1,521,992</b>	<b>1,588,043</b>	<b>1,613,945</b>	<b>1,766,129</b>	<b>2,027,164</b>	<b>2,241,857</b>	<b>2,357,964</b>
481+482	Broadcasting and Telecommunications Carriers*	138,875	147,113	172,975	251,691	243,180	183,091	156,053
772	Computer and Related Services	229,145	231,379	280,239	318,089	430,047	464,121	519,316
	<b>Total ICT Services*</b>	<b>368,020</b>	<b>378,492</b>	<b>453,214</b>	<b>569,780</b>	<b>673,227</b>	<b>647,212</b>	<b>675,369</b>
	<b>Total ICT</b>	<b>1,890,012</b>	<b>1,966,535</b>	<b>2,067,159</b>	<b>2,335,909</b>	<b>2,700,391</b>	<b>2,889,069</b>	<b>3,033,333</b>
	<b>TOTAL PRIVATE SECTOR R&amp;D</b>	<b>5,216,000</b>	<b>5,439,000</b>	<b>5,845,000</b>	<b>6,539,000</b>	<b>7,121,000</b>	<b>7,659,000</b>	<b>8,143,000</b>
	<b>ICT R&amp;D as a PERCENTAGE of TOTAL PRIVATE SECTOR R&amp;D</b>	<b>36.2%</b>	<b>36.2%</b>	<b>35.4%</b>	<b>35.7%</b>	<b>37.9%</b>	<b>37.7%</b>	<b>37.3%</b>

(percent)

SIC	Industry	% change 1995-1996	% change 1990-1996	CAGR 1990-1996
3341	Record Player, Radio and Television Receiver Industry	8.1%	355.1%	28.7%
3351	Telecommunication Equipment Industry	6.9%	99.5%	12.2%
3352	Electronic Parts and Components Industry	21.1%	67.8%	9.0%
3359	Other Communication and Electronic Equipment Industries	-1.0%	2.4%	0.4%
3361	Electronic Computing and Peripheral Equipment Industry	-0.6%	5.1%	0.8%
3368	Electronic and Other Office, Store and Business Machine Industries	1.6%	31.2%	4.6%
3911	Indicating, Recording and Controlling Instruments Industry	15.4%	17.7%	2.8%
3912	Other Instruments and Related Products Industry	16.7%	66.3%	8.8%
	<b>Total ICT Manufacturing</b>	<b>5.2%</b>	<b>54.9%</b>	<b>7.6%</b>
481+482	Broadcasting and Telecommunications Carriers*	-14.8%	12.4%	2.0%
772	Computer and Related Services	11.9%	126.6%	14.6%
	<b>Total ICT Services*</b>	<b>4.4%</b>	<b>83.5%</b>	<b>10.6%</b>
	<b>Total ICT</b>	<b>5.0%</b>	<b>60.5%</b>	<b>8.2%</b>
	<b>TOTAL PRIVATE SECTOR R&amp;D</b>	<b>6.3%</b>	<b>56.1%</b>	<b>7.7%</b>

\* SIC's 481 and 482 are combined to maintain confidentiality among respondents.  
See Sources and Technical Notes for more details.

**Table 4.5**  
**Total ICT: Trade**  
**Aggregate Statistics: 1990 - 1996**

Trade	1990	1991	1992	1993	1994	1995	1996	% change 1995-1996	% change 1990-1996	CAGR 1990-1996
	(in millions of dollars)							(percent)		
ICT Manufacturing										
Exports	9,643	10,487	11,604	12,434	16,052	19,531	20,705	6.0	114.7	13.6
Imports	18,200	19,155	21,549	24,588	30,474	35,568	36,478	2.6	100.4	12.3
Balance of trade	(8,557)	(8,668)	(9,945)	(12,154)	(14,422)	(16,037)	(15,773)	1.6	-84.3	-10.7

Trade	1990	1991	1992	1993	1994	1995	1996	% change 1995-1996	% change 1990-1996	CAGR 1990-1996
	(in millions of dollars)							(percent)		
ICT Services										
Exports	1,726	1,877	2,022	2,407	2,612	2,756	3,097	12.4	79.4	10.2
Imports	1,516	1,587	1,628	1,883	2,159	2,381	2,532	6.3	67.0	8.9
Balance of trade	210	290	394	524	453	375	565	50.7	169.0	17.9

Trade	1990	1991	1992	1993	1994	1995	1996	% change 1995-1996	% change 1990-1996	CAGR 1990-1996
	(in millions of dollars)							(percent)		
ICT Sector										
Exports	11,369	12,364	13,626	14,841	18,664	22,287	23,802	6.8	109.4	13.1
Imports	19,716	20,742	23,177	26,471	32,633	37,949	39,010	2.8	97.9	12.0
Balance of trade	(8,347)	(8,378)	(9,551)	(11,630)	(13,969)	(15,662)	(15,208)	2.9	-82.2	-10.5

See Sources and Technical Notes for more details.

Table 4.6  
Total ICT Exports: 1990 - 1996

SIC	Name of Industry	1990	1991	1992	1993	1994	1995	1996
		(millions of dollars)						
3341	Record Player, Radio and Television Receiver Industry	190	114	137	145	217	257	240
3351	Telecommunication Equipment Industry	1,102	1,073	1,436	1,924	2,329	2,839	3,550
3359	Other Communication and Electronic Equipment Industries	945	879	1,000	974	1,471	1,649	1,954
3352	Electronic Parts and Components Industry	3,065	3,580	3,276	2,992	3,468	4,279	5,204
3361	Electronic Computing and Peripheral Equipment Industry	2,821	3,257	3,842	4,293	5,975	7,757	6,706
3368	Electronic and Other Office, Store and Business Machine Industries	363	324	311	356	392	372	418
3911	Indicating, Recording and Controlling Instruments Industry	574	601	710	833	1,175	1,214	1,262
3912	Other Instruments and Related Products Industry	582	660	891	916	1,026	1,164	1,371
	<b>Total ICT Manufacturing Exports</b>	<b>9,643</b>	<b>10,487</b>	<b>11,604</b>	<b>12,434</b>	<b>16,052</b>	<b>19,531</b>	<b>20,705</b>
	<b>Total Canadian Merchandise Exports</b>	<b>148,979</b>	<b>146,006</b>	<b>162,827</b>	<b>187,515</b>	<b>226,495</b>	<b>264,306</b>	<b>275,921</b>
	Computer and Software	506	586	775	995	1,012	1,056	1,164
	Communications*	1,220	1,291	1,247	1,412	1,600	1,700	1,933
	<b>Total ICT Services Exports</b>	<b>1,726</b>	<b>1,877</b>	<b>2,022</b>	<b>2,407</b>	<b>2,612</b>	<b>2,756</b>	<b>3,097</b>
	<b>Total Canadian Services Exports</b>	<b>9,061</b>	<b>9,814</b>	<b>11,080</b>	<b>13,065</b>	<b>15,275</b>	<b>16,713</b>	<b>17,971</b>
	<b>Total ICT Exports</b>	<b>11,369</b>	<b>12,364</b>	<b>13,626</b>	<b>14,841</b>	<b>18,664</b>	<b>22,287</b>	<b>23,802</b>
	<b>Total Canadian Exports</b>	<b>158,040</b>	<b>155,820</b>	<b>173,907</b>	<b>200,580</b>	<b>241,770</b>	<b>281,019</b>	<b>293,892</b>

SIC	Name of Industry	% Change	% Change	CAGR
		1995-1996	1990-1996	1990-1996
(percent)				
3341	Record Player, Radio and Television Receiver Industry	-6.4	26.1	3.9
3351	Telecommunication Equipment Industry	25.0	222.0	21.5
3359	Other Communication and Electronic Equipment Industries	18.5	106.7	12.9
3352	Electronic Parts and Components Industry	21.6	69.8	9.2
3361	Electronic Computing and Peripheral Equipment Industry	-13.5	137.7	15.5
3368	Electronic and Other Office, Store and Business Machine Industries	12.2	15.1	2.4
3911	Indicating, Recording and Controlling Instruments Industry	3.9	119.8	14.0
3912	Other Instruments and Related Products Industry	17.8	135.8	15.4
	<b>Total ICT Manufacturing Exports</b>	<b>6.0</b>	<b>114.7</b>	<b>13.6</b>
	<b>Total Canadian Merchandise Exports</b>	<b>4.4</b>	<b>85.2</b>	<b>10.8</b>
Name of Industry		% change	% change	CAGR
		1995-1996	1990-1996	1990-1996
	Computer and Software	10.2	130.0	14.9
	Communications*	13.7	58.4	8.0
	<b>Total ICT Services Exports</b>	<b>12.4</b>	<b>79.4</b>	<b>10.2</b>
	<b>Total Canadian Services Exports</b>	<b>7.5</b>	<b>98.3</b>	<b>12.1</b>
	<b>Total ICT Exports</b>	<b>6.8</b>	<b>109.4</b>	<b>13.1</b>
	<b>Total Canadian Exports</b>	<b>4.6</b>	<b>86.0</b>	<b>10.9</b>

\* Includes Telecommunications services and Postal and Courier services, but excludes Broadcasting. User requirement for redesign of trade data are being discussed. See Sources and Technical Notes for more details.



Table 4.7  
ICT Imports: 1990 - 1996

SIC	Name of Industry	1990	1991	1992	1993	1994	1995	1996
		(millions of dollars)						
3341	Record Player, Radio and Television Receiver Industry	1,459	1,665	1,786	2,056	2,323	2,543	2,280
3351	Telecommunication Equipment Industry	551	695	1,019	1,229	1,414	1,690	2,216
3359	Other Communication and Electronic Equipment Industries	1,461	1,367	1,357	1,524	1,862	2,163	2,438
3352	Electronic Parts and Components Industry	4,786	4,954	5,461	5,995	11,123	13,927	13,440
3361	Electronic Computing and Peripheral Equipment Industry	5,224	5,879	6,785	7,839	6,705	7,753	8,511
3368	Electronic and Other Office, Store and Business Machine Industries	908	878	1,022	1,106	1,154	1,220	1,257
3911	Indicating, Recording and Controlling Instruments Industry	1,276	1,235	1,358	1,758	2,469	2,778	2,648
3912	Other Instruments and Related Products Industry	2,535	2,481	2,759	3,080	3,424	3,494	3,689
	<b>Total ICT Manufacturing Imports</b>	<b>18,200</b>	<b>19,155</b>	<b>21,549</b>	<b>24,588</b>	<b>30,474</b>	<b>35,568</b>	<b>36,478</b>
	<b>Total Canadian Merchandise Imports</b>	<b>136,245</b>	<b>135,461</b>	<b>148,018</b>	<b>169,953</b>	<b>202,736</b>	<b>225,628</b>	<b>233,113</b>
	Computer and Software	306	404	421	531	606	669	846
	Communications*	1,210	1,183	1,207	1,352	1,553	1,712	1,686
	<b>Total ICT Services Imports</b>	<b>1,516</b>	<b>1,587</b>	<b>1,628</b>	<b>1,883</b>	<b>2,159</b>	<b>2,381</b>	<b>2,532</b>
	<b>Total Canadian Services Imports</b>	<b>12,554</b>	<b>13,208</b>	<b>14,050</b>	<b>16,799</b>	<b>19,461</b>	<b>20,687</b>	<b>21,882</b>
	<b>Total ICT Imports</b>	<b>19,716</b>	<b>20,742</b>	<b>23,177</b>	<b>26,471</b>	<b>32,633</b>	<b>37,949</b>	<b>39,010</b>
	<b>Total Canadian Imports</b>	<b>148,799</b>	<b>148,669</b>	<b>162,068</b>	<b>186,752</b>	<b>222,197</b>	<b>246,315</b>	<b>254,995</b>

SIC	Name of Industry	% Change 1995-1996	% Change 1990-1996	CAGR 1990-1996
		(percent)		
3341	Record Player, Radio and Television Receiver Industry	-10.3	56.3	7.7
3351	Telecommunication Equipment Industry	31.1	302.2	26.1
3359	Other Communication and Electronic Equipment Industries	12.7	66.9	8.9
3352	Electronic Parts and Components Industry	-3.5	180.8	18.8
3361	Electronic Computing and Peripheral Equipment Industry	9.8	62.9	8.5
3368	Electronic and Other Office, Store and Business Machine Industries	3.1	38.5	5.6
3911	Indicating, Recording and Controlling Instruments Industry	-4.7	107.5	12.9
3912	Other Instruments and Related Products Industry	5.6	45.5	6.5
	<b>Total ICT Manufacturing Imports</b>	<b>2.6</b>	<b>100.4</b>	<b>12.3</b>
	<b>Total Canadian Merchandise Imports</b>	<b>3.3</b>	<b>71.1</b>	<b>9.4</b>
	<b>Name of Industry</b>	<b>% change 1995-1996</b>	<b>% change 1990-1996</b>	<b>CAGR 1990-1996</b>
	Computer and Software	26.5	176.5	18.5
	Communications*	-1.5	39.3	5.7
	<b>Total ICT Services Imports</b>	<b>6.3</b>	<b>67.0</b>	<b>8.9</b>
	<b>Total Canadian Services Imports</b>	<b>5.8</b>	<b>74.3</b>	<b>9.7</b>
	<b>Total ICT Imports</b>	<b>2.8</b>	<b>97.9</b>	<b>12.0</b>
	<b>Total Canadian Imports</b>	<b>3.5</b>	<b>71.4</b>	<b>9.4</b>

\* Includes Telecommunications services and Postal and Courier services, but excludes Broadcasting. User requirement for redesign of trade data are being discussed. See Sources and Technical Notes for more details.

