



**INFORMATION AND COMMUNICATION  
TECHNOLOGIES (ICT) INDICATORS (2011)  
GOVERNMENT AND HIGHER EDUCATION SECTOR**



Information Technology Authority  
Sultanate of Oman



e.oman





**HIS MAJESTY SULTAN QABOOS BIN SAID**



# CONTENTS

	Page No.
Introduction	7
Survey's Objectives	8
Survey Methodology	8
Survey's Reference Year	9
List of Figures- Government Sector	10
List of Figures- Higher Education Sector	11
Information and Communication Technologies (ICT) Usage in Government Survey (2011)	12
Information and Communication Technologies (ICT) Access to and Usage in Higher Education Survey (2011)	18



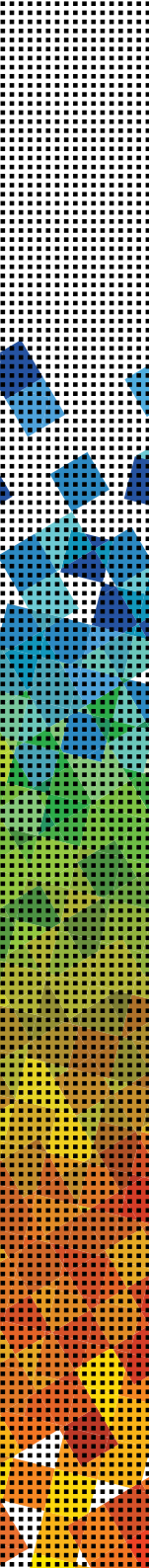
## INTRODUCTION:

The Digital Oman Strategy/e.oman Initiative outlines the blueprint for several key IT initiatives in the Sultanate of Oman which aim to empower the citizens by providing meaningful interaction through eServices.

Through the implementation of eServices, the government seeks new and innovative ways to better engage and interact with citizens in the delivery of public services. It imperative that assessment is carried out along with the execution of the plan. This is essential to quantify the successful implementation of the key initiatives and to facilitate any challenges identified during the course of the implementation, effectively and efficiently. Information Technology Authority strictly follows “Core Information and Communication Technologies (ICT) Indicators” that have been developed under the umbrella of International Telecommunication Union (ITU) by the Partnership on Measuring ICT for Development whose members are:-

- a. International Telecommunication Union (ITU)
- b. United Nations Conference on Trade and Development (UNCTAD)
- c. United Nations Educational, Scientific and Cultural Organization (UNESCO)
- d. Eurostat
- e. Organisation for Economic Co-operation and Development (OECD)
- f. United Nations Department of Economic and Social Affairs (UNDESA)
- g. Institute for Statistics (UIS)
- h. The World Bank
- i. Four United Nations Regional Commissions (the UN Economic Commission for Africa, the UN Economic Commission for Latin America and the Caribbean, the UN Economic and Social Commission for Asia and the Pacific, and the UN Economic and Social Commission for Western Asia).

This publication presents the results of two surveys for the reference



year of 2011; ICT Usage in Government Survey and ICT Access and Usage in Higher Education Survey.

ITA wishes to thank all government and private organization who have cooperated and assisted in conducting these surveys.

### **Survey's Objectives:**

- To measure ICT penetration rate in government and higher education sectors.
- To compile ICT statistics from government and higher education sectors to assist decision makers in developing strategic plans.
- Collect and analyze ICT Indicators in compliance with the International Telecommunication Union (ITU) and Global Community unified indicators and definitions of IT sector.
- To provide ICT data for international and regional benchmarking.

### **Survey Methodology:**

#### **Survey Sample:**

- **Government Sector:**

The survey covered most government entities. A total of 58 organizations were surveyed and 91% (53 entities responded).

- **Higher Education Sector:**

The survey covered most higher education institutions totally around 46 which are as follow:

- Ministry of Health: (15) Health Institutes
- Ministry of Higher Education: (6 Colleges of Applied Sciences and 16 Private) Higher Education Institutions
- Ministry of Manpower: (7) Technical Colleges
- Sultan Qaboos University
- College of Banking and Financial Studies

#### **Survey's Period:**

The Survey period including data collection, data validation, data analysis and final results approximately 4 months.





