



October 2015

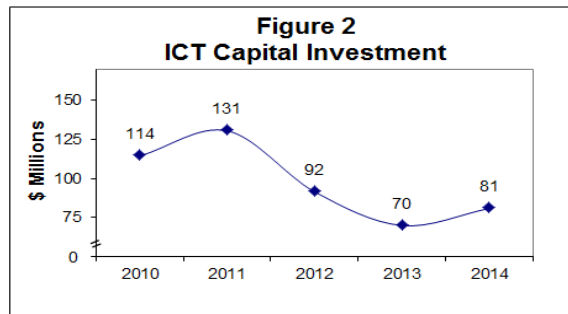
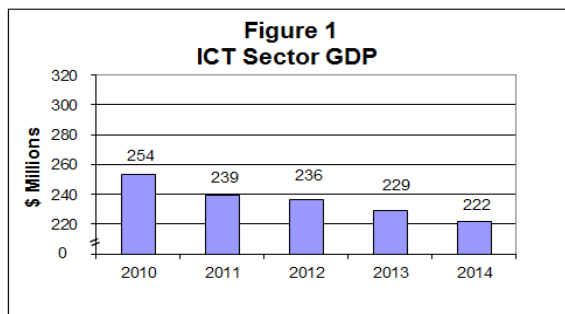
Information and Communications Technology (ICT) Report FOR THE YEAR ENDED 2014

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 for the year 2014 was generated using data from a sample of 1,500 businesses with a response rate of 91.1 per cent. The results show the core indicators on the use of ICT by businesses. Analysis and tables related to GDP, investment, employment and trade contained within the report align with the CARICOM definition of the ICT sector (see page 6). Included in this measure are the industries that comprise the OECD 2007 definition as well as trade industries and content and media industries.

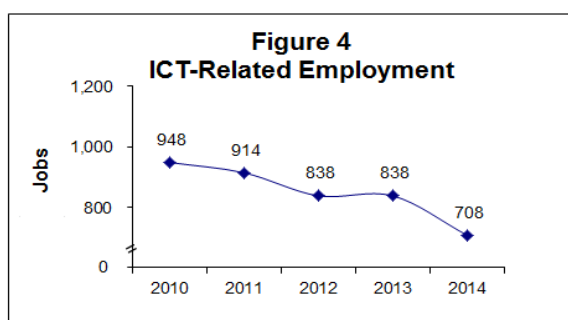
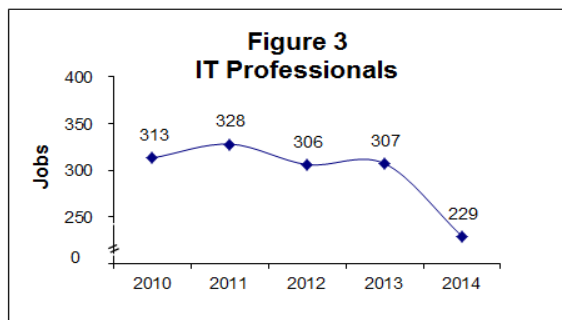
ICT SECTOR GDP AND CAPITAL INVESTMENT

- The ICT sector contributed 3.9 per cent to GDP or \$222 million in 2014 (**Figure 1**).
- Capital investment in ICT increased by 15.7 per cent from \$70 million in 2013 to \$81 million in 2014 (**Figure 2**). This growth reflected a 38.3 per cent increase in the purchase of computer software.