Table 4.8  
ICT Trade Balance: 1990 - 1996

SIC	Name of Industry	1990	1991	1992	1993	1994	1995	1996
(millions of dollars)								
3341	Record Player, Radio and Television Receiver Industry	(1,268)	(1,551)	(1,649)	(1,911)	(2,106)	(2,286)	(2,039)
3351	Telecommunication Equipment Industry	551	378	417	695	914	1,149	1,334
3359	Other Communication and Electronic Equipment Industries	(515)	(488)	(357)	(550)	(391)	(514)	(484)
3352	Electronic Parts and Components Industry	(1,721)	(1,374)	(2,185)	(3,002)	(7,655)	(9,648)	(8,236)
3361	Electronic Computing and Peripheral Equipment Industry	(2,403)	(2,623)	(2,943)	(3,546)	(731)	4	(1,805)
3368	Electronic and Other Office, Store and Business Machine Industries	(545)	(554)	(710)	(750)	(762)	(848)	(840)
3911	Indicating, Recording and Controlling Instruments Industry	(703)	(634)	(648)	(925)	(1,294)	(1,564)	(1,386)
3912	Other Instruments and Related Products Industry	(1,953)	(1,822)	(1,868)	(2,165)	(2,398)	(2,330)	(2,318)
	<b>Total ICT Manufacturing Trade Balance</b>	<b>(8,557)</b>	<b>(8,668)</b>	<b>(9,945)</b>	<b>(12,154)</b>	<b>(14,422)</b>	<b>(16,037)</b>	<b>(15,773)</b>
	<b>Total Canadian Merchandise Trade Balance</b>	<b>12,734</b>	<b>10,545</b>	<b>14,809</b>	<b>17,562</b>	<b>23,759</b>	<b>38,678</b>	<b>42,808</b>
	Computer and Software	200	182	354	464	406	387	318
	Communications*	10	108	40	60	47	(12)	247
	<b>Total ICT Services Trade Balance</b>	<b>210</b>	<b>290</b>	<b>394</b>	<b>524</b>	<b>453</b>	<b>375</b>	<b>565</b>
	<b>Total Canadian Services Trade Balance</b>	<b>(3,493)</b>	<b>(3,394)</b>	<b>(2,970)</b>	<b>(3,734)</b>	<b>(4,186)</b>	<b>(3,974)</b>	<b>(3,911)</b>
	<b>Total ICT Trade Balance</b>	<b>(8,347)</b>	<b>(8,378)</b>	<b>(9,551)</b>	<b>(11,630)</b>	<b>(13,969)</b>	<b>(15,662)</b>	<b>(15,208)</b>
	<b>Total Canadian Trade Balance</b>	<b>9,241</b>	<b>7,151</b>	<b>11,839</b>	<b>13,828</b>	<b>19,573</b>	<b>34,704</b>	<b>38,897</b>

SIC	Name of Industry	% Change	% Change	CAGR
		1995-1996	1990-1996	1990-1996
(percent)				
3341	Record Player, Radio and Television Receiver Industry	10.7	-60.8	-8.2
3351	Telecommunication Equipment Industry	16.1	141.9	15.9
3359	Other Communication and Electronic Equipment Industries	5.8	6.1	1.0
3352	Electronic Parts and Components Industry	14.6	-378.6	-29.8
3361	Electronic Computing and Peripheral Equipment Industry	-4707.6	24.9	4.7
3368	Electronic and Other Office, Store and Business Machine Industries	1.0	-54.0	-7.5
3911	Indicating, Recording and Controlling Instruments Industry	11.4	-97.3	-12.0
3912	Other Instruments and Related Products Industry	0.5	-18.6	-2.9
	<b>Total ICT Manufacturing Trade Balance</b>	<b>1.6</b>	<b>-84.3</b>	<b>-10.7</b>
	<b>Total Canadian Merchandise Trade Balance</b>	<b>10.7</b>	<b>236.2</b>	<b>22.4</b>
	<b>Name of Industry</b>	<b>% change</b>	<b>% change</b>	<b>CAGR</b>
		<b>1995-1996</b>	<b>1990-1996</b>	<b>1990-1996</b>
	Computer and Software	-17.8	59.0	8.0
	Communications*	2158.3	2370.0	70.7
	<b>Total ICT Services Trade Balance</b>	<b>50.7</b>	<b>169.0</b>	<b>17.9</b>
	<b>Total Canadian Services Trade Balance</b>	<b>1.6</b>	<b>-12.0</b>	<b>-1.9</b>
	<b>Total ICT Trade Balance</b>	<b>2.9</b>	<b>-82.2</b>	<b>-10.5</b>
	<b>Total Canadian Trade Balance</b>	<b>12.1</b>	<b>320.9</b>	<b>27.1</b>

\* Includes Telecommunications services and Postal and Courier services, but excludes Broadcasting. User requirement for redesign of trade data are being discussed. See Sources and Technical Notes for more details.

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## Section 5

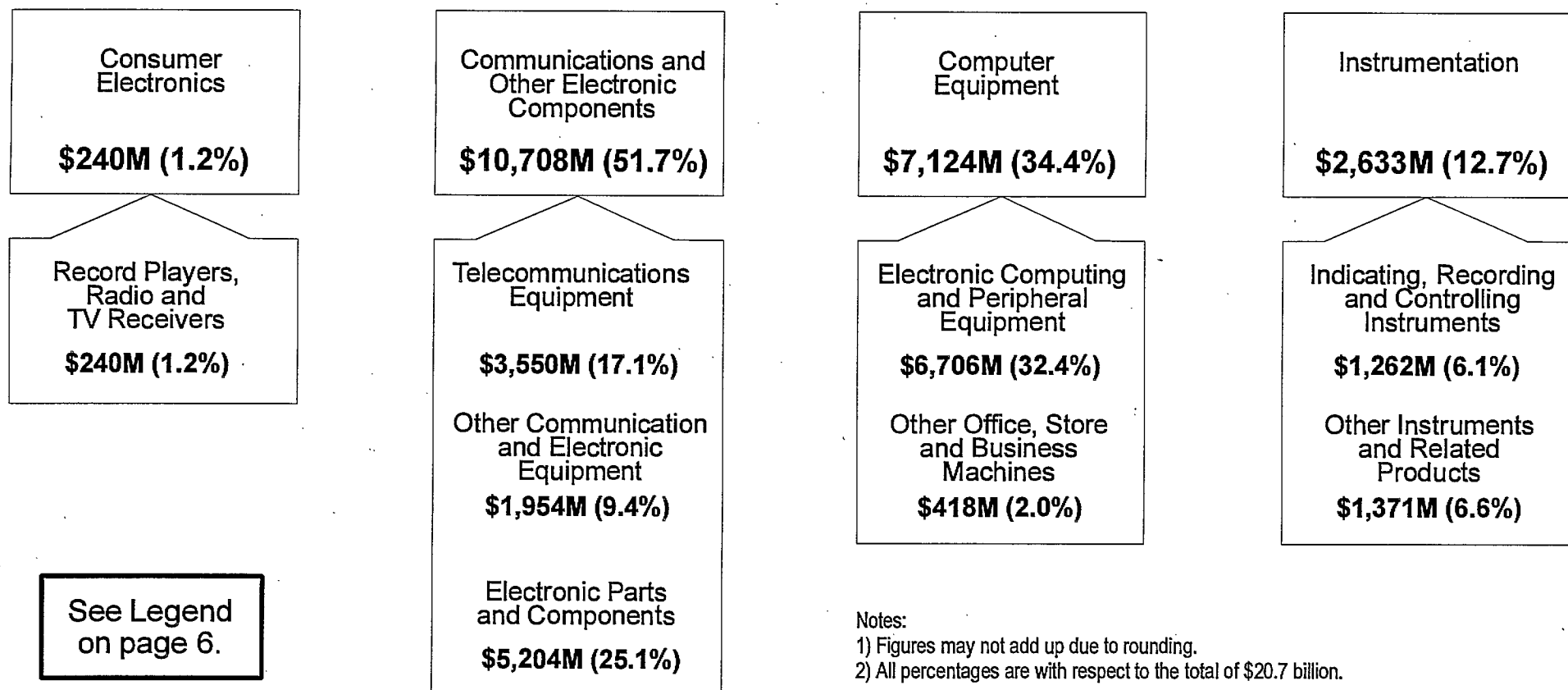
# ICT Manufacturing (Merchandise) Trade

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# Information and Communication Technologies

## Figure 11 - Total Manufacturing Exports: 1996

### \$20.7 billion



**Table 5.1**  
**ICT Manufacturing Sector**  
**Total Exports: 1990 - 1996**

		thousands of dollars						
SIC	Name of Industry	1990	1991	1992	1993	1994	1995	1996
3341	Record Player, Radio and Television Receiver Industry	190,474	114,095	137,032	144,635	217,188	256,600	240,208
3351	Telecommunication Equipment Industry	1,102,303	1,072,837	1,435,881	1,924,310	2,328,609	2,839,265	3,549,549
3359	Other Communication and Electronic Equipment Industries	945,377	878,691	999,938	974,174	1,470,926	1,649,224	1,954,180
3352	Electronic Parts and Components Industry	3,065,120	3,580,019	3,275,901	2,992,473	3,468,440	4,278,510	5,204,443
3361	Electronic Computing and Peripheral Equipment Industry	2,821,063	3,256,564	3,842,354	4,293,010	5,974,701	7,756,843	6,706,081
3368	Electronic and Other Office, Store and Business Machine Industries	362,885	323,877	311,499	356,132	391,522	372,226	417,749
3911	Indicating, Recording and Controlling Instruments Industry	573,830	601,047	710,445	833,335	1,175,056	1,213,685	1,261,508
3912	Other Instruments and Related Products Industry	581,687	659,845	890,685	915,770	1,025,593	1,164,395	1,371,340
	<b>Total ICT Manufacturing Exports</b>	<b>9,642,740</b>	<b>10,486,975</b>	<b>11,603,735</b>	<b>12,433,838</b>	<b>16,052,035</b>	<b>19,530,748</b>	<b>20,705,058</b>
	<b>Total Canadian Merchandise Exports</b>	<b>148,979,000</b>	<b>146,006,000</b>	<b>162,827,000</b>	<b>187,515,000</b>	<b>226,495,000</b>	<b>264,306,000</b>	<b>275,921,000</b>

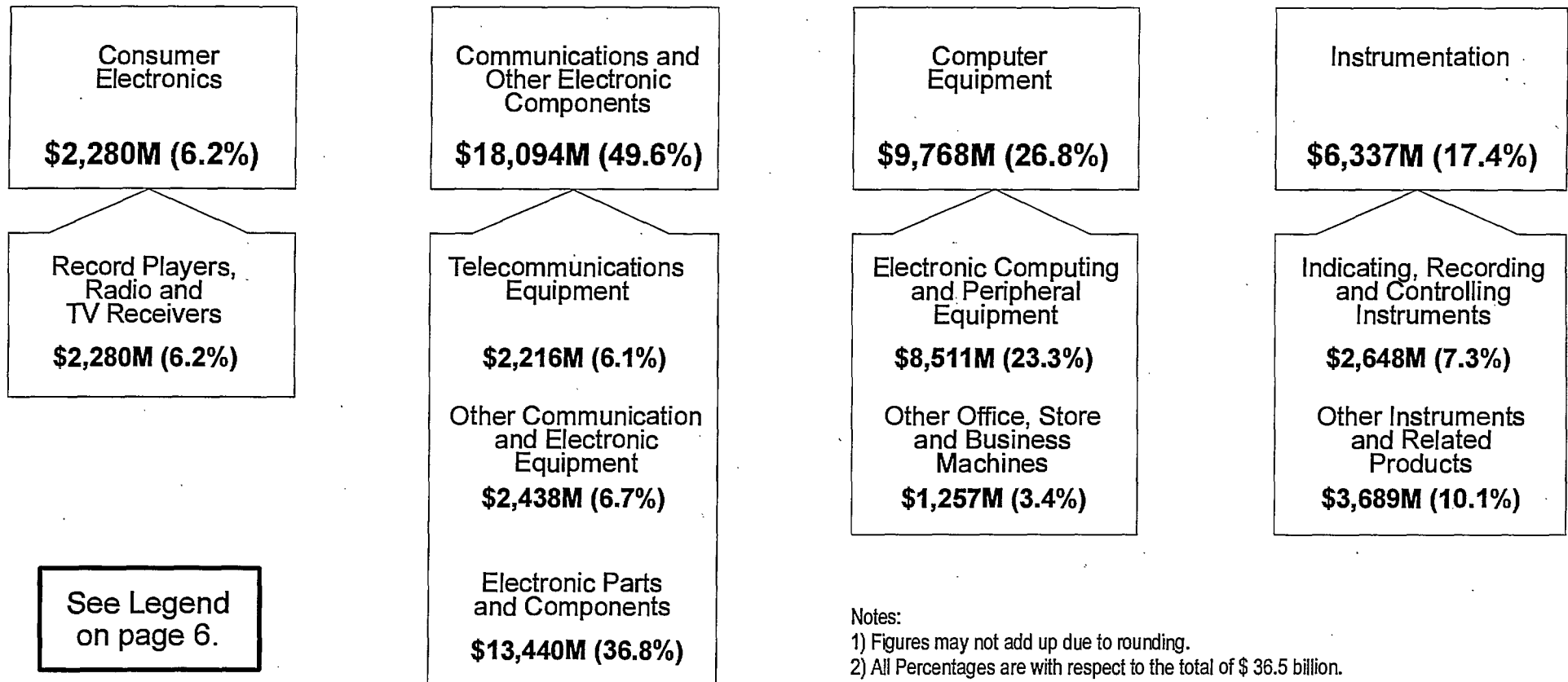
		Percentage of total ICT manufacturing exports						
SIC	Name of Industry	1990	1991	1992	1993	1994	1995	1996
3341	Record Player, Radio and Television Receiver Industry	2.0	1.1	1.2	1.2	1.4	1.3	1.2
3351	Telecommunication Equipment Industry	11.4	10.2	12.4	15.5	14.5	14.5	17.1
3359	Other Communication and Electronic Equipment Industries	9.8	8.4	8.6	7.8	9.2	8.4	9.4
3352	Electronic Parts and Components Industry	31.8	34.1	28.2	24.1	21.6	21.9	25.1
3361	Electronic Computing and Peripheral Equipment Industry	29.3	31.1	33.1	34.5	37.2	39.7	32.4
3368	Electronic and Other Office, Store and Business Machine Industries	3.8	3.1	2.7	2.9	2.4	1.9	2.0
3911	Indicating, Recording and Controlling Instruments Industry	6.0	5.7	6.1	6.7	7.3	6.2	6.1
3912	Other Instruments and Related Products Industry	6.0	6.3	7.7	7.4	6.4	6.0	6.6
	<b>Total ICT Manufacturing Exports</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
	<b>ICT Exports as a percentage of total Canadian Merchandise Exports</b>	<b>6.5</b>	<b>7.2</b>	<b>7.1</b>	<b>6.6</b>	<b>7.1</b>	<b>7.4</b>	<b>7.5</b>

See Sources and Technical Notes for more details.

