



Information and Communications Technology (ICT) Report FOR THE YEAR ENDED 2013

BACKGROUND

The Organization for Economic Development (OECD, 2007) defines the Information and Communication Technologies (ICT) sector as comprising a combination of manufacturing and services industries that enable or fulfill the function of information processing and communication, including transmission and display by electronic means. These industries are involved in the development, delivery and support of advanced technological products.

This report is generated using data from annual business surveys and shows the results of the core indicators on use of ICT by businesses. Analysis and tables related to GDP, employment, trade and investment contained within the report follow the CARICOM definition of the ICT sector (see Box 1 on the inside back cover). Included in this measure are the industries that comprise the OECD 2007 definition as well as trade industries and content & media industries.

2013 HIGHLIGHTS

- The ICT sector contributed 4.1 per cent to Bermuda's GDP, or \$229 million.
- There were 838 ICT-related jobs in 2013, the same as in 2012.
- 89 per cent of all businesses use computers during their daily operations.
- Imports of ICT goods and services fell to \$112.4 million in 2013.
- Exports of ICT services decreased to \$80.7 million.
- Capital investment in ICT goods totaled \$70 million.

PROFILE OF THE ICT SECTOR

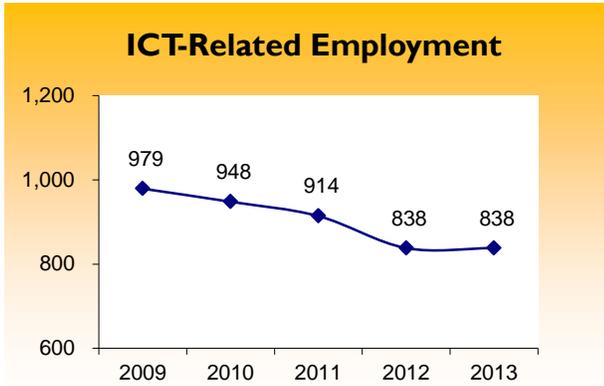
ICT SECTOR VALUE ADDED DOWN

The value added of the ICT sector totaled \$229 million, a decline of 3.0 per cent from 2012. The decrease in economic activity of the ICT sector was due mostly to the ICT Services industries where lower output in telecommunications pushed the valued added down by \$5.3 million. Activity in the ICT Trade industries also decreased \$2.0 million on account of lower sales of computers and office equipment. ICT Manufacturing industries registered a marginal decline of \$0.5 million. In contrast, the Content and Media industries recorded a modest \$0.4 million increase in value added.



The ICT sector's share of total GDP decreased slightly to 4.1 per cent in 2013 from 4.3 per cent the previous year.

ICT EMPLOYMENT REMAINS STEADY



ICT-related employment remained unchanged in 2013. Total ICT-related jobs represented 2.4 per cent of overall employment, unchanged from 2011 and 2012 levels.

In 2013, approximately 38 per cent of all companies outsourced their ICT needs to other companies which marked a 2 percentage-point rise over 2012. However, this outsourcing did not negatively impact the number of local ICT-related jobs. The proportion of companies that hired other local businesses to fulfill their ICT needs remained unchanged at 77 per cent compared to 2012.

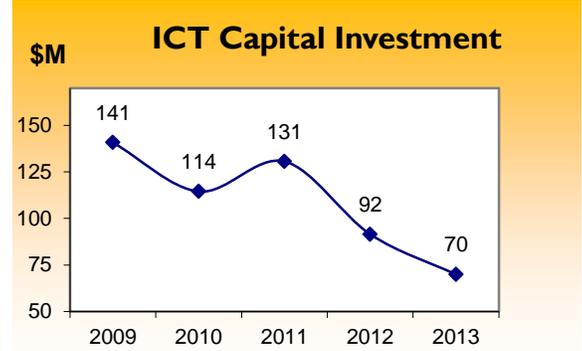
TRADE IN ICT GOODS AND SERVICES RECORD A DEFICIT

In 2013, Bermuda recorded a trade deficit on ICT goods and services. A total of \$112.4 million was paid to non-residents, down 7.5 per cent from the previous year. Exports of information and communication technology services totaled \$80.7 million, declining 4.7 per cent year-over-year (see Table 1 below).