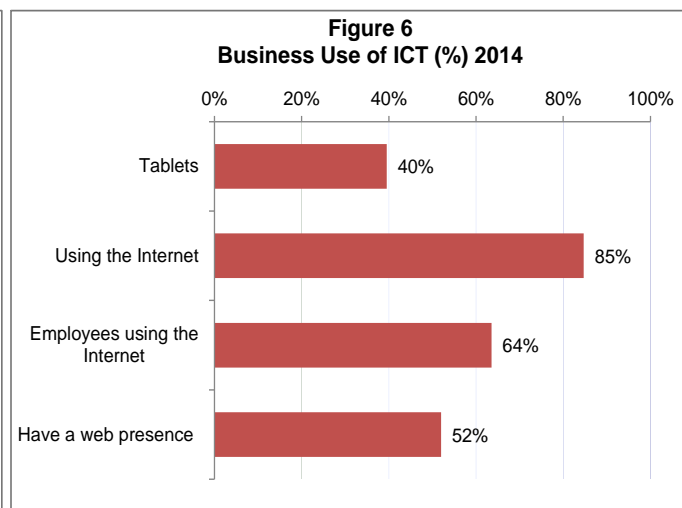
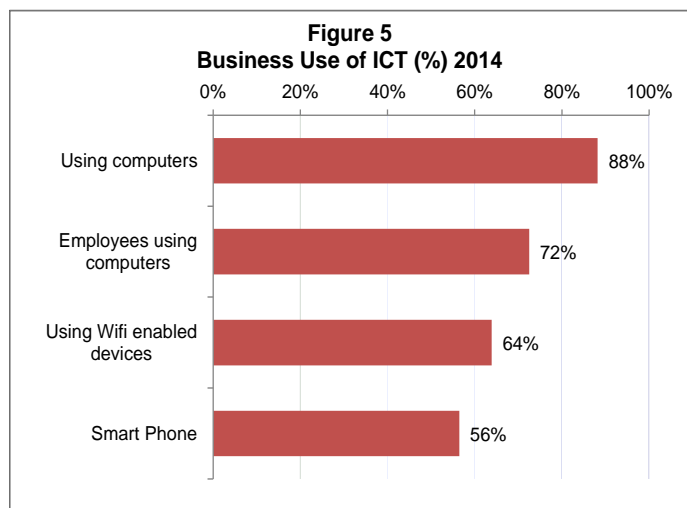
INFORMATION TECHNOLOGY (IT) PROFESSIONALS AND ICT RELATED EMPLOYMENT

- Between 2013 and 2014, employment of IT professionals decreased by 25.4 per cent, or 78 Jobs (**Figure 3**).
- ICT-related employment decreased by 15.5 per cent or 130 jobs (**Figure 4**).
- ICT-related employment accounted for 2.1 per cent of total filled jobs in 2014 compared to 2.4 per cent in 2013.



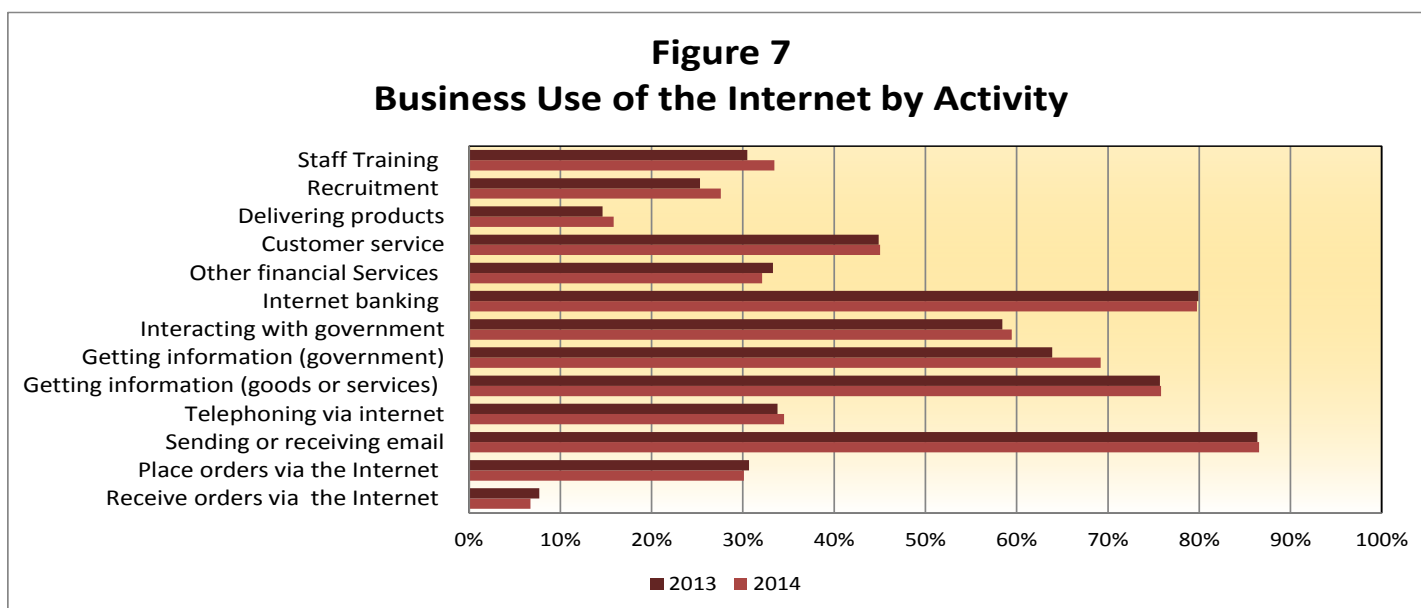
BUSINESS USE OF ICT

- In 2014, 88 per cent of businesses surveyed reported using a computer for business operations. With a further 64 per cent identifying the use of Wi-Fi enabled devices to conduct business (**Figure 5**).
- Slightly more than half of the businesses surveyed reported having a web presence, while 64 per cent of businesses allow their employees internet access (**Figure 6**).