# Information and Communication Technologies

## Figure 12 - Manufacturing Imports: 1996

### \$36.5 billion



**Table 5.2**  
**ICT Manufacturing Sector**  
**Imports: 1990 - 1996**

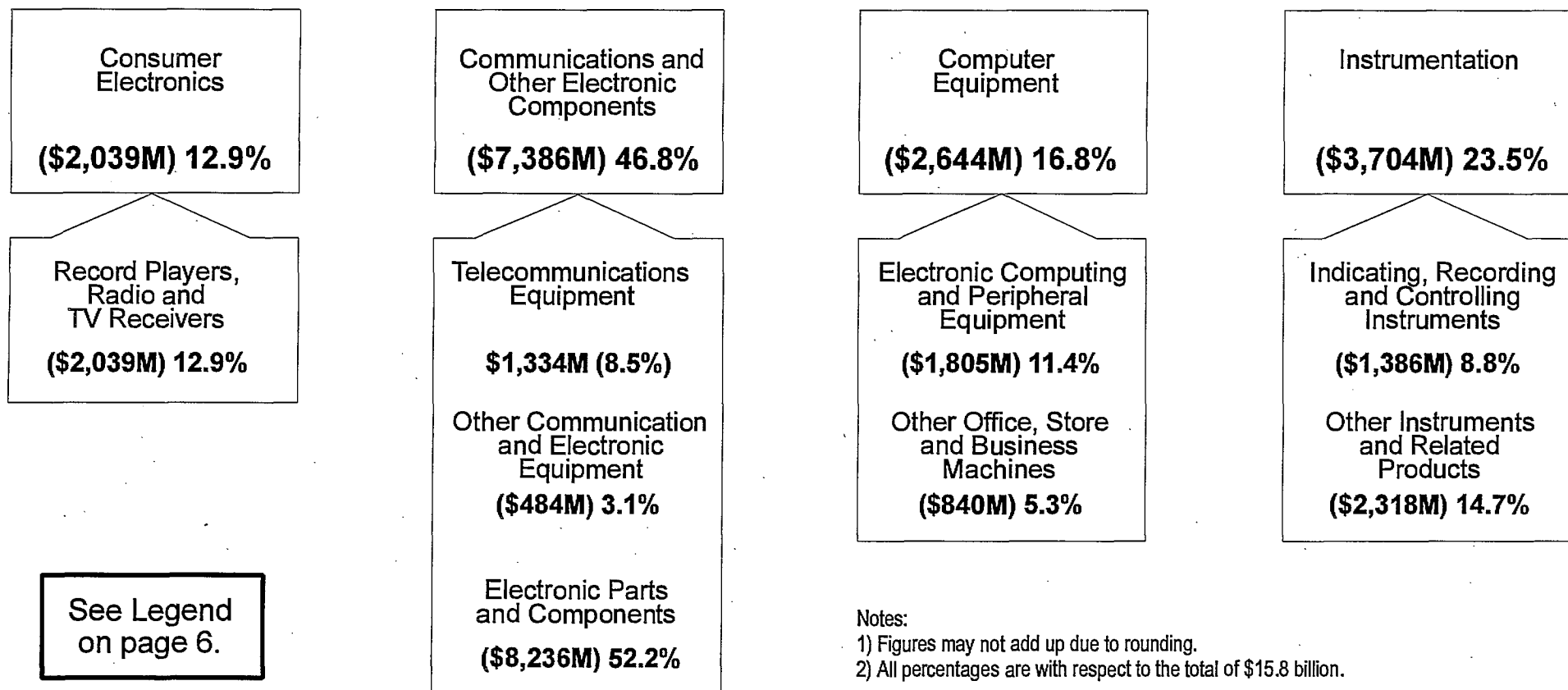
		thousands of dollars						
SIC	Name of Industry	1990	1991	1992	1993	1994	1995	1996
3341	Record Player, Radio and Television Receiver Industry	1,458,792	1,665,260	1,786,347	2,055,814	2,322,757	2,542,556	2,279,677
3351	Telecommunication Equipment Industry	550,875	695,294	1,019,251	1,229,492	1,414,368	-1,690,409	2,215,607
3359	Other Communication and Electronic Equipment Industries	1,460,790	1,366,979	1,357,373	1,524,406	1,861,553	2,163,283	2,438,163
3352	Electronic Parts and Components Industry	4,785,828	4,953,746	5,461,302	5,994,935	11,123,493	13,927,342	13,439,981
3361	Electronic Computing and Peripheral Equipment Industry	5,224,331	5,879,324	6,785,206	7,839,459	6,705,253	7,752,662	8,510,692
3368	Electronic and Other Office, Store and Business Machine Industries	908,086	877,769	1,021,591	1,105,915	1,153,878	1,220,162	1,257,413
3911	Indicating, Recording and Controlling Instruments Industry	1,276,367	1,234,881	1,358,438	1,757,877	2,468,973	2,777,834	2,647,898
3912	Other Instruments and Related Products Industry	2,535,122	2,481,469	2,759,013	3,080,277	3,423,714	3,494,000	3,688,843
	<b>Total ICT Manufacturing Imports</b>	<b>18,200,191</b>	<b>19,154,722</b>	<b>21,548,520</b>	<b>24,588,175</b>	<b>30,473,990</b>	<b>35,568,247</b>	<b>36,478,274</b>
	<b>Total Canadian Merchandise Imports</b>	<b>136,245,000</b>	<b>135,461,000</b>	<b>148,018,000</b>	<b>169,953,000</b>	<b>202,736,000</b>	<b>225,628,000</b>	<b>233,113,000</b>

		Percentage of total ICT manufacturing imports						
SIC	Name of Industry	1990	1991	1992	1993	1994	1995	1996
3341	Record Player, Radio and Television Receiver Industry	8.0	8.7	8.3	8.4	7.6	7.1	6.2
3351	Telecommunication Equipment Industry	3.0	3.6	4.7	5.0	4.6	4.8	6.1
3359	Other Communication and Electronic Equipment Industries	8.0	7.1	6.3	6.2	6.1	6.1	6.7
3352	Electronic Parts and Components Industry	26.3	25.9	25.3	24.4	36.5	39.2	36.8
3361	Electronic Computing and Peripheral Equipment Industry	28.7	30.7	31.5	31.9	22.0	21.8	23.3
3368	Electronic and Other Office, Store and Business Machine Industries	5.0	4.6	4.7	4.5	3.8	3.4	3.4
3911	Indicating, Recording and Controlling Instruments Industry	7.0	6.4	6.3	7.1	8.1	7.8	7.3
3912	Other Instruments and Related Products Industry	13.9	13.0	12.8	12.5	11.2	9.8	10.1
	<b>Total ICT Manufacturing Imports</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
	<b>ICT Imports as a percentage of total Canadian Merchandise Imports</b>	<b>13.4</b>	<b>14.1</b>	<b>14.6</b>	<b>14.5</b>	<b>15.0</b>	<b>15.8</b>	<b>15.6</b>

See Sources and Technical Notes for more details.

# Information and Communication Technologies

## Figure 13 - Total Manufacturing Trade Balance: 1996 (\$15.8 billion deficit)





**Table 5.3**  
**ICT Manufacturing Sector**  
**Trade Balance: 1990 - 1996**

		thousands of dollars						
SIC	Name of Industry	1990	1991	1992	1993	1994	1995	1996
3341	Record Player, Radio and Television Receiver Industry	(1,268,318)	(1,551,165)	(1,649,315)	(1,911,180)	(2,105,570)	(2,285,956)	(2,039,469)
3351	Telecommunication Equipment Industry	551,428	377,543	416,630	694,818	914,241	1,148,856	1,333,942
3359	Other Communication and Electronic Equipment Industries	(515,413)	(488,288)	(357,435)	(550,232)	(390,627)	(514,059)	(483,983)
3352	Electronic Parts and Components Industry	(1,720,708)	(1,373,726)	(2,185,401)	(3,002,462)	(7,655,053)	(9,648,832)	(8,235,538)
3361	Electronic Computing and Peripheral Equipment Industry	(2,403,267)	(2,622,761)	(2,942,852)	(3,546,449)	(730,552)	4,181	(1,804,611)
3368	Electronic and Other Office, Store and Business Machine Industries	(545,200)	(553,892)	(710,092)	(749,783)	(762,357)	(847,937)	(839,664)
3911	Indicating, Recording and Controlling Instruments Industry	(702,537)	(633,834)	(647,992)	(924,542)	(1,293,916)	(1,564,149)	(1,386,390)
3912	Other Instruments and Related Products Industry	(1,953,435)	(1,821,624)	(1,868,328)	(2,164,507)	(2,398,121)	(2,329,604)	(2,317,503)
	<b>Total ICT Manufacturing Trade Balance</b>	<b>(8,557,451)</b>	<b>(8,667,747)</b>	<b>(9,944,785)</b>	<b>(12,154,338)</b>	<b>(14,421,955)</b>	<b>(16,037,499)</b>	<b>(15,773,216)</b>
	<b>Total Canadian Merchandise Trade Balance</b>	<b>12,734,000</b>	<b>10,545,000</b>	<b>14,809,000</b>	<b>17,562,000</b>	<b>23,759,000</b>	<b>38,678,000</b>	<b>42,808,000</b>

		Percentage of total ICT manufacturing trade balance						
SIC	Name of Industry	1990	1991	1992	1993	1994	1995	1996
3341	Record Player, Radio and Television Receiver Industry	14.8	17.9	16.6	15.7	14.6	14.3	12.9
3351	Telecommunication Equipment Industry	(6.4)	(4.4)	(4.2)	(5.7)	(6.3)	(7.2)	(8.5)
3359	Other Communication and Electronic Equipment Industries	6.0	5.6	3.6	4.5	2.7	3.2	3.1
3352	Electronic Parts and Components Industry	20.1	15.8	22.0	24.7	53.1	60.2	52.2
3361	Electronic Computing and Peripheral Equipment Industry	28.1	30.3	29.6	29.2	5.1	(0.0)	11.4
3368	Electronic and Other Office, Store and Business Machine Industries	6.4	6.4	7.1	6.2	5.3	5.3	5.3
3911	Indicating, Recording and Controlling Instruments Industry	8.2	7.3	6.5	7.6	9.0	9.8	8.8
3912	Other Instruments and Related Products Industry	22.8	21.0	18.8	17.8	16.6	14.5	14.7
	<b>Total ICT Manufacturing Trade Balance</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

See Sources and Technical Notes for more details.



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**Section 6**  
**ICT Manufacturing**  
**Industry Tables**  
**1990 - 1996**

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Table 6.0  
ICT Manufacturing: 1990 - 1996  
Total ICT Manufacturing

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Production Employees	60,280	58,244	61,418	56,822	57,448	62,284	69,492
Administrative & Executive Employment	33,014	34,533	32,853	30,545	29,882	29,990	25,983
Total Employment	93,294	92,775	94,271	87,367	87,330	92,274	95,475

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of Establishments	1,251	1,112	1,077	1,033	1,020	1,099	1,127
Production Salaries & Wages	1,745,573	1,765,653	1,967,295	1,848,713	1,922,770	2,112,298	2,623,610
Administrative and Executive Salaries & Wages	1,403,093	1,512,405	1,469,318	1,569,527	1,578,441	1,597,886	1,422,872
Total Salaries and Wages	3,148,666	3,278,058	3,436,613	3,418,240	3,501,211	3,710,184	4,046,482
Total Shipments (Revenue)	14,315,374	16,611,269	18,053,653	17,881,217	21,312,590	26,048,926	25,492,572
Manufacturing Shipments	12,310,169	14,442,199	15,519,960	15,739,354	19,020,733	23,663,184	23,181,316
Cost of Fuel & Electricity	80,905	81,527	88,810	88,538	91,139	99,767	103,738
Cost of Materials and Supplies Used	5,891,056	8,106,478	9,014,576	9,049,160	11,505,427	14,639,920	13,574,528
Cost of Materials, Supplies & Goods for Resale	7,227,458	9,387,416	10,704,158	10,474,784	12,968,266	16,383,867	15,264,160
Manufacturing Value Added	6,292,725	6,219,326	6,515,474	6,766,994	7,473,050	9,222,962	9,519,596
Total Value Added	6,931,362	7,053,516	7,285,693	7,483,233	8,302,068	9,863,491	10,142,486

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP (1986 constant dollars)	6,071,300	6,370,700	6,957,900	7,220,300	9,222,900	11,372,500	11,081,100
R&D Expenditures	1,521,992	1,588,043	1,613,945	1,766,129	2,027,164	2,241,857	2,357,964

Trade Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Imports	18,200,191	19,154,722	21,548,520	24,588,175	30,473,990	35,568,247	36,478,274
Total Exports	9,642,740	10,486,975	11,603,735	12,433,838	16,052,035	19,530,748	20,705,058
Trade Balance	(8,557,451)	(8,667,747)	(9,944,785)	(12,154,338)	(14,421,955)	(16,037,499)	(15,773,216)
Manufacturing Shipments	12,310,169	14,442,199	15,519,960	15,739,354	19,020,733	23,663,184	23,181,316
Apparent Domestic Market	20,867,620	23,109,946	25,464,745	27,893,692	33,442,688	39,700,683	38,954,532

All underlined figures are Industry Canada estimates.  
See Sources and Technical Notes for more details.

**Table 6.1**  
**ICT Manufacturing: 1990 - 1996**  
**Record Player, Radio and TV Receivers\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Production Employees	2,066	1,779	2,195	1,239	1,195	921	824
Administrative & Executive Employment	562	500	469	194	321	252	244
Total Employment	2,628	2,279	2,664	1,433	1,516	1,173	1,068

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of Establishments	20	20	14	15	16	17	16
Production Salaries & Wages	50,607	44,324	62,525	28,845	30,033	20,610	<u>17,264</u>
Administrative and Executive Salaries & Wages	24,444	24,387	25,068	10,698	15,491	12,518	<u>12,109</u>
Total Salaries and Wages	75,051	68,711	87,593	39,543	45,524	33,128	<u>29,373</u>
Total Shipments (Revenue)	831,455	726,534	915,371	668,585	821,370	811,951	<u>623,943</u>
Manufacturing Shipments	555,167	477,539	538,568	272,805	391,052	375,247	<u>288,358</u>
Cost of Fuel & Electricity	1,688	1,979	2,168	1,406	1,218	1,137	<u>874</u>
Cost of Materials and Supplies Used	338,983	322,323	346,017	225,027	327,885	313,852	<u>241,179</u>
Cost of Materials, Supplies & Goods for Resale	583,316	516,309	667,809	551,823	653,660	672,257	<u>516,595</u>
Manufacturing Value Added	208,825	169,810	178,010	48,190	56,987	61,061	<u>46,922</u>
Total Value Added	240,780	224,819	233,021	117,174	161,530	139,360	<u>107,091</u>

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP (1986 constant dollars)	159,000	132,400	147,100	75,200	108,700	117,800	87,500
R&D Expenditures	3,182	7,164	9,519	10,662	11,787	13,399	14,481

Trade Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Imports	1,458,792	1,665,260	1,786,347	2,055,814	2,322,757	2,542,556	2,279,677
Total Exports	190,474	114,095	137,032	144,635	217,188	256,600	240,208
Trade Balance	(1,268,318)	(1,551,165)	(1,649,315)	(1,911,180)	(2,105,570)	(2,285,956)	(2,039,469)
Manufacturing Shipments	555,167	477,539	538,568	272,805	391,052	375,247	<u>288,358</u>
Apparent Domestic Market	1,823,485	2,028,704	2,187,883	2,183,985	2,496,622	2,661,203	<u>2,327,827</u>

**\* Refers to SIC 3341**

also referred to as Consumer Electronics

All underlined figures are Industry Canada estimates.

See Sources and Technical Notes for more details.

**Table 6.2**  
**ICT Manufacturing: 1990 - 1996**  
**Communication and Other Electronic Components\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Production Employees	38,961	37,089	38,664	35,814	36,634	39,776	42,072
Administrative & Executive Employment	17,175	19,027	18,098	17,519	16,041	16,636	13,836
Total Employment	56,136	56,114	56,762	53,333	52,675	56,412	55,908

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of Establishments	557	501	484	467	458	511	530
Production Salaries & Wages	1,190,772	1,189,347	1,337,439	1,255,766	1,311,787	1,393,708	1,598,067
Administrative and Executive Salaries & Wages	736,757	814,522	782,354	897,896	871,680	913,643	788,675
Total Salaries and Wages	1,927,529	2,003,869	2,119,793	2,153,662	2,183,467	2,307,351	2,386,742
Total Shipments (Revenue)	7,407,490	9,624,074	10,607,253	10,606,044	11,615,500	14,119,848	15,731,817
Manufacturing Shipments	6,700,601	8,781,806	9,699,201	9,840,064	10,970,217	13,331,953	14,844,472
Cost of Fuel & Electricity	47,624	49,934	56,645	56,326	57,911	64,831	71,831
Cost of Materials and Supplies Used	2,607,817	4,507,419	5,287,977	5,369,644	5,712,608	6,738,949	7,468,987
Cost of Materials, Supplies & Goods for Resale	3,076,025	5,029,965	5,873,564	5,914,240	6,224,115	7,409,818	8,223,590
Manufacturing Value Added	4,045,294	4,160,918	4,480,071	4,515,577	5,206,312	6,697,739	7,202,822
Total Value Added	4,253,809	4,426,698	4,728,644	4,736,961	5,340,088	6,813,499	7,336,829

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP (1986 constant dollars)	3,293,200	3,322,900	3,670,100	3,663,500	4,086,600	4,818,000	5,271,400
R&D Expenditures	1,155,132	1,188,404	1,192,638	1,376,571	1,609,800	1,824,790	1,927,781

Trade Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Imports	6,797,493	7,016,018	7,837,926	8,748,834	14,399,414	17,781,033	18,093,751
Total Exports	5,112,800	5,531,547	5,711,720	5,890,957	7,267,975	8,766,999	10,708,172
Trade Balance	(1,684,693)	(1,484,471)	(2,126,206)	(2,857,877)	(7,131,439)	(9,014,034)	(7,385,579)
Manufacturing Shipments	6,700,601	8,781,806	9,699,201	9,840,064	10,970,217	13,331,953	14,844,472
Apparent Domestic Market	8,385,294	10,266,277	11,825,407	12,697,941	18,101,656	22,345,987	22,230,051

**\* Refers to SIC 335 (aggregation of SIC 3351, 3352 & 3359)**

All underlined figures are Industry Canada estimates.  
See Sources and Technical Notes for more details.