### **Survey Questionnaire:**

The questionnaires were designed according to ITU- Core ICT indicators 2010 that had been developed by the members of the Partnership on Measuring ICT for Development with consideration to ITA's requirements to implement e.oman Strategy.

### **Training:**

All focal points in government entities and higher education institutions received training in data collection procedures. The questionnaires were explained to ensure maximum response rate and accurate data.

### **Data Collection:**

The Survey was online at ITA website ([www.ita.gov.om](http://www.ita.gov.om)).

### **Data Editing, Processing and Analyzing:**

Data verification and validation was conducted by calling back via various methods e.g. fax, emails and telephone calls. Data analyses were done by a specialized staff in analyzing ICT data.

### **Survey's Reference Year:**

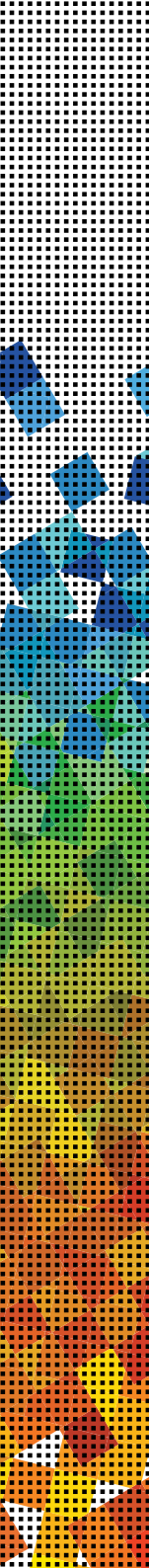
- **Government Sector:** Year of 2010.
- **Higher Education Sector:** Academic Year of 2009\2010.

## LIST OF FIGURES– GOVERNMENT SECTOR

Figure		Page
<b>Figure (1):</b>	Percentage Distribution of Total Staff by Nationality 2011	14
<b>Figure (2):</b>	Percentage Distribution of Omani Staff by Gender 2011	14
<b>Figure (3):</b>	Percentage of Staff with ICT Skills 2011	14
<b>Figure (4):</b>	Percentage of Staff with ICT Majors 2011	14
<b>Figure (5):</b>	Percentage of PCs Connected to the Internet	14
<b>Figure (6):</b>	Percentage of Government Entities by Type of Internet Access 2011	15
<b>Figure (7):</b>	Percentage of Staff Routinely Using PCs and Internet at Work	15
<b>Figure (8):</b>	No. of Government Entities who Use E-mail for Official Internal Communications by the Percentage of Usage 2011	15
<b>Figure (9):</b>	No. of Government Entities who use E-mail For Official External Communications by the Percentage of Usage 2011	16
<b>Figure (10):</b>	Percentage of Government Entities Having the Following Information Technologies Tools, 2011	16
<b>Figure (11):</b>	Percentage of Government Entities Using the Following Communication Tools, 2011	16
<b>Figure (12):</b>	Percentage of Online Services by the Type of Service, 2011	17

## LIST OF FIGURES– HIGHER EDUCATION SECTOR

Figure		Page
<b>Figure (13):</b>	Percentage of Institutions by Type and Type of Internet Access 2011	20
<b>Figure (14):</b>	Percentage of PCs Connected to the Internet by Type of Institution 2011	20
<b>Figure (15):</b>	Percentage of Institutions that Provide an Official E-mail Account to	20
<b>Figure (16):</b>	Percentage of Institutions that Provide an Official E-mail Account to Admin. Staff by Type of Institution 2011	21
<b>Figure (17):</b>	Percentage of Institutions that Provide an Official E-mail Account to Academic Staff by Type of Institution 2011	21
<b>Figure (18):</b>	Percentage of Institutions that Provide an Official E-mail Account to Students by Type of Institution 2011	21
<b>Figure (19):</b>	Percentage of Institutions Having the Following Information Technologies by Type of Institution 2011	22
<b>Figure (20):</b>	Percentage of Institutions by Type of Institution and Type of Network 2011	22
<b>Figure (21):</b>	Percentage of Institutions Offering 2011	22
<b>Figure (22):</b>	Percentage of ICT Majors out of Total Majors 2011	23
<b>Figure (23):</b>	Percentage of Staff With ICT Majors and Skills	23
<b>Figure (24):</b>	Percentage of Students Enrolled in ICT Related Majors 2011	23
<b>Figure (25):</b>	Percentage of Students Enrolled in ICT Related Majors by Type of Institution 2011	24
<b>Figure (26):</b>	Percentage of Students Enrolled in ICT Related Majors by Gender 2011	24