BUSINESS USE OF THE INTERNET BY ACTIVITY

- The leading uses of the internet by businesses were sending or receiving e-mails, internet banking, and getting information on goods and services (**Figures 7**).
- More businesses are using the internet to recruit and train staff, with both categories increasing by 3 percentage points over 2013 (**Figure 7**).
- The number of businesses using the internet to get information from government increased by 5 percentage points in 2014 (**Figure 7**).



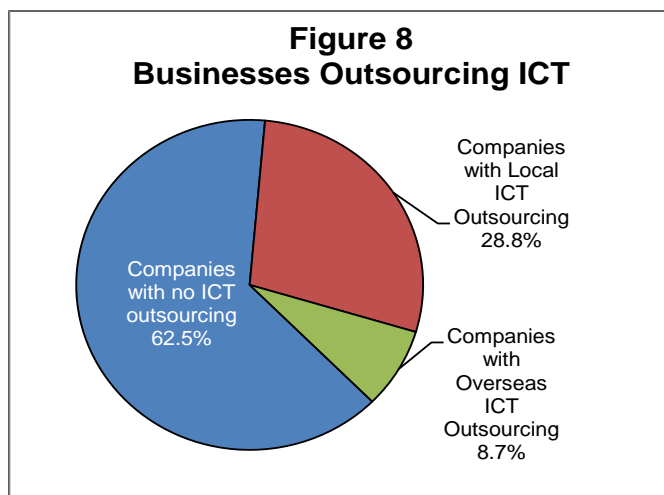
TRADE IN ICT GOODS AND SERVICES

- Bermuda's ICT trade deficit increased by 62.1 per cent or \$19.7 million in 2014 (**Table 1**).
- The wider deficit reflected an increase in imports of 9.9 per cent or \$11.1 million combined with a decline in exports of 10.6 per cent or \$8.6 million.

Table 1: Trade in ICT Goods and Services (\$000)			
IMPORTS	2013	2014	% Change
ICT Goods			
Telecommunications equipment	13,619	14,309	5.1%
Computer and related equipment	14,974	18,655	24.6%
Electronic components	1,310	1,359	3.7%
Audio and video equipment	5,337	7,557	41.6%
Other ICT goods	4,965	7,061	42.2%
Total ICT Goods	40,205	48,940	21.7%
ICT Services	72,185	74,575	3.3%
Total Imports (Goods and Services)	112,390	123,515	9.9%
EXPORTS			
Total Exports of ICT Services	80,702	72,136	-10.6%
Trade Balance	(31,688)	(51,379)	62.1%

BUSINESSES OUTSOURCING ICT

- The majority of companies surveyed (62.5 per cent) did not outsource their ICT needs in 2014. Nearly three out of 10 companies (28.8 per cent) outsourced their ICT needs to other local companies and approximately one in every 10 companies (8.7 per cent) outsourced their ICT needs overseas (**Figure 8**).



USE OF ICT FOR SELECTED INDUSTRIES

- There is a continued trend from previous years of service-related industries relying heavily on ICT to conduct business (Tables 2 and 3). However, the agriculture and construction industries have embraced greater use of ICT compared to 2013, reporting an increase in the use of computers to conduct business by 6 percentage points and 1 percentage point, respectively.