**Table 6.2.1**  
**ICT Manufacturing: 1990 - 1996**  
**Electronic Parts and Components Industry\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Production Employees	12,242	11,192	9,799	10,251	11,532	14,271	15,095
Administrative & Executive Employment	2,721	5,198	4,882	2,814	2,761	3,399	2,827
Total Employment	14,963	16,389	14,681	13,065	14,293	17,670	17,922

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of Establishments	262	222	215	208	209	239	242
Production Salaries & Wages	286,730	265,730	260,060	266,494	313,373	388,387	445,336
Administrative and Executive Salaries & Wages	111,053	194,405	158,345	138,083	142,628	171,494	148,037
Total Salaries and Wages	397,783	460,135	418,405	404,577	456,001	559,881	593,373
Total Shipments (Revenue)	1,250,912	3,084,722	3,568,802	3,636,628	3,917,958	4,975,857	5,413,705
Manufacturing Shipments**	1,190,258	3,020,879	3,484,147	3,568,140	3,893,984	4,933,241	5,367,339
Cost of Fuel & Electricity	20,448	21,595	21,921	22,566	24,636	31,151	33,892
Cost of Materials and Supplies Used	448,742	2,204,267	2,720,184	2,693,925	2,759,935	3,366,149	3,662,352
Cost of Materials, Supplies & Goods for Resale	502,776	2,246,050	2,785,072	2,738,921	2,784,005	3,423,152	3,724,371
Manufacturing Value Added	723,672	688,527	741,087	847,092	1,122,989	1,692,997	1,556,071
Total Value Added	730,292	709,106	764,812	870,584	1,122,893	1,677,344	1,541,684

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP (1986 constant dollars)	680,900	753,000	834,200	868,900	983,800	1,182,300	1,327,700
R&D Expenditures	42,588	41,436	49,036	48,542	50,260	59,012	71,469

Trade Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Imports	4,785,828	4,953,746	5,461,302	5,994,935	11,123,493	13,927,342	13,439,981
Total Exports	3,065,120	3,580,019	3,275,901	2,992,473	3,468,440	4,278,510	5,204,443
Trade Balance	(1,720,708)	(1,373,726)	(2,185,401)	(3,002,462)	(7,655,053)	(9,648,832)	(8,235,538)
Manufacturing Shipments**	1,190,258	3,020,879	3,484,147	3,568,140	3,893,984	4,933,241	5,367,339
Apparent Domestic Market	2,910,966	4,394,605	5,669,548	6,570,602	11,549,037	14,582,073	13,602,877

**\* Refers to SIC 3352**

\*\* In 1991, the method of reporting manufacturing shipments changed for this SIC.

All underlined figures are Industry Canada estimates.

See Sources and Technical Notes for more details.

**Table 6.2.2**  
**ICT Manufacturing: 1990 - 1996**  
**Telecommunication Equipment Industry and Other**  
**Communication and Electronic Equipment Industries**

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Production Employees	26,719	25,897	28,865	25,563	25,102	25,505	26,977
Administrative & Executive Employment	14,454	13,829	13,216	14,705	13,280	13,237	11,009
Total Employment	41,173	39,725	42,081	40,268	38,382	38,742	37,986

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of Establishments	295	279	269	259	249	272	288
Production Salaries & Wages	904,042	923,617	1,077,379	989,272	998,414	1,005,321	1,152,731
Administrative and Executive Salaries & Wages	625,704	620,117	624,009	759,813	729,052	742,149	640,638
Total Salaries and Wages	1,529,746	1,543,734	1,701,388	1,749,085	1,727,466	1,747,470	1,793,369
Total Shipments (Revenue)	6,156,578	6,539,352	7,038,451	6,969,416	7,697,542	9,143,991	10,318,112
Manufacturing Shipments	5,510,343	5,760,927	6,215,054	6,271,924	7,076,233	8,398,712	9,477,133
Cost of Fuel & Electricity	27,176	28,339	34,724	33,760	33,275	33,680	37,939
Cost of Materials and Supplies Used	2,159,075	2,303,152	2,567,793	2,675,719	2,952,673	3,372,800	3,806,635
Cost of Materials, Supplies & Goods for Resale	2,573,249	2,783,915	3,088,492	3,175,319	3,440,110	3,986,666	4,499,219
Manufacturing Value Added	3,321,622	3,472,391	3,738,984	3,668,485	4,083,323	5,004,742	5,646,751
Total Value Added	3,523,517	3,717,592	3,963,832	3,866,377	4,217,195	5,136,155	5,795,145

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP (1986 constant dollars)	2,612,300	2,569,900	2,835,900	2,794,600	3,102,800	3,635,700	3,943,700
R&D Expenditures	1,112,544	1,146,968	1,143,602	1,328,029	1,559,540	1,765,778	1,856,312

Trade Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Imports	2,011,665	2,062,273	2,376,624	2,753,898	3,275,921	3,853,692	4,653,771
Total Exports	2,047,680	1,951,528	2,435,819	2,898,483	3,799,535	4,488,489	5,503,730
Trade Balance	36,015	(110,745)	59,195	144,585	523,614	634,797	849,959
Manufacturing Shipments	5,510,343	5,760,927	6,215,054	6,271,924	7,076,233	8,398,712	9,477,133
Apparent Domestic Market	5,474,328	5,871,672	6,155,859	6,127,339	6,552,619	7,763,915	8,627,174

\* Refers to SIC 3358 (SIC 3351 & 3359)

All underlined figures are Industry Canada estimates.  
See Sources and Technical Notes for more details.



**Table 6.2.2.1**  
**ICT Manufacturing: 1990 - 1996**  
**Telecommunication Equipment Industry\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Production Employees	8,498	<u>10,054</u>	<u>11,609</u>	10,497	11,439	12,625	<u>13,354</u>
Administrative & Executive Employment	6,363	6,214	6,064	8,207	7,848	8,081	6,721
Total Employment	14,861	16,267	17,673	18,704	19,287	20,706	20,075

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of Establishments	57	65	63	62	61	65	74
Production Salaries & Wages	286,268	<u>361,047</u>	<u>435,825</u>	429,334	445,974	481,040	<u>551,575</u>
Administrative and Executive Salaries & Wages	307,360	311,110	314,860	469,780	472,796	500,828	<u>432,325</u>
Total Salaries and Wages	593,628	<u>672,157</u>	<u>750,685</u>	899,114	918,770	981,868	<u>983,900</u>
Total Shipments (Revenue)	<u>3,003,561</u>	<u>3,511,093</u>	<u>4,018,624</u>	<u>4,192,552</u>	<u>4,871,576</u>	<u>6,267,300</u>	<u>7,091,099</u>
Manufacturing Shipments	<u>2,736,077</u>	<u>3,186,491</u>	<u>3,636,904</u>	<u>3,811,177</u>	<u>4,457,561</u>	<u>5,756,147</u>	<u>6,512,758</u>
Cost of Fuel & Electricity	9,304	<u>10,945</u>	<u>13,226</u>	14,568	15,174	16,319	<u>18,464</u>
Cost of Materials and Supplies Used	<u>1,010,953</u>	<u>1,248,250</u>	<u>1,485,546</u>	1,669,679	1,858,810	2,389,972	<u>2,704,119</u>
Cost of Materials, Supplies & Goods for Resale	<u>1,210,404</u>	<u>1,475,777</u>	<u>1,738,055</u>	1,935,754	2,168,973	2,799,913	<u>3,167,944</u>
Manufacturing Value Added	<u>1,743,039</u>	<u>1,990,567</u>	<u>2,238,095</u>	2,234,300	2,580,733	3,366,290	<u>3,808,769</u>
Total Value Added	<u>1,780,906</u>	<u>2,035,181</u>	<u>2,289,456</u>	2,349,600	2,684,585	3,467,502	<u>3,923,284</u>

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP (1986 constant dollars)	1,337,900	1,328,300	1,558,600	1,555,800	1,762,200	2,262,700	2,433,500
R&D Expenditures	738,517	773,383	735,085	906,052	1,109,731	1,378,664	1,473,208

Trade Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Imports	550,875	695,294	1,019,251	1,229,492	1,414,368	1,690,409	2,215,607
Total Exports	1,102,303	1,072,837	1,435,881	1,924,310	2,328,609	2,839,265	3,549,549
Trade Balance	551,428	377,543	416,630	694,818	914,241	1,148,856	1,333,942
Manufacturing Shipments	<u>2,736,077</u>	<u>3,186,491</u>	<u>3,636,904</u>	<u>3,811,177</u>	<u>4,457,561</u>	<u>5,756,147</u>	<u>6,512,758</u>
Apparent Domestic Market	2,184,649	2,808,948	3,220,274	3,116,359	3,543,320	4,607,291	5,178,816

**\* Refers to SIC 3351**

All underlined figures are Industry Canada estimates.  
 See Sources and Technical Notes for more details.

**Table 6.2.2.2**  
**ICT Manufacturing: 1990 - 1996**  
**Other Communication and Electronic Equipment Industries\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Production Employees	18,221	15,843	17,256	15,066	13,663	12,880	13,623
Administrative & Executive Employment	8,091	7,615	7,152	6,498	5,432	5,156	4,288
Total Employment	26,312	23,458	24,408	21,564	19,095	18,036	17,911

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of Establishments	238	214	206	197	188	207	214
Production Salaries & Wages	617,774	562,570	641,554	559,938	552,440	524,281	601,156
Administrative and Executive Salaries & Wages	318,344	309,007	309,149	290,033	256,256	241,321	208,313
Total Salaries and Wages	936,118	871,577	950,703	849,971	808,696	765,602	809,469
Total Shipments (Revenue)	3,153,017	3,028,259	3,019,827	2,776,864	2,825,966	2,876,691	3,227,013
Manufacturing Shipments	2,774,266	2,574,436	2,578,150	2,460,747	2,618,672	2,642,565	2,964,375
Cost of Fuel & Electricity	17,872	17,394	21,498	19,192	18,101	17,361	19,475
Cost of Materials and Supplies Used	1,148,122	1,054,902	1,082,247	1,006,040	1,093,863	982,828	1,102,516
Cost of Materials, Supplies & Goods for Resale	1,362,845	1,308,138	1,350,437	1,239,565	1,271,137	1,186,753	1,331,275
Manufacturing Value Added	1,578,583	1,481,824	1,500,889	1,434,185	1,502,590	1,638,452	1,837,982
Total Value Added	1,742,611	1,682,411	1,674,376	1,516,777	1,532,610	1,668,653	1,871,861

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP (1986 constant dollars)	1,274,400	1,241,600	1,277,300	1,238,800	1,340,600	1,373,000	1,510,200
R&D Expenditures	374,027	373,585	408,517	421,977	449,809	387,114	383,104

Trade Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Imports	1,460,790	1,366,979	1,357,373	1,524,406	1,861,553	2,163,283	2,438,163
Total Exports	945,377	878,691	999,938	974,174	1,470,926	1,649,224	1,954,180
Trade Balance	(515,413)	(488,288)	(357,435)	(550,232)	(390,627)	(514,059)	(483,983)
Manufacturing Shipments	2,774,266	2,574,436	2,578,150	2,460,747	2,618,672	2,642,565	2,964,375
Apparent Domestic Market	3,289,679	3,062,724	2,935,585	3,010,979	3,009,299	3,156,624	3,448,358

\* Refers to SIC 3359

All underlined figures are Industry Canada estimates.  
See Sources and Technical Notes for more details.

**Table 6.3**  
**ICT Manufacturing: 1990 - 1996**  
**Office, Store and Business Machine Industry\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Production Employees	8,340	7,886	8,826	8,743	8,974	9,585	13,607
Administrative & Executive Employment	7,856	7,794	7,909	6,684	6,878	6,112	5,757
Total Employment	16,196	15,680	16,735	15,427	15,852	15,697	19,364

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of Establishments	225	189	190	182	173	184	182
Production Salaries & Wages	211,811	218,263	233,737	247,138	263,516	335,967	569,041
Administrative and Executive Salaries & Wages	326,386	346,946	361,736	363,620	374,813	334,920	325,930
Total Salaries and Wages	538,197	565,209	595,473	610,758	638,329	670,887	894,971
Total Shipments (Revenue)	3,739,459	3,786,257	4,096,673	4,062,458	6,077,021	8,014,627	5,806,279
Manufacturing Shipments	3,208,158	3,297,202	3,353,379	3,655,312	5,496,222	7,559,498	5,474,717
Cost of Fuel & Electricity	13,020	12,711	12,528	13,980	14,894	15,704	11,636
Cost of Materials and Supplies Used	2,118,547	2,468,110	2,532,752	2,610,536	4,522,583	6,497,644	4,695,632
Cost of Materials, Supplies & Goods for Resale	2,407,573	2,712,727	3,023,641	2,803,307	4,751,400	6,802,984	4,916,633
Manufacturing Value Added	1,049,582	841,478	788,092	1,079,661	1,000,602	1,104,352	808,883
Total Value Added	1,291,857	1,085,916	1,040,497	1,294,036	1,352,584	1,254,141	919,445

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP (1986 constant dollars)	1,815,100	2,067,700	2,291,700	2,622,700	4,106,400	5,459,600	4,696,500
R&D Expenditures	298,816	329,102	344,553	309,209	325,095	321,505	320,162

Trade Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Imports	6,132,416	6,757,094	7,806,797	8,945,374	7,859,131	8,972,824	9,768,105
Total Exports	3,183,948	3,580,441	4,153,853	4,649,141	6,366,223	8,129,069	7,123,830
Trade Balance	(2,948,468)	(3,176,652)	(3,652,945)	(4,296,232)	(1,492,909)	(843,756)	(2,644,275)
Manufacturing Shipments	3,208,158	3,297,202	3,353,379	3,655,312	5,496,222	7,559,498	5,474,717
Apparent Domestic Market	6,156,626	6,473,854	7,006,324	7,951,544	6,989,131	8,403,254	8,118,992

**\* Refers to SIC 336 (aggregation of SIC 3361, 3362 & 3369)**  
 also referred to as Computer Equipment

All underlined figures are Industry Canada estimates.  
 See Sources and Technical Notes for more details.