	2011	2012	2013
IMPORTS			
ICT Goods			
Telecommunications equipment	11,370	17,932	13,619
Computer and related equipment	12,593	9,846	14,974
Electronic components	893	605	1,310
Audio and video equipment	7,220	6,616	5,337
Other ICT goods	3,020	5,745	4,965
Total ICT Goods	35,096	40,745	40,205
ICT Services	82,719	80,746	72,185
Total Imports (Goods and Services)	117,815	121,491	112,390
EXPORTS			
Total Exports of ICT Services	78,255	84,653	80,702
Trade Balance	(39,560)	(36,838)	(31,688)

ICT CAPITAL INVESTMENT DECREASES

Expenditure on ICT capital goods decreased further to \$70 million in 2013. This decline was due primarily to a 38.9 per cent or \$23 million decrease in business investment of computer software. Similar to previous years, expenditure by financial institutions and the international business community accounted for more than half of all ICT investment in Bermuda during 2013. Labour intensive industries such as agriculture, fishing and construction invested the least in ICT capital goods during the year. ICT investment represented 27 per cent of all capital investment, down from 33 per cent in 2012.



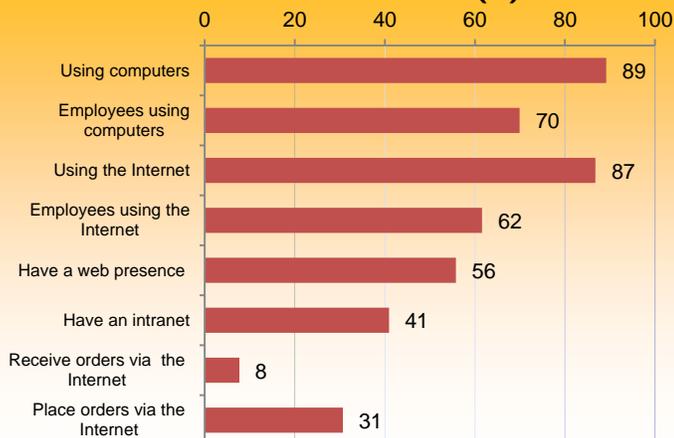
BUSINESS USE OF ICT DOMINATED BY SERVICE INDUSTRIES

Businesses in Bermuda showed continued reliance on information and communications technology (ICT) during their day-to-day operations. Table 2 shows that service-related industries, such as financial and insurance institutions were more prevalent users of ICT than goods-producing industries. On average, about 90 per cent of all companies in service-related industries used a computer compared to only 83 per cent usage by goods-producing industries such as agriculture and manufacturing.

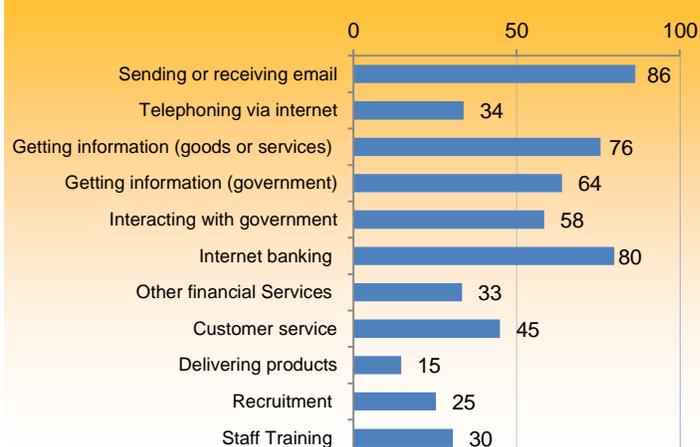
Table 2: Percent (%) Use of ICT for Selected Industries - 2013

Use of ICT	Agriculture	Construction	Transport and Communications		Financial Institutions	Insurance and related activities	International Business Activity	ICT Sector
			Accommodation Services	Communications				
Using computers	78	73	88	88	93	100	97	97
Employees using computers	23	30	52	72	100	100	98	84
Using the Internet	73	67	88	84	93	100	97	96
Employees using the Internet	20	24	39	65	100	90	98	77
Have a web presence	20	24	84	69	86	90	73	75
Have an intranet	8	19	36	49	71	100	73	66
Receive orders via the Internet	0	1	36	13	29	30	1	54
Place orders via the Internet	13	18	40	24	50	40	26	13
Proportion of businesses using the internet by type of activity:								
Sending or receiving email	73	68	88	84	93	100	97	94
Telephoning via internet	8	15	32	37	79	80	75	55
Getting information (goods or services)	58	54	88	70	93	90	78	93
Getting information (government)	50	36	76	61	86	100	83	73
Interacting with government	45	36	76	51	93	90	76	64
Internet banking	68	61	76	75	93	90	95	93
Other financial Services	20	13	40	22	79	70	65	39
Customer service	30	21	76	55	86	90	39	69
Delivering products	8	3	28	18	50	60	21	30
Recruitment	13	9	28	18	64	60	44	34
Staff Training	5	9	36	33	79	80	69	46