Table 2: Percent (%) Use of ICT for Selected Industries - 2014

Use of ICT	Agri- culture	Cons- truction	Accommod- ation Services	Transport and Communic- ations	Financial Insti- tutions	Insurance and related activities	Inter- national Business Activity	ICT Sector
Using computers	79%	80%	92%	83%	100%	100%	95%	93%
Using Wifi enable devices:	60%	56%	54%	57%	100%	90%	85%	81%
SmartPhones	46%	55%	25%	56%	80%	60%	84%	81%
Tablets	35%	27%	38%	24%	80%	40%	61%	50%
Using the Internet	79%	80%	92%	81%	50%	100%	93%	91%
Have a web presence	17%	23%	71%	63%	62%	80%	68%	78%
Have an Internal Network	17%	28%	50%	56%	80%	100%	76%	72%
Have an intranet	12%	16%	42%	35%	80%	90%	52%	50%
Have Local Area Network (LAN)	6%	16%	33%	30%	40%	50%	47%	47%
Have an Extranet	4%	6%	25%	20%	50%	60%	32%	31%
Receive orders via the Internet	10%	22%	63%	22%	30%	30%	24%	43%
Place orders via the Internet	0%	1%	42%	11%	50%	10%	1%	14%

Table 3: Percent (%) Use of ICT for Selected Industries - 2014

Type of Activity	Agri- culture	Cons- truction	Accommod- ation Services	Transport and Communic- ations	Financial Insti- tutions	Insurance and related activities	Inter- national Business Activity	ICT Sector
Sending or receiving email	75%	80%	92%	80%	100%	100%	93%	91%
Telephoning via internet	6%	13%	38%	35%	100%	80%	72%	66%
Getting information (goods or services)	56%	55%	92%	72%	90%	90%	85%	91%
Getting information (government)	50%	51%	79%	69%	90%	90%	89%	79%
Interacting with government	46%	43%	83%	50%	90%	80%	79%	67%
Internet banking	77%	72%	83%	74%	90%	90%	90%	90%
Other financial Services	12%	16%	50%	20%	80%	80%	64%	47%
Customer service	29%	30%	83%	54%	70%	70%	36%	69%
Delivering products	0%	3%	33%	13%	70%	50%	27%	29%
Recruitment	17%	12%	38%	26%	70%	50%	47%	38%
Staff Training	6%	13%	54%	28%	80%	80%	72%	57%

ICT BY SIZE OF COMPANY

- Establishments with a higher number of employees invariably used ICT in greater proportions (**Table 4**) and across a wider spectrum of activities (**Table 5**) than companies with fewer employees.

Table 4: Percent (%) use of ICT by Size of Company - 2014

Use of ICT	1 - 9 employees	10 - 19 employees	20 - 49 employees	50 - 249 employees	250 + employees	Total Economy
Using computers	83%	98%	99%	100%	100%	88%
Employees using computers	86%	66%	66%	73%	74%	72%
Using Wifi enabled devices	57%	72%	77%	88%	83%	64%
Smart Phone	51%	65%	67%	78%	83%	56%
Tablets	33%	49%	51%	65%	50%	40%
Using the Internet	81%	97%	99%	100%	100%	87%
Employees using the Internet	78%	58%	56%	65%	63%	64%
Have a web presence	38%	73%	83%	91%	100%	52%
Using Internal Network:	37%	63%	71%	82%	100%	48%
Have an intranet	19%	39%	49%	57%	100%	28%
Have Local Area Network (LAN)	24%	39%	48%	57%	67%	31%
Have Extranet	11%	19%	25%	38%	50%	16%
Receive orders via the Internet	24%	34%	48%	48%	83%	30%
Place orders via the Internet	4%	8%	12%	23%	67%	7%

Table 5: Percent (%) Proportion of businesses using the internet by type of activity (Company Size) - 2014

Type of Activity	1 - 9 employees	10 - 19 employees	20 - 49 employees	50 - 249 employees	250 + employees	Total Economy
Sending or receiving email	81%	97%	99%	100%	100%	87%
Telephoning via internet	24%	46%	57%	76%	83%	35%
Getting information (goods or services)	67%	91%	96%	98%	100%	76%
Getting information (government)	59%	85%	93%	96%	100%	69%
Interacting with government	48%	77%	87%	93%	100%	59%
Internet banking	72%	94%	96%	98%	100%	80%
Other financial Services	23%	38%	55%	67%	100%	32%
Customer service	36%	58%	69%	72%	100%	45%
Delivering products	10%	24%	23%	35%	100%	16%
Recruitment	14%	40%	66%	76%	100%	28%
Staff Training	22%	44%	61%	80%	100%	33%

DEFINING THE ICT SECTOR

The information Box below outlines the various industries that comprise the ICT sector as defined by the Caribbean Community Secretariat (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:



GOVERNMENT OF BERMUDA

Cabinet Office

Department of Statistics
48 Cedar Avenue
Hamilton HM 11