**Table 6.3.1**  
**ICT Manufacturing: 1990 - 1996**  
**Electronic Computing and Peripheral Equipment Industry\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Production Employees	7,029	6,606	7,447	7,333	7,747	8,255	11,719
Administrative & Executive Employment	5,130	4,405	4,448	3,650	6,002	5,244	4,939
Total Employment	12,159	11,011	11,895	10,983	13,749	13,499	16,658

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of Establishments	182	148	149	142	137	148	143
Production Salaries & Wages	177,069	181,627	194,351	204,824	224,592	291,666	494,007
Administrative and Executive Salaries & Wages	219,385	209,571	208,862	191,921	333,535	296,559	288,599
Total Salaries and Wages	396,454	391,198	403,213	396,745	558,127	588,225	782,606
Total Shipments (Revenue)	2,954,501	2,964,656	3,321,023	3,316,961	5,645,716	7,626,920	5,480,747
Manufacturing Shipments	2,837,539	2,884,371	2,960,469	3,241,689	5,106,651	7,209,010	5,180,435
Cost of Fuel & Electricity	10,358	9,863	9,501	10,860	12,198	12,800	9,198
Cost of Materials and Supplies Used	1,883,892	2,200,457	2,292,468	2,351,323	4,264,713	6,279,604	4,512,558
Cost of Materials, Supplies & Goods for Resale	1,980,981	2,263,632	2,617,155	2,395,903	4,480,114	6,571,870	4,722,582
Manufacturing Value Added	919,273	716,937	637,622	923,177	873,492	978,025	702,814
Total Value Added	939,146	734,047	673,489	953,869	1,197,156	1,103,669	793,103

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP (1986 constant dollars)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
R&D Expenditures	274,982	301,985	319,526	281,160	294,869	290,703	288,880

Trade Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Imports	5,224,331	5,879,324	6,785,206	7,839,459	6,705,253	7,752,662	8,510,692
Total Exports	2,821,063	3,256,564	3,842,354	4,293,010	5,974,701	7,756,843	6,706,081
Trade Balance	(2,403,267)	(2,622,761)	(2,942,852)	(3,546,449)	(730,552)	4,181	(1,804,611)
Manufacturing Shipments	2,837,539	2,884,371	2,960,469	3,241,689	5,106,651	7,209,010	5,180,435
Apparent Domestic Market	5,240,806	5,507,132	5,903,321	6,788,138	5,837,203	7,204,829	6,985,046

**\* Refers to SIC 3361**

All underlined figures are Industry Canada estimates.  
See Sources and Technical Notes for more details.

**Table 6.3.2**  
**ICT Manufacturing: 1990 - 1996**  
**Office, Store and Business Machine Industries (including Electronic)\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Production Employees	1,311	1,280	1,379	1,410	1,227	1,330	<u>1,888</u>
Administrative & Executive Employment	2,726	3,389	3,461	3,034	876	868	818
Total Employment	4,037	4,669	4,840	4,444	2,103	2,198	2,706

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of Establishments	43	41	41	40	36	36	39
Production Salaries & Wages	34,742	36,636	39,386	42,314	38,924	44,301	<u>75,034</u>
Administrative and Executive Salaries & Wages	107,001	137,375	152,874	171,699	41,278	38,361	<u>37,331</u>
Total Salaries and Wages	141,743	174,011	192,260	214,013	80,202	82,662	<u>112,365</u>
Total Shipments (Revenue)	784,958	821,601	775,650	745,497	431,305	387,707	<u>325,532</u>
Manufacturing Shipments	370,619	412,831	392,910	413,623	389,571	350,488	<u>294,282</u>
Cost of Fuel & Electricity	2,662	2,848	3,027	3,120	2,696	2,904	<u>2,438</u>
Cost of Materials and Supplies Used	234,655	267,653	240,284	259,213	257,870	218,040	<u>183,074</u>
Cost of Materials, Supplies & Goods for Resale	426,592	449,095	406,486	407,404	271,286	231,114	<u>194,051</u>
Manufacturing Value Added	130,309	124,541	150,470	156,484	127,110	126,327	<u>106,069</u>
Total Value Added	352,711	351,869	367,008	340,167	155,428	150,472	<u>126,342</u>

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP (1986 constant dollars)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
R&D Expenditures	23,834	27,117	25,027	28,049	30,226	30,802	31,282

Trade Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Imports	908,086	877,769	1,021,591	1,105,915	1,153,878	1,220,162	1,257,413
Total Exports	362,885	323,877	311,499	356,132	391,522	372,226	417,749
Trade Balance	(545,200)	(553,892)	(710,092)	(749,783)	(762,357)	(847,937)	(839,664)
Manufacturing Shipments	370,619	412,831	392,910	413,623	389,571	350,488	<u>294,282</u>
Apparent Domestic Market	915,819	966,723	1,103,002	1,163,406	1,151,928	1,198,425	1,133,946

**\* Refers to SIC 3368 (SIC 3362 & 3369)**

All underlined figures are Industry Canada estimates.  
 See Sources and Technical Notes for more details.

**Table 6.4**  
**ICT Manufacturing: 1990 - 1996**  
**Indicating, Recording, Controlling and Other**  
**Instruments and Related Products Industry\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Production Employees	10,913	11,490	11,733	11,026	10,645	12,002	<u>12,989</u>
Administrative & Executive Employment	7,421	7,212	6,377	6,148	6,642	6,990	<u>6,146</u>
Total Employment	18,334	18,702	18,110	17,174	17,287	18,992	<u>19,135</u>

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of Establishments	449	402	389	369	373	387	<u>399</u>
Production Salaries & Wages	292,383	313,719	333,594	316,964	317,434	362,013	<u>439,238</u>
Administrative and Executive Salaries & Wages	315,506	326,550	300,160	297,313	316,457	336,805	<u>296,158</u>
Total Salaries and Wages	607,889	640,269	633,754	614,277	633,891	698,818	<u>735,396</u>
Total Shipments (Revenue)	2,336,970	2,474,404	2,434,356	2,544,130	2,798,699	3,102,500	<u>3,330,533</u>
Manufacturing Shipments	1,846,243	1,885,652	1,928,812	1,971,173	2,163,242	2,396,486	<u>2,573,769</u>
Cost of Fuel & Electricity	18,573	16,903	17,469	16,826	17,116	18,095	<u>19,397</u>
Cost of Materials and Supplies Used	825,709	808,626	847,830	843,953	942,351	1,089,475	<u>1,168,730</u>
Cost of Materials, Supplies & Goods for Resale	1,160,544	1,128,415	1,139,144	1,205,414	1,339,091	1,498,808	<u>1,607,342</u>
Manufacturing Value Added	989,024	1,047,120	1,069,301	1,123,566	1,209,149	1,359,810	<u>1,460,969</u>
Total Value Added	1,144,916	1,316,083	1,283,531	1,335,062	1,447,866	1,656,491	<u>1,779,121</u>

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP (1986 constant dollars)**	804,000	847,700	849,000	858,900	921,200	977,100	<u>1,025,700</u>
R&D Expenditures	64,862	63,373	67,235	69,687	80,482	82,163	<u>95,540</u>

Trade Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Imports	3,811,489	3,716,350	4,117,450	4,838,154	5,892,687	6,271,834	<u>6,336,741</u>
Total Exports	1,155,517	1,260,891	1,601,131	1,749,105	2,200,650	2,378,080	<u>2,632,848</u>
Trade Balance	(2,655,972)	(2,455,459)	(2,516,320)	(3,089,049)	(3,692,038)	(3,893,753)	<u>(3,703,893)</u>
Manufacturing Shipments	1,846,243	1,885,652	1,928,812	1,971,173	2,163,242	2,396,486	<u>2,573,769</u>
Apparent Domestic Market	4,502,215	4,341,111	4,445,132	5,060,222	5,855,280	6,290,239	<u>6,277,662</u>

**\* Refers to SIC 391 (SIC 3911 & 3912)**

also referred to as Instrumentation

\*\* Somewhat overstated due to the inclusion of SICs 3913 and 3914.

All underlined figures are Industry Canada estimates.

See Sources and Technical Notes for more details.

**Table 6.4.1**  
**ICT Manufacturing: 1990 - 1996**  
**Indicating, Recording and Controlling Instruments Industry\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Production Employees	6,622	6,509	6,499	5,815	5,522	6,029	6,525
Administrative & Executive Employment	4,830	4,334	3,985	3,863	3,907	4,110	3,614
Total Employment	11,452	10,843	10,484	9,678	9,429	10,139	10,139

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of Establishments	270	242	234	221	216	212	215
Production Salaries & Wages	174,721	178,574	186,881	168,790	159,481	183,292	222,392
Administrative and Executive Salaries & Wages	190,081	174,697	169,807	168,680	183,305	198,129	174,218
Total Salaries and Wages	364,802	353,271	356,688	337,470	342,786	381,421	396,610
Total Shipments (Revenue)	1,317,861	1,286,427	1,282,708	1,313,436	1,405,389	1,505,970	1,636,535
Manufacturing Shipments	1,075,575	1,025,508	1,053,380	1,031,833	1,116,696	1,207,790	1,312,503
Cost of Fuel & Electricity	10,128	7,861	8,186	7,621	7,619	7,685	8,351
Cost of Materials and Supplies Used	466,442	435,372	436,907	393,747	432,687	496,838	539,913
Cost of Materials, Supplies & Goods for Resale	610,643	568,843	556,544	530,204	581,319	664,052	721,624
Manufacturing Value Added	595,495	575,978	611,791	641,260	670,358	707,346	768,672
Total Value Added	693,580	703,426	721,482	786,406	810,419	838,312	910,992

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP (1986 constant dollars)	408,900	394,700	399,800	389,200	408,600	442,500	472,400
R&D Expenditures	25,347	23,595	24,495	26,580	28,342	25,856	29,838

Trade Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Imports	1,276,367	1,234,881	1,358,438	1,757,877	2,468,973	2,777,834	2,647,898
Total Exports	573,830	601,047	710,445	833,335	1,175,056	1,213,685	1,261,508
Trade Balance	(702,537)	(633,834)	(647,992)	(924,542)	(1,293,916)	(1,564,149)	(1,386,390)
Manufacturing Shipments	1,075,575	1,025,508	1,053,380	1,031,833	1,116,696	1,207,790	1,312,503
Apparent Domestic Market	1,778,112	1,659,342	1,701,372	1,956,375	2,410,612	2,771,939	2,698,893

**\* Refers to SIC 3911**

All underlined figures are Industry Canada estimates.  
See Sources and Technical Notes for more details.

**Table 6.4.2**  
**ICT Manufacturing: 1990 - 1996**  
**Other Instruments and Related Products\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Production Employees	4,291	4,981	5,234	5,211	5,123	5,973	6,464
Administrative & Executive Employment	2,591	2,878	2,392	2,285	2,735	2,880	2,532
Total Employment	6,882	7,859	7,626	7,496	7,858	8,853	8,996

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of Establishments	179	160	155	148	157	175	184
Production Salaries & Wages	117,662	135,145	146,713	148,174	157,953	178,721	216,846
Administrative and Executive Salaries & Wages	125,425	151,853	130,353	128,633	133,152	138,676	121,940
Total Salaries and Wages	243,087	286,998	277,066	276,807	291,105	317,397	338,786
Total Shipments (Revenue)	1,019,109	1,187,977	1,151,648	1,230,694	1,393,310	1,596,530	1,693,998
Manufacturing Shipments	770,668	860,144	875,432	939,340	1,046,546	1,188,696	1,261,266
Cost of Fuel & Electricity	8,445	9,042	9,283	9,205	9,497	10,410	11,046
Cost of Materials and Supplies Used	359,267	373,254	410,923	450,206	509,664	592,637	628,817
Cost of Materials, Supplies & Goods for Resale	549,901	559,572	582,600	675,210	757,772	834,756	885,718
Manufacturing Value Added	393,529	471,142	457,510	482,306	538,791	652,464	692,297
Total Value Added	451,336	612,657	562,049	548,656	637,447	818,179	868,129

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP (1986 constant dollars)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
R&D Expenditures	39,515	39,778	42,740	43,107	52,140	56,307	65,702

Trade Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Imports	2,535,122	2,481,469	2,759,013	3,080,277	3,423,714	3,494,000	3,688,843
Total Exports	581,687	659,845	890,685	915,770	1,025,593	1,164,395	1,371,340
Trade Balance	(1,953,435)	(1,821,624)	(1,868,328)	(2,164,507)	(2,398,121)	(2,329,604)	(2,317,503)
Manufacturing Shipments	770,668	860,144	875,432	939,340	1,046,546	1,188,696	1,261,266
Apparent Domestic Market	2,724,103	2,681,768	2,743,760	3,103,847	3,444,667	3,518,300	3,578,769

\* Refers to SIC 3912

All underlined figures are Industry Canada estimates.  
See Sources and Technical Notes for more details.



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**Section 7**  
**ICT Services**  
**Industry Tables**  
**1990 - 1996**

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**Table 7.0**  
**ICT Services: 1990 - 1996**  
**Total ICT Services**

<b>Establishment Level</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>
Number of Establishments*	10,924	11,447	12,001	13,203	13,611	15,307	16,300

persons

<b>Employment</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>
Total Employment**	267,790	268,311	244,201	257,481	277,588	317,835	322,500

thousands of dollars

<b>Revenues</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>
Total Revenues	27,784,455	30,838,050	32,323,877	33,963,194	38,334,603	39,655,982	44,131,079

thousands of dollars

<b>Company Level</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>
GDP at Factor Cost (1986 constant dollars)	19,355,200	20,466,600	21,321,500	22,316,500	24,295,500	26,305,600	28,414,900
R&D Expenditures	368,020	378,492	453,214	569,780	673,227	647,212	675,369

\* Computer Services only.

\*\* Source: The Labour Force Survey, Statistics Canada (Cat. no. 71-001); includes full-time, part-time and self-employed.

All underlined figures are Industry Canada estimates.

See Sources and Technical Notes for more details.

**Table 7.1**  
**ICT Services: 1990 - 1996**  
**Software and Computer Services\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Total Employment**	71,660	90,015	72,024	79,021	99,056	123,312	137,300

Employment	estimated breakdown of employment data (persons)						
	1990	1991	1992	1993	1994	1995	1996
- Full-Time	66,000	84,500	66,100	73,200	92,000	113,300	125,300
- Part-Time	5,700	7,500	6,000	5,800	7,100	10,000	12,000
Self-Employed	19,600	27,000	18,200	25,200	23,800	32,200	40,700

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of Establishments**	10,924	11,447	12,001	13,203	13,611	15,307	16,300
Total Wages and Salaries**	2,434,055	2,548,549	2,782,016	3,424,000	3,637,000	4,104,000	4,623,000

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP at Factor Cost (Constant 1986 dollars)	3,693,000	4,115,000	4,559,000	4,930,000	5,486,000	5,981,000	6,512,500
R&D Expenditures	229,145	231,379	280,239	318,089	430,047	464,121	519,316

Financial Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Revenues	8,315,311	10,266,406	10,831,564	11,605,200	14,583,107	14,334,180	15,436,000
Operating Expenses	7,563,026	10,188,328	10,423,684	11,302,751	13,812,381	13,706,412	14,385,000
Operating Income/Loss	752,285	78,078	407,880	302,449	770,726	627,768	1,051,000
Net Profit	368,278	(109,481)	25,580	(113,776)	354,800	307,002	607,000
Total Assets	6,044,536	6,574,283	6,696,952	6,878,901	6,893,074	7,466,076	9,586,500
Total Liabilities	3,454,190	4,347,281	4,209,129	4,449,715	4,090,853	4,441,758	5,317,250
Total Equity	2,590,346	2,227,002	2,487,823	2,429,186	2,802,221	3,024,317	4,269,250
Profit Margin (%)	9.05	0.76	3.77	2.61	5.29	4.38	6.81

\* Refers to SIC 772 (Computer and Related Services) or as Software & Computer Services

\*\* "Total Employment" and "Total Wages and Salaries" data are from different sources.

All underlined figures are Industry Canada estimates.

See Sources and Technical Notes for more details.