Business Use of ICT (%) 2013



Business Use of the Internet by Activity (%) 2013



In 2013, 56 per cent of businesses reported having a web presence (Table 3) compared to 52 per cent the previous year. Despite this increase, most businesses did not utilise this web presence for e-commerce. There were fewer companies trading goods via the internet in 2013. Only 31 per cent of these companies used the internet to place orders for goods and services and an even smaller proportion (8%) received orders over the internet. The majority of businesses used the internet for sending and receiving e-mails, while internet banking and accessing information were among the more prevalent internet activities.

In 2013, 89 per cent of all companies used computers in their daily operations (Table 3) and 87 per cent used the internet. The size of businesses showed positive correlations with specific aspects of ICT use such as having a web presence, an intranet and e-commerce. The larger the company, the greater was the use of the internet for all activities with the exception of recruitment.

Table 3: Percent (%) use of ICT by Size of Company, 2013

Use of ICT	1 - 9 employees	10 - 19 employees	20 - 49 employees	50 - 249 employees	250 + employees	Total Economy
Using computers	84	98	99	100	100	89
Employees using computers	77	66	64	71	74	70
Using the Internet	81	97	99	100	100	87
Employees using the Internet	69	56	55	62	68	62
Have a web presence	43	73	85	91	100	56
Have an intranet	30	56	64	74	83	41
Receive orders via the Internet	6	9	9	19	67	8
Place orders via the Internet	26	31	49	44	67	31
Proportion of businesses using the internet by type of activity:						
Sending or receiving email	81	96	99	100	100	86
Telephoning via internet	24	41	53	72	100	34
Getting information (goods or services)	67	88	96	99	100	76
Getting information (government)	52	83	87	96	100	64
Interacting with government	47	75	83	86	100	58
Internet banking	72	95	96	99	100	80
Other financial Services	25	42	47	62	100	33
Customer service	37	55	62	67	100	45
Delivering products	10	21	23	30	67	15
Recruitment	12	34	65	63	100	25
Staff Training	18	44	55	74	100	30

DEFINING THE ICT SECTOR

In 2010, Bermuda was selected as one of four Caribbean Community Secretariat (CARICOM) member states to participate in a pilot project to measure the economic contribution of the ICT sector. The information Box below outlines the various industries that comprise the ICT sector as defined by CARICOM. The selected industries align with the United Nations International Standard Industrial Classification (ISIC) Rev.4.

CARICOM ICT sector definition (based on ISIC Rev.4)

ICT manufacturing industries

- 2610 Manufacture of electronic components and boards
- 2620 Manufacture of computers and peripheral equipment
- 2630 Manufacture of communication equipment
- 2640 Manufacture of consumer electronics
- 2680 Manufacture of magnetic and optical media

ICT trade industries

- 4651 Wholesale of computers, computer peripheral equipment and software
- 4652 Wholesale of electronic and telecommunications equipment and parts
- 474 Retail sale of information and communications equipment in specialised stores
- 476 Retail sale of cultural and recreation goods in specialised stores

ICT services industries

- 5820 Software publishing
- 61 Telecommunications
- 62 Computer programming, consultancy, and related activities
- 631 Data processing, hosting, and related activities; web portals
- 7730 Renting and leasing activities
- 8220 Activities of call centers
- 951 Repair of computers and communication equipment
- 9521 Repair of consumer electronics

ICT content and media industries

- 581 Publishing of books, periodicals, and other publishing activities
- 591 Motion picture, video, and television programme activities
- 5920 Sound recording and music publishing activities
- 60 Programming and broadcasting activities
- 639 Other information service activities

Source: Determining the contribution of ICT to GDP (CARICOM, May 2011)

Published by:



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