**Table 7.2**  
**ICT Services: 1990 - 1996**  
**Telecommunications Services\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Total Employment	142,157	129,621	120,217	126,910	127,529	144,500	128,700

estimated breakdown of employment data (persons)							
Employment	1990	1991	1992	1993	1994	1995	1996
- Full-Time	136,800	123,600	114,400	120,400	120,000	138,700	122,400
- Part-Time	4,000	4,200	4,200	4,900	5,200	5,800	6,300
Self-Employed (less than 1,500)	x	x	x	x	x	x	x

thousands of dollars							
Company Level	1990	1991	1992	1993	1994	1995	1996
GDP at Factor Cost (Constant 1986 dollars)	13,663,000	14,248,000	14,687,000	15,361,000	16,753,000	18,188,000	19,749,000
R&D Expenditures (Combined with Broadcasting)**	N/A	N/A	N/A	N/A	N/A	N/A	N/A

thousands of dollars							
Operating Revenues	1990	1991	1992	1993	1994	1995	1996
Telecommunications Carriers***	12,264,484	13,712,259	14,277,520	15,876,512	16,501,855	17,817,847	20,888,000
Other Telecommunications Service Providers	2,746,000	2,215,000	2,257,000	1,337,000	1,829,000	1,732,000	1,640,204
Revenues	15,010,484	15,927,259	16,534,520	17,213,512	18,330,855	19,549,847	22,528,204

thousands of dollars or percent							
Other Financial Data	1990	1991	1992	1993	1994	1995	1996
Telecommunications Carriers (only)***							
Operating Expenses	9,318,163	10,283,758	10,728,820	12,599,365	13,142,281	14,813,786	17,265,000
Operating Income/Loss	2,946,321	3,428,501	3,548,700	3,277,147	3,359,574	3,004,061	3,623,000
Net Profit	1,322,946	1,542,339	1,591,491	894,261	1,221,941	792,505	1,289,000
Total Assets	30,966,673	33,271,242	36,150,346	38,591,527	39,346,789	40,617,992	42,015,000
Total Liabilities	16,928,640	18,506,186	20,250,756	22,450,834	23,090,737	24,914,779	26,166,000
Total Equity	14,038,032	14,765,056	15,899,590	16,140,693	16,256,052	15,703,213	15,489,000
Profit Margin (%)	24.02	25.00	24.86	20.64	20.36	16.86	17.34

\* Carriers only, refers to SIC 482 (Telecommunications Carriers)

\*\* See Table 4.4 (p.26) for combined figures.

\*\*\* As reported by Statistics Canada (Cat. no. 61-219).

All underlined figures are Industry Canada estimates.

See Sources and Technical Notes for more details.

**Table 7.3**  
**ICT Services: 1990 - 1996**  
**Broadcasting Services\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Total Employment**	53,973	48,675	51,960	51,550	51,003	50,023	56,500

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP at factor cost (1986 constant dollars)	1,999,200	2,103,600	2,075,500	2,025,500	2,056,500	2,136,600	2,153,400
- Radio & TV Broadcasting	1,309,100	1,361,300	1,330,300	1,257,000	1,268,600	1,321,500	1,332,600
- Cable Television	690,100	742,300	745,200	768,500	787,900	815,100	820,800
R&D Expenditures (Combined with Telecom)***	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Financial Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Revenues (excludes grants)	4,458,660	4,644,385	4,957,793	5,144,482	5,420,641	5,771,955	6,166,875
- Radio & TV Broadcasting	2,817,531	2,854,925	3,011,783	2,992,559	3,086,850	3,239,659	3,487,901
- Cable Television	1,641,129	1,789,460	1,946,010	2,151,923	2,333,791	2,532,296	2,678,974
Expenses	5,372,322	5,558,666	5,690,230	6,048,127	6,257,907	6,735,714	7,215,877
- Radio & TV Broadcasting	3,972,852	4,028,728	4,089,546	4,149,177	4,254,093	4,383,435	4,490,608
- Cable Television	1,399,470	1,529,938	1,600,684	1,898,950	2,003,814	2,352,279	2,725,269
Total Profit before income tax	287,111	221,155	457,962	360,877	510,002	591,167	275,784
- Radio & TV Broadcasting****	35,893	(45,807)	104,156	95,261	124,935	157,021	104,884
- Cable Television	251,218	266,962	353,806	265,616	385,067	434,146	170,900

**\* Refers to SIC 481 (Broadcasting)**

\*\* Source: The Labour Force Survey, Statistics Canada (Cat. no. 71-001).

\*\*\* See Table 4.4 (p.26) for combined figures.

\*\*\*\* Profits include grants for Non-Commercial Radio and TV. Profits not applicable to the CBC.

See Sources and Technical Notes for more details.

Table 7.3.1  
ICT Services: 1990 - 1996  
Broadcasting Services  
Radio and TV Broadcasting\*

Establishment Level	1990	1991	1992	1993	1994	1995	1996
Employment**	persons						
- Private radio stations	10,417	10,213	9,813	9,591	9,251	8,963	8,617
- Private television stations	8,673	8,524	8,297	8,158	8,273	8,193	8,023
- Pay and specialty television services****	969	1,061	1,125	1,161	1,200	1,437	1,563
- CBC	10,733	9,814	9,294	9,208	12,298	11,524	11,367
- Non commercial radio and television stations	1,732	1,775	1,967	2,176	2,250	2,177	1,923
<b>Total Employment**</b>	<b>32,524</b>	<b>31,387</b>	<b>30,496</b>	<b>30,294</b>	<b>33,272</b>	<b>32,294</b>	<b>31,493</b>

thousands of dollars							
Financial Data	1990	1991	1992	1993	1994	1995	1996
<b>Revenues (excludes grants)</b>	<b>2,817,531</b>	<b>2,854,925</b>	<b>3,011,783</b>	<b>2,992,559</b>	<b>3,086,850</b>	<b>3,239,659</b>	<b>3,487,901</b>
- Private radio stations	780,271	755,900	768,453	741,056	765,837	780,259	810,542
- Private television stations	1,364,987	1,377,787	1,460,496	1,464,467	1,490,061	1,530,515	1,581,024
- Pay and specialty television services****	297,478	328,685	365,447	399,415	421,413	507,556	582,929
- CBC	318,012	321,922	346,307	332,173	350,279	364,821	459,768
- Non commercial radio and television stations	56,783	70,631	71,080	55,448	59,260	56,508	53,638
<b>Expenses</b>	<b>3,972,852</b>	<b>4,028,728</b>	<b>4,089,546</b>	<b>4,149,177</b>	<b>4,254,093</b>	<b>4,383,435</b>	<b>4,490,608</b>
- Private radio stations	811,434	816,220	813,086	785,219	775,986	764,342	790,636
- Private television stations	1,374,221	1,394,014	1,407,197	1,386,806	1,413,233	1,438,529	1,470,342
- Pay and specialty television services****	263,022	270,978	290,597	336,183	341,278	429,613	532,442
- CBC	1,338,457	1,345,446	1,375,532	1,423,180	1,490,598	1,524,275	1,499,000
- Non commercial radio and television stations	185,718	202,070	203,134	217,789	232,998	226,676	198,188
<b>Total Profit before income tax</b>	<b>35,893</b>	<b>(45,807)</b>	<b>104,156</b>	<b>95,261</b>	<b>124,935</b>	<b>157,021</b>	<b>104,884</b>
- Private radio stations	(19,602)	(34,145)	(32,074)	(50,034)	(27,770)	3,770	6,637
- Private television stations	13,982	(70,409)	56,819	90,364	81,663	92,078	69,193
- Pay and specialty television services****	34,907	55,315	73,141	62,827	79,355	75,143	38,483
- CBC	--	--	--	--	--	--	--
- Non commercial radio and television stations***	6,606	3,432	6,270	(7,896)	(8,313)	(13,970)	(9,429)
<b>Salaries &amp; Benefits</b>	<b>1,570,138</b>	<b>1,644,269</b>	<b>1,652,858</b>	<b>1,671,453</b>	<b>1,762,806</b>	<b>1,806,155</b>	<b>1,686,412</b>
- Private radio stations	375,241	386,963	391,683	382,501	386,156	379,815	385,943
- Private television stations	405,513	420,885	424,694	427,520	444,069	469,029	459,107
- Pay and specialty television services****	23,516	28,656	33,174	53,761	55,148	66,913	72,681
- CBC	683,173	719,801	711,313	713,340	783,203	798,713	693,035
- Non commercial radio and television stations	82,695	87,964	91,994	94,331	94,230	91,685	75,646

thousands of dollars							
Company Level	1990	1991	1992	1993	1994	1995	1996
GDP (1986 constant dollars)	1,309,100	1,361,300	1,330,300	1,257,000	1,268,600	1,321,500	1,332,600

\* Refers to SIC 4811 (Radio Broadcasting), SIC 4812 (TV Broadcasting)  
and SIC 4813 (Combined Radio and TV Broadcasting). Data already included in Table 7.3

\*\* Radio and Television Broadcasting, Statistics Canada (Cat. no. 56-204) was used to provide industry details (full-time equivalents).

\*\*\* Includes grants.

\*\*\*\* Excludes CBC Newsworld and RDI which are already captured in CBC figures.

See Sources and Technical Notes for more details.

**Table 7.3.1A**  
**ICT Services: 1990 - 1996**  
**Radio & TV Broadcasting**  
**Private Radio Stations\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Total Employment**	10,417	10,213	9,813	9,591	9,251	8,963	8,617

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of stations	495	504	501	499	495	495	495
Salaries & Benefits	375,241	386,963	391,683	382,501	386,156	379,815	385,943

Financial Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Revenues	780,271	755,900	768,453	741,056	765,837	780,259	810,542
- Sale of air time	764,343	741,063	749,436	721,455	741,141	754,049	792,020
- Other	15,928	14,837	19,017	19,601	24,697	26,210	18,522
Expenses	811,434	816,220	813,086	785,219	775,986	764,342	790,637
- Program	248,740	254,399	255,163	247,774	246,131	251,347	258,067
- Technical	32,215	32,562	33,265	31,899	32,126	32,016	33,086
- Sales & promotion	199,502	194,525	204,607	204,726	213,510	208,088	221,880
- Administration & general	231,940	233,893	234,501	227,203	225,947	207,793	211,139
- Depreciation	30,632	31,762	32,250	31,022	29,673	28,418	29,082
- Interest expense	68,404	69,079	53,300	42,595	28,598	36,680	37,383
Income(Loss) before taxes and adjustments	(31,163)	(60,320)	(44,633)	(44,163)	(10,149)	15,917	19,905
Other adjustments-income (expense)	11,561	26,174	12,559	(5,871)	(17,621)	(12,148)	(13,269)
Income(Loss) before income taxes	(19,602)	(34,145)	(32,074)	(50,034)	(27,770)	3,770	6,637
Income(Loss) after income taxes	(26,047)	(41,085)	(36,229)	(48,196)	(31,288)	(4,346)	(3,091)

\* Data already included in Table 7.3.1

\*\* Radio and Television Broadcasting, Statistics Canada (Cat. no. 56-204) was used to provide industry details (full-time equivalents).

Numbers may not add up due to rounding.

See Sources and Technical Notes for more details.

**Table 7.3.1B**  
**ICT Services: 1990 -1996**  
**Radio & TV Broadcasting**  
**Private TV Stations\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Total Employment**	8,673	8,524	8,297	8,158	8,273	8,193	8,023

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of stations	103	104	104	106	102	100	103
Salaries & Benefits	405,513	420,885	424,694	427,520	444,069	469,029	459,107

Financial Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Revenues	1,364,987	1,377,787	1,460,496	1,464,467	1,490,061	1,530,514	1,581,024
- Sale of air time	1,248,382	1,262,735	1,341,424	1,329,877	1,370,898	1,444,038	1,487,168
- Other	116,606	115,052	119,073	134,590	119,163	86,476	93,856
Expenses	1,374,221	1,394,014	1,407,197	1,386,806	1,413,233	1,438,529	1,470,342
- Program	774,164	789,972	800,898	791,133	820,885	825,206	861,944
- Technical	74,084	70,164	71,865	71,566	71,520	75,486	75,946
- Sales & promotion	149,799	147,222	148,085	156,002	154,202	168,201	172,057
- Administration & general	226,131	223,064	220,131	212,367	220,629	210,069	199,434
- Depreciation	54,500	54,068	55,709	54,991	56,066	55,674	58,835
- Interest expense	95,544	109,523	110,508	100,746	89,930	103,893	102,126
Income(Loss) before taxes and adjustments	(9,234)	(16,227)	53,299	77,661	76,828	91,985	110,682
Other adjustments-income (expense)	23,215	(54,183)	3,520	12,703	4,836	92	(41,490)
Income(Loss) before income taxes	13,982	(70,409)	56,819	90,364	81,663	92,078	69,193
Income(Loss) after income taxes	915	(64,979)	29,528	58,452	38,399	44,272	30,168

\* Data already included in Table 7.3.1

\*\* Radio and Television Broadcasting, Statistics Canada (Cat. no. 56-204) was used to provide industry details (full-time equivalents).

Numbers may not add up due to rounding.

See Sources and Technical Notes for more details.



**Table 7.3.1C**  
**ICT Services: 1990 -1996**  
**Radio & TV Broadcasting**  
**Pay and Specialty TV Services\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Total Employment**	969	1,061	1,125	1,161	1,200	1,437	1,563

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Number of services	16	16	18	18	18	27	27
Salaries & Benefits	23,516	28,656	33,174	53,761	55,148	66,913	72,681

Financial Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Revenues	297,478	328,685	365,447	399,415	421,413	507,556	582,928
- Sale of air time	54,826	65,340	77,936	87,126	94,964	104,718	133,562
- Other	242,653	263,345	287,511	312,289	326,448	402,838	449,366
Expenses	263,022	270,978	290,597	336,183	341,278	429,613	532,442
- Program	143,298	148,969	162,589	186,379	197,836	253,208	309,692
- Technical	34,572	36,634	39,158	42,542	39,341	48,399	46,246
- Sales & promotion	35,263	41,585	41,064	46,114	44,588	55,961	62,728
- Administration & general	23,036	28,899	34,480	44,595	43,745	48,400	57,544
- Depreciation	5,032	5,228	5,284	7,002	5,280	7,074	9,603
- Interest expense	21,821	9,664	8,022	9,551	10,489	16,572	46,629
Income(Loss) before taxes and adjustments	34,456	57,707	74,850	63,232	80,134	77,943	50,486
Other adjustments-income (expense)	451	(2,392)	(1,709)	(405)	(779)	(2,799)	(12,004)
Income(Loss) before income taxes	34,907	55,315	73,141	62,827	79,355	75,143	38,483
Income(Loss) after income taxes	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\* Data already included in Table 7.3.1. This Table excludes data on CBC Newsworld and RDI.

\*\* Radio and Television Broadcasting, Statistics Canada (Cat. no. 56-204) was used to provide industry details (full-time equivalents).

Numbers may not add up due to rounding.

See Sources and Technical Notes for more details.

**Table 7.3.1D**  
**ICT Services: 1990 -1996**  
**Radio & TV Broadcasting**  
**Canadian Broadcasting Corporation (CBC)\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Total Employment**	10,733	9,814	9,294	9,208	12,298	11,524	11,367

Company Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Salaries & Benefits	683,173	719,801	711,313	713,340	783,203	798,713	693,035

Financial Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Revenues	318,012	321,922	346,307	332,173	350,279	364,821	459,768
- Sale of air time	291,048	282,927	308,753	281,927	291,635	284,058	339,730
- Other	26,964	38,995	37,554	50,246	58,644	80,763	120,038
Grants (See Sources and Technical Notes)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Expenses	1,338,457	1,345,446	1,375,532	1,423,180	1,490,598	1,524,275	1,499,000
- Program	511,987	827,672	840,566	840,210	968,539	985,758	962,186
- Technical	421,393	81,498	92,877	92,958	91,976	94,547	90,268
- Sales & promotion	39,755	54,330	61,815	61,367	66,605	64,115	64,923
- Administration & general	297,645	309,745	301,641	317,620	209,511	222,949	210,306
- Depreciation	67,677	72,201	78,633	89,190	127,650	126,905	141,586
- Interest expense	--	--	--	21,835	26,317	30,001	29,731
Income(Loss) before grants, taxes and adjustments	(1,020,445)	(1,023,524)	(1,029,225)	(1,091,007)	(1,140,319)	(1,159,454)	(1,039,232)
Other adjustments-income (expense)	31,497	16,044	25,092	21,913	18,515	47,093	(194,398)
Income(Loss) before grants and income taxes***	(988,948)	(1,007,480)	(1,004,133)	(1,069,094)	(1,121,804)	(1,112,361)	(1,233,630)
Income(Loss) after income taxes	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\* Data already included in Table 7.3.1

\*\* Radio and Television Broadcasting, Statistics Canada (Cat. no. 56-204) was used to provide industry details (full-time equivalents).

\*\*\* Net cost of CBC operations.

Numbers may not add up due to rounding.

See Sources and Technical Notes for more details.

**Table 7.3.1E**  
**ICT Services: 1990 -1996**  
**Radio & TV Broadcasting**  
**Non Commercial Radio and TV\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Total Employment**	1,732	1,775	1,967	2,176	2,250	2,177	1,923

Establishment Level	number or thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Salaries & Benefits	82,695	87,964	91,994	94,331	94,230	91,685	75,646

Financial Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Revenues	56,783	70,631	71,080	55,448	59,260	56,508	53,639
- Sale of air time	8,216	7,201	7,842	9,087	10,357	10,827	9,166
- Other	48,567	63,430	63,238	46,360	48,903	45,681	44,473
Grants	132,228	132,433	137,745	154,349	165,256	155,494	136,123
Expenses	185,718	202,070	203,134	217,789	232,998	226,676	198,187
- Program	107,420	119,288	116,904	121,819	124,430	124,479	106,271
- Technical	25,226	24,607	28,754	34,772	37,739	32,368	23,576
- Sales & promotion	16,528	20,780	19,124	18,521	16,055	16,596	15,155
- Administration & general	28,906	29,676	32,166	36,514	48,548	47,407	46,095
- Depreciation	4,495	4,719	3,122	3,138	3,904	4,573	4,522
- Interest expense	3,142	3,001	3,064	3,025	2,322	1,253	2,568
Income(Loss) before taxes and adjustments	3,293	994	5,691	(7,993)	(8,482)	(14,675)	(8,425)
Other adjustments-income (expense)	3,313	2,438	580	97	168	704	(1,002)
Income(Loss) before income taxes***	6,606	3,432	6,270	(7,896)	(8,314)	(13,971)	(9,427)
Income(Loss) after income taxes	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\* Data already included in Table 7.3.1

\*\* Radio and Television Broadcasting, Statistics Canada (Cat. no. 56-204) was used to provide industry details (full-time equivalents).

\*\*\* Calculated as (Revenues + Grants - Expenses + Adjustments).

Numbers may not add up due to rounding.

See Sources and Technical Notes for more details.

**Table 7.3.2A**  
**ICT Services: 1990 - 1996**  
**Broadcasting Services**  
**Cable Television Industry\***

Employment	persons						
	1990	1991	1992	1993	1994	1995	1996
Total Employment	9,799	9,758	9,112	9,211	9,419	10,487	9,453
- Basic	8,951	9,043	8,455	8,684	8,877	9,706	8,733
- Discretionary	848	715	657	527	542	781	720

Establishment Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Salaries and Benefits	346,792	355,903	370,941	385,871	391,504	411,035	412,094
- Basic	320,056	331,152	347,142	366,065	369,886	390,258	385,525
- Discretionary	26,736	24,751	23,799	19,806	21,618	20,777	26,569

Company Level	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
GDP (1986 constant dollars)	690,100	742,300	745,200	768,500	787,900	815,100	820,800
R&D Expenditures (Combined with Telecom)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Financial Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
Revenues	1,641,129	1,789,460	1,946,010	2,151,923	2,333,791	2,532,295	2,678,973
- Basic	1,356,622	1,477,609	1,588,094	1,680,976	1,763,119	1,846,052	1,903,555
- Discretionary	284,507	311,851	357,916	470,947	570,672	686,243	775,418
Expenses	1,399,470	1,529,938	1,600,634	1,898,950	2,003,814	2,352,279	2,725,269
- Interest	126,592	161,173	137,177	281,364	289,371	436,455	669,573
- Depreciation	219,533	250,128	260,496	291,395	303,716	332,395	370,085
- Other Expenses	1,053,345	1,118,637	1,202,961	1,326,191	1,410,727	1,583,429	1,685,611
Income(Loss) before taxes and adjustments	241,659	259,522	345,376	252,973	329,977	180,016	(46,296)
Adjustments-income (expense)	9,559	7,440	8,430	12,643	55,090	254,130	217,196
Income(Loss) before income taxes	251,218	266,962	353,806	265,616	385,067	434,146	170,900
Net Income(Loss) after Income taxes	181,436	188,828	270,009	171,014	259,830	325,906	148,914

\* Refers to SIC 4814. Data already included in Table 7.3

See Sources and Technical Notes for more details.

**Table 7.3.2B**  
**ICT Services: 1990 - 1996**  
**Broadcasting Services**  
**Cable Television Industry (Continued)\***

Financial Data	thousands of dollars						
	1990	1991	1992	1993	1994	1995	1996
<b>Revenues</b>	1,641,129	1,789,460	1,946,010	2,151,923	2,329,465	2,532,295	2,678,973
- Basic	1,356,622	1,477,609	1,588,094	1,680,976	1,759,126	1,846,052	1,903,555
- Discretionary	284,507	311,851	357,916	470,947	570,339	686,243	775,418
<b>Expenses</b>	<b>1,399,470</b>	<b>1,529,938</b>	<b>1,600,634</b>	<b>1,898,951</b>	<b>2,003,814</b>	<b>2,352,279</b>	<b>2,725,269</b>
- Basic	1,173,567	1,298,423	1,342,858	1,497,559	1,538,734	1,795,346	1,926,974
- Interest	123,573	156,166	133,268	228,440	208,045	337,638	409,366
- Depreciation	197,815	232,908	242,841	265,720	275,713	297,280	324,139
- Other	852,179	909,349	966,749	1,003,399	1,054,976	1,160,428	1,193,469
- Discretionary	225,903	231,515	257,776	401,392	465,080	556,933	798,295
- Interest	3,020	5,008	3,909	52,924	81,326	98,818	260,206
- Depreciation	21,719	17,220	17,656	25,676	28,002	35,115	45,946
- Other	201,164	209,287	236,211	322,792	355,752	423,000	492,142
Income(Loss) before taxes and adjustments	241,659	259,522	345,376	252,972	325,651	180,016	(46,296)
- Basic	183,055	179,186	245,236	183,417	220,392	50,706	(23,419)
- Discretionary	58,604	80,336	100,140	69,555	105,259	129,310	(22,877)
Adjustments-income (expense)	9,559	7,439	8,430	12,643	55,090	254,130	217,196
- Basic	8,743	(262)	8,062	11,290	50,382	239,233	197,302
- Discretionary	816	7,701	368	1,353	4,708	14,897	19,894
Income(Loss) before Income taxes	251,218	266,961	353,806	265,615	380,741	434,146	170,900
- Basic	191,798	178,924	253,298	194,707	270,774	289,939	173,883
- Discretionary	59,420	88,037	100,508	70,908	109,967	144,207	(2,983)
Net Income(Loss) after Income taxes	181,436	188,828	270,009	171,015	259,832	325,906	148,914
- Basic	134,952	126,637	195,614	123,330	184,589	226,221	132,396
- Discretionary	46,484	62,191	74,395	47,685	75,243	99,685	16,518

\* Refers to SIC 4814. Data already included in Table 7.3

See Sources and Technical Notes for more details.

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# Statistical Appendices

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# Statistics Canada SIC Definitions

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## Industry Descriptions by SIC, with product/service classifications based on Standard Industrial Classification - 1980 Statistics Canada, (Cat. no. 12-501)

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### SIC 3341 Record Player, Radio and Television Industry

Establishments primarily engaged in manufacturing radio and television receiving sets, sound playing and recording equipment and parts (except electronic parts) and video recording and duplicating equipment. Establishments primarily engaged in producing automobile radios are classified here.

- audio and video recording and duplicating equipment
- loud speakers
- phonographs
- radio and phonograph combinations
- radio receiving sets, automobile, home, clock, etc.
- record player and tape recorder parts (except electronic)
- stereo amplifiers
- T.V. converters
- tape players
- television receiving sets, domestic
- video recording and duplicating equipment

### SIC 3351 Telecommunication Equipment Industry

Establishments primarily engaged in manufacturing telephone, telegraph and microwave transmitting and related equipment.

- carrier current equipment, telephone and telegraph
- central office and switching equipment, telephone or telegraph
- intercommunicating telephone sets
- micro-wave transmitting equipment
- multiplex equipment
- station apparatus
- telegraph equipment and parts

### SIC 3352 Electronic Parts and Components Industry

Establishments primarily engaged in manufacturing electronic components and parts.

- audio frequency amplifiers (excl. stereo amplifiers)
- capacitors
- connectors
- crystals (mounted) and holders
- electronic chips and bubbles
- integrated circuits
- power packs (non-rotating power supply converter units)
- printed circuits for electronic equipment
- receiving tubes
- resistors
- satellite parts and components (incl. for earth stations)
- semi-conductors (transistor, rectifier)
- television picture tubes (incl. rebuilt)
- transformers, electronic



## Industry Descriptions by SIC, with product/service classifications based on Standard Industrial Classification - 1980 Statistics Canada, (Cat. no. 12-501)

### SIC 3359 Other Communication and Electronic Equipment Industries

Establishments primarily engaged in manufacturing electronic equipment not elsewhere classified. Establishments primarily engaged in the repair and overhaul of electronic equipment, except household equipment, are classified here.

- alarm and signals systems (excl. railway and street traffic)
- antennae (incl. parts and mountings)
- aviation radio equipment
- C.B. radio equipment
- closed circuit television equipment
- electronic navigational aids and related devices
- electronic process control equipment
- intercommunication systems (excl. telephone)
- land mobile radio communication equipment
- marine radio communication equipment
- micro-wave transmitting equipment (excl. telephone)
- point-to-point radio equipment
- public address systems
- radar equipment, commercial or defence
- radio broadcast equipment
- repair and overhaul of electronic equipment (excl. household)
- sonar equipment, commercial or defence
- studio equipment, radio or television broadcast
- television broadcast equipment
- transmitting equipment, radio and television broadcast (incl. antenna)

### SIC 3361 Electronic Computing and Peripheral Equipment Industry

Establishments primarily engaged in manufacturing electronic data processing equipment.

- analog electronic computing and processing equipment
- central processing units, electronic
- computer peripheral equipment, digital electric
- computers, single package
- control units
- disc drives
- drum drives
- electronic computers (excl. parts and components)
- electronic data processing machinery and equipment (excl. parts and components)
- input or output on-line devices (printers, plotters, readers)
- input-output devices, computer connectors (terminals-keyboard, punched cards)
- key-punch drives
- memory modules (basic and add on)
- peripheral processing units (incl. channels)
- tape drives

## Industry Descriptions by SIC, with product/service classifications based on Standard Industrial Classification - 1980 Statistics Canada, (Cat. no. 12-501)

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### SIC 3368 Office, Store and Business Machine Industry (including Electronic) (SICs 3362 and 3369)

Note: As the industrial classifications 3362 and 3369 are closely related, they are both listed under classification 3368.

#### SIC 3362 - Electronic Office, Store and Business Machine Industry

Establishments primarily engaged in manufacturing electronic office, store and business machines.

- accounting machines
- adding machines
- balances, for store, home, office or factory
- business machines and equipment
- calculating machines
- cash registers
- scales

#### SIC 3369 - Other Office, Store and Business Machine Industries

Establishments primarily engaged in manufacturing office, store and business machines and equipment (except electronic).

- accounting machines
- adding machines
- business machines and equipment
- calculating machines
- cash registers
- hair dryers
- scales for store, home, office or factory
- tape dispensing machines
- typewriters
- vending machines and parts

### SIC 3911 Indicating, Recording and Controlling Instruments Industry

Establishments primarily engaged in manufacturing mechanical, electrical or electronic instruments for indicating, recording and controlling (except electronic process control and electrical industrial control).

- control panels
- control valves and regulators for measuring and measuring- controlling instruments
- controls and accessories for heating and ventilating
- flow and liquid level instruments and accessories
- flow regulators
- galvanometers
- gas meter mechanisms and parts
- indicating instruments, parts and accessories
- mechanical motion, rotation, timing and cycle instruments
- pressure regulators (incl. reducing valves)
- recording instruments, parts and accessories
- temperature regulators
- thermostats
- water meter mechanisms and parts

# Industry Descriptions by SIC, with product/service classifications

based on Standard Industrial Classification - 1980 Statistics Canada, (Cat. no. 12-501)

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## SIC 3912 Other Instruments and Related Products Industry

Establishments primarily engaged in manufacturing professional and scientific instruments excluding electronic navigational instruments.

- aeronautical instruments
- balances, scientific
- engineering and geophysical instruments and apparatus
- medical and related instruments, apparatus and equipment
- navigational instruments (excl. electronic)
- ophthalmic (optical) examining and diagnostic equipment
- photographic equipment and supplies
- photographic film and plates (incl. X-ray), unexposed
- projectors (incl. image and cinematographic)
- pyrometers (incl. thermocouples) and accessories
- scales, scientific
- surgical instruments
- surveying instruments
- sutures and suture needles (incl. sutures with needles)
- thermometers and accessories
- X-ray equipment

## SIC 481 Broadcasting

Establishments primarily engaged in broadcasting audio or video signals by radio and television including cable systems.

### SIC 4811 - Radio Broadcasting Industry

Establishments primarily engaged in operating radio broadcasting studios and facilities for programs of entertainment, news, talks and the like. This industry includes establishments primarily engaged in operating radio broadcasting networks and relay systems.

- Network broadcasting service, radio
- Radio broadcasting network service
- Radio broadcasting relay system operation
- Radio broadcasting service
- Radio program producing and directing
- Studio operation, radio

### SIC 4812 - Television Broadcasting Industry

Establishments primarily engaged in operating television broadcasting and in the operation of television broadcasting studios for programs of entertainment, news, talks and the like. This industry includes establishments primarily engaged in operating television broadcasting networks and relay systems.

- Network broadcasting service, television
- Relay systems, television, operation
- Studio operation, television
- Television broadcasting service
- Television rebroadcasting station

## Industry Descriptions by SIC, with product/service classifications based on Standard Industrial Classification - 1980 Statistics Canada, (Cat. no. 12-501)

### SIC 4813 - Combined Radio and Television Broadcasting Industry

Establishments primarily engaged in an integrated radio and television broadcasting operation for programs of entertainment, news, talks and the likes. This industry includes establishments primarily engaged in operating integrated radio and television broadcasting networks and relay systems.

- Integrated radio and television broadcasting service
- Integrated radio and television broadcasting network
- Integrated radio and television broadcasting relay system

Broadcasting as defined in this document differs from the Standard Industrial Classification definition of SIC 481, primarily because figures in this document are collected from all holders of broadcasting licenses, regardless of their SIC.

- Private Radio and Television Broadcasting Stations: All commercial broadcasting stations, the regional television network, Global Communications Limited and the national network, CTV Television Network Limited.
- Non Commercial Stations: Those stations having more revenue from sources other than air-time sales (ie., grants, fund-raising), unlike commercial broadcasting stations whose major revenue is from air-time sales.
- Pay and Specialty TV Services: Services aimed at particular audiences. This category includes services specializing in children's programming, news, music, sports, movies and the likes.

For a more detailed explanation, please refer to Statistics Canada's "*Radio and Television Broadcasting*" (Cat. no. 56-204).

### SIC 4814 Cable Television Industry

Establishments primarily engaged in broadcasting television and frequency modulated radio signals to subscribers by mean of co-axial cable and community antennas.

- cable television service
- community antenna service (CATV)

### SIC 482 Telecommunication Carriers Industry

Establishments primarily engaged in operating telephone and other telecommunication transmission services by electro-magnetic means.

- broadband exchange service
- cable service, telephone
- overseas telephone service
- public telephone service
- satellite communications service
- telegraph communication service, wire or radio
- telephone carrier service
- telephone network service
- telephoto service
- teletype service

**Industry Descriptions by SIC, with product/service classifications**  
based on Standard Industrial Classification - 1980 Statistics Canada, (Cat. no. 12-501)

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**SIC 772 Computer and Related Services**

Establishments primarily engaged in providing computer services and in the maintenance and repair of computer equipment.

- computer consulting
- computer input preparation
- computer maintenance
- computer processing
- computer programming
- computer rental or leasing (excl. finance leasing)
- computer repair
- computer software services
- computer time-sharing
- electronic data processing equipment, maintenance and repair
- software packages, computer services
- systems analysis and design
- systems design

Note: It is expected that the implementation of the North American Industrial Classification System (NAICS) by 1997 will greatly facilitate defining the ICT sector. More information on the 1997 NAICS can be obtained from Statistics Canada and/or its website at:

<http://www.statcan.ca/english/Subjects/Standard/sector.htm>





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# Financial and Statistical Definitions

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## Financial and Statistical Definitions

Readers are advised to consult with Statistics Canada on specific methodologies and definitions used throughout this publication, the relevant Statistics Canada documents contain such information. The following definitions pertain mainly to ICT manufacturing data.

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### **Profiling Data (at the establishment level)**

Number of Establishments: Smallest operating unit in a business capable of reporting specified input and output data which are collected and published at the establishment level by the Survey of Manufacturing Technology.

Production Employment: Those employees engaged in processing, assembling, storing, inspection and maintenance.

Production Salaries and Wages: Gross amount paid to production employees, including overtime, bonus and commissions, but before deductions for income tax and employee benefits.

Cost of Fuel and Electricity: Cost of fuel purchased for use in production and transportation and cost of electricity consumed for energy purposes, both in manufacturing and non-manufacturing operations.

Cost of Materials and Supplies Used: Raw materials, containers and supplies purchased and owned by the establishment and used in its manufacturing operations.

Administrative and Executive Employment: Those employees designated as executive, administrative, clerical/office and sales staff.

Administrative and Executive Salaries & Wages: Gross amount paid to executive, administrative, clerical and sales staff, including overtime, bonuses and commissions, but before deductions for income tax and employee benefits.

Total Employment: Production Employment plus Administrative and Executive Employment. Total employment for the manufacturing industries comes from the Annual Survey of Manufactures, while employment for the services industries is from the Labour Force Survey which captures the self-employed.

Total Salaries & Wages: Production Salaries and Wages plus Administrative and Executive Salaries and Wages.

Manufacturing Shipments: Shipments of goods manufactured from the establishment's own materials, except consignment shipments.

Manufacturing Value Added: Value of shipments of goods of the establishment's own manufacture plus the net change in inventory of goods in process and finished goods, minus the cost of materials supplies and fuel and electricity used.

Total Shipments: This includes both Manufacturing Shipments and non-manufacturing shipments. Non-manufacturing shipments include wholesaling of goods, rental of new equipment, construction of buildings for the establishment's own use with its own labour, and the operation of cafeterias, laboratories, etc.

Cost of Materials, Supplies & Goods for Resale: Cost of purchase of materials, supplies and goods which were sold without a change in the condition (wholesaling).

Total Value Added: Value added for manufacturing and non-manufacturing activities.



## Financial and Statistical Definitions

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### Profiling Data (at the company level)

GDP: is a measure of an industry's value-added to the economy. GDP at factor cost is essentially total sales by the industry (gross output) less inputs of goods and services provided by sources other than the industry itself.

R&D Expenditures: R&D expenditures are those eligible for Revenue Canada R&D tax credits.

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### Trade Data

There is a fundamental difference between trade and production data. Production data also captures secondary production which occurs at the establishment level and differs from the plant's principal manufacturing activity to which they are classified. Trade data, on the other hand, classifies all products as they cross the border regardless of the principal activity of the producing establishment. This data is captured as a commodity rather than as an industry good. In an effort to quantify industry trade, Statistics Canada associates the exported commodity code with a manufacturing industry code (Cat. no. 65-202). A simple example would be the case of an exported automobile engine which would be attributed to the Canadian Motor Vehicle Engine and Engine Parts Industry even though it may have been produced by a plant classified to the Motor Vehicle Industry.

Readers should note that this is a crude estimation of industry trade and is susceptible to errors. However, in the absence of a better measurement method, this type of estimation is one of few means available to estimate industrial trade.

Imports: All goods which have crossed Canada's territorial boundary, whether for immediate consumption in Canada or stored in bonded customs warehouses.

Total Exports: Total exports include both domestic exports and re-exports. DOMESTIC exports include goods grown, extracted or manufactured in Canada, including goods of foreign origin which have been materially transformed in Canada. RE-EXPORTS are exports of foreign goods which have not been materially transformed in Canada, including foreign goods withdrawn for export from bonded customs warehouses.

Apparent Domestic Market: Total Imports minus Total Exports plus Manufacturing Shipments.

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### Definitions specific to Broadcasting

Total Expenses: The sum of program, technical, sales & promotion, administration and general, depreciation and interest expenses.

Program Expenses: The sum of programs telecast and other programming expenses.

Technical Expenses: The sum of technical equipment, technical consultants services, maintenance, other technical costs, line, microwave or satellite charges and remuneration.

Sales and Promotion Expenses: The sum of audience promotion, trade promotion, rating services, sales commission representatives, other sales and promotion expenses and remuneration.

Broadcasting Station: A licensed operating station operating in the broadcasting band, the transmissions of which are intended for public reception.



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# Sources and Technical Notes

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## Sources

### REVENUES

#### Manufacturing (as measured by total shipments):

Business Integrated Database (Statistics Canada and Industry Canada), including the Annual Survey of Manufactures (Cat. no. 31-203), Manufacturing, Construction and Energy Division, Statistics Canada.

#### Services (Computer Services and Telecommunications Carriers):

Financial and Taxation Statistics for Enterprises (Cat. no. 61-219), Industrial Organization and Finance Division, Statistics Canada.

Services Indicators (Cat. no. 63-016), Services Division, Statistics Canada.

#### Other Telecommunications Service Providers

Annual reports to shareholders.

#### Broadcasting

Radio and Television Broadcasting (Cat. no. 56-204), Science and Technology Redesign Project, Statistics Canada.

Cable Television Statistics (Cat. no. 56-205), Science and Technology Redesign Project, Statistics Canada.

#### Non-Commercial Radio and TV

Service Bulletin - Communications (Cat. no. 56-001), Statistics Canada.

### EMPLOYMENT

#### Manufacturing

Business Integrated Database (Statistics Canada and Industry Canada), including the Annual Survey of Manufactures (Cat. no. 31-203), Manufacturing, Construction and Energy Division, Statistics Canada.

#### Services (Computer Services and Telecommunications Carriers):

The Labour Force Survey (Cat. no. 71-001), Household Surveys Division, Statistics Canada, as reported in Services Indicators (Cat. no. 63-016), Services Division, Statistics Canada.

#### Broadcasting

The Labour Force Survey (Cat. no. 71-001), Household Surveys Division, Statistics Canada, as reported in Services Indicators (Cat. no. 63-016), Services Division, Statistics Canada. At a more disaggregated level:

Radio and Television Broadcasting (Cat. no. 56-204), Science and Technology Redesign Project, Statistics Canada.

Cable Television Statistics (Cat. no. 56-205), Science and Technology Redesign Project, Statistics Canada.

## Sources

### GROSS DOMESTIC PRODUCT (GDP)

Gross Domestic Product by Industry (Cat. no. 15-001), Industry Measures and Analysis Division, Statistics Canada.

### TRADE

#### ICT Manufacturing

Trade Information Enquiry and Retrieval System (TIERS), International Trade Division, Statistics Canada.

#### ICT Services

Canada's International Transactions in Services (Cat. no. 67-203), Balance of Payments Division, Statistics Canada.

### RESEARCH AND DEVELOPMENT (R&D)

Special tabulations for Industry Canada (June 1997); Science and Technology Redesign Project, Statistics Canada.

### OTHER DATA

#### Manufacturing

Business Integrated Database (Statistics Canada and Industry Canada), including the Annual Survey of Manufactures (Cat. no. 31-203), Manufacturing, Construction and Energy Division, Statistics Canada.

#### Computer and Related Services (SIC 772)

Number of establishments and total wages and salaries:

Software Development and Computer Service Industry (Cat. no. 63-222), Services Division, Statistics Canada.

#### Total Canadian Merchandise Exports

Exports, Merchandise Trade (Cat. no. 65-202), International Trade Division, Statistics Canada.

#### Total Canadian Merchandise Imports

Imports, Merchandise Trade (Cat. no. 65-203), International Trade Division, Statistics Canada.

## Technical Notes

### EMPLOYMENT

#### Manufacturing

All 1996 figures are Industry Canada estimates based on 12 months of monthly data for 1996 from the Monthly Survey of Manufacturing, Statistics Canada (Cat. no. 31-001). These monthly employment figures (only full-time equivalents) are only available at the 3 digit SIC-E level of disaggregation. Industry Canada therefore estimates the 4 digit values by using the 1995 percentages of their respective 3 digit value. It is for this reason that the percentage change from 1995 to 1996 for all 4 digit SICs within the same 3 digit SIC will be the same. Employment figures for previous years are actual 4 digit values from the Annual Survey of Manufactures, Statistics Canada (Cat. no. 31-203).

#### Services

All employment figures for ICT Services sector are from the Labour Force Survey (LFS), Statistics Canada (Cat. no. 71-001), as reported in Services Indicators, Statistics Canada (Cat. no. 63-016). Employment figures from this source include full-time, part-time employees and self-employed. Additional sources of employment data were used to provide industry details for Radio and Television Broadcasting, Statistics Canada (Cat. no. 56-204) and Cable Television, Statistics Canada (Cat. no. 56-205). The data from these catalogues are gathered by means of mandatory production surveys sent to all license holders. Employment figures from these catalogues are measured in terms of full-time equivalents (FTE's) and do not include contractors (freelancers) or the self-employed. The principal reason that 56-204 and 56-205 are used in this publication is because these catalogues allow for a much finer disaggregation of the broadcasting sector than does the LFS. For the purposes of this publication, the LFS employment figures will be used when stating "Total ICT services employment", whereas the employment figures from 56-204 and 56-205 will be used when examining the broadcasting industry itself. To emphasize this point, employment figures from both the LFS and 56-204 and 56-205 are quoted on the employment summary chart.

#### General

Different statistical methodologies were used in the collection of the data for the ICT services and ICT manufacturing industries as outlined above. Data from the LFS and the Annual Survey of Manufacturers use different statistical methodologies and were not intended to be aggregated. Industry Canada, however, feels that the aggregation of these survey results, despite their differences, does provide some insight into the performance of the Canadian ICT manufacturing and services sectors. It is for this reason that throughout this publication, "Total ICT Employment" should be regarded as Industry Canada estimates, based on different Statistics Canada sources.

## Technical Notes

### REVENUES

#### Manufacturing

All revenue figures in the manufacturing sector are measured in term of total shipments. All 1996 figures are Industry Canada estimates based on 12 months of monthly data for 1996 from the Monthly Survey of Manufacturing, Statistics Canada (Cat. no. 31-001).

#### Services (Computer Services and Telecommunications Carriers)

All revenue figures in the services sector are measured in terms of operating revenues and are from Financial and Taxation Statistics for Enterprises, Statistics Canada (Cat. no. 61-219). These figures are gathered at the ENTERPRISE level rather than the ESTABLISHMENT level. Enterprise statistics reflect consolidated data for a "family of businesses under common ownership and control..." (see "Quarterly Financial Statistics For Enterprises, Fourth Quarter 1995, Statistics Canada, Cat. no. 61-008 page 47 for more details), whereas establishment data are derived from the "The smallest operating entity which produces as homogeneous a set of good and services as possible..." (see Standard Industrial Classification, Statistics Canada, Cat. no. 12-501 page 16 for more details).

#### Other Telecommunications Service Providers

Since the 1990's, there have been significant changes in the telecommunications service industry. Significant progress has been made to reflect these changes in the on-going surveys of Statistics Canada. The results, however, will mainly appear in 1996 data and beyond. In the meantime, Industry Canada has estimated the data gaps based on an analysis of key telecommunications service providers' annual reports to shareholders. These estimates have been added to revenue data of Statistics Canada.

#### Broadcasting

All revenue figures for the broadcasting industries are from Radio and Television Broadcasting, Statistics Canada (Cat. no. 56-204) and Cable Television, Statistics Canada (Cat. no. 56-205). These catalogues compile survey information for all license holders regardless of the SIC to which they are classified. Revenue figures for CBC and Non-Commercial Radio and Television Stations exclude grants.

## Technical Notes

### GROSS DOMESTIC PRODUCT (GDP)

All GDP figures are from Gross Domestic Product by Industry, Statistics Canada (Cat. no. 15-001). No estimates have been made.

### RESEARCH AND DEVELOPMENT (R&D)

R&D figures for the Telecommunications and Broadcasting industries have been combined to maintain confidentiality among respondents. Industry Canada has not estimated any of the data to produce more disaggregated data.

### INTERNATIONAL TRADE IN ICT SERVICES

There have been significant revisions to the trade in services data as presented in last year's version of this publication (The Information and Communication Technologies Statistical Review: 1990-1995). For further details, please refer to the publication "Canada's International Transactions in Services", Statistics Canada (Cat. no. 67-203).

### CBC

#### Employment

Starting in 1994, the average number of employees and remuneration reported by CBC includes permanent, temporary and casuals whereas previous years reflected only the average number of permanent employees and the total wage remuneration for all employees regardless of employment status. It would be misleading to derive an average salary estimate based only on the number of permanent employees or to assume a growth in the workforce. Also starting in 1994, contractual employees of CBC whose contracts are of 13 weeks or more are now included as part of total remuneration. These salaries were not included in remuneration previously.



## Technical Notes

### Revenues

- (i) CBC's total revenues do not include grants.
- (ii) In 1991, the CBC changed its reporting procedures transferring salaries and benefits from technical expenditures to program expenses which reflects production salaries related to programming. Technical salaries and benefits are thus limited to employees engaged in maintaining studio, equipment and transmission.
- (iii) The activities of CBC Newsworld and RDI are captured in CBC and not in Pay and Specialty TV Services.

### Other

In Table 7.3.1D, CBC grants are not included because they are based on a different fiscal year time frame.

### **GENERAL**

**All underlined figures in this publication are Industry Canada estimates.**