**INFORMATION AND COMMUNICATION  
TECHNOLOGIES (ICT) USAGE IN  
GOVERNMENT SURVEY (2011)**

## SUMMARY RESULTS

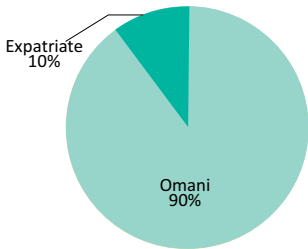
Indicator	2011	2010	2009
Percentage of Staff With ICT Skills	43%	42%	15%
Staff to Computers Ratio	1.4	1.2	2.9
Percentage of Computers Connected to the Internet	83%	50%	42%
Percentage of Staff Routinely Using Computers at Work	45%	43%	21%
Percentage of Staff Routinely Using Internet at Work	39%*	42%	15%
Estimated Percentage of Government Employees Using E-mail as a Mean of Communication – External Communication	94%	90%	88%
Estimated Percentage of Government Employees Using E-mail as a Mean of Communication – Internal Communication	85%**	93%	83%
Percentage of Government Entities with an Intranet	87%	86%	85%
Percentage of Government Entities Linked to any Network	91%	89%	69%

\* Limited access to internet to some staff as per entities policies.

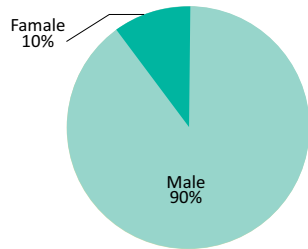
\*\* eOffice is being used by some government entities.

eOffice: Is an Internal Communication System.

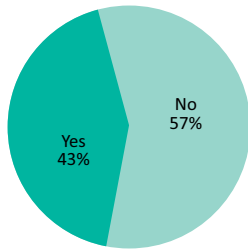
**Figure (1): Percentage Distribution of Total Staff by Nationality 2011**



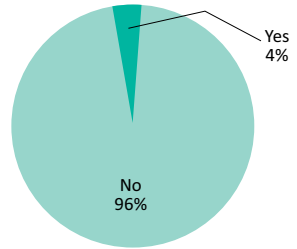
**Figure (2): Percentage Distribution of Omani Staff by Gender 2011**



**Figure (3): Percentage of Staff with ICT Skills 2011**



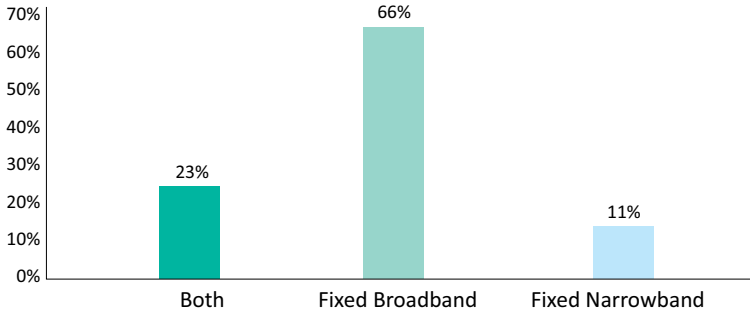
**Figure (4): Percentage of Staff with ICT Majors 2011**



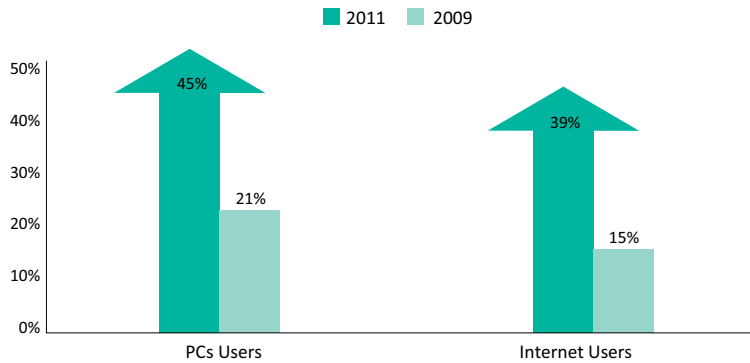
**Figure (5): Percentage of PCs Connected to the Internet 2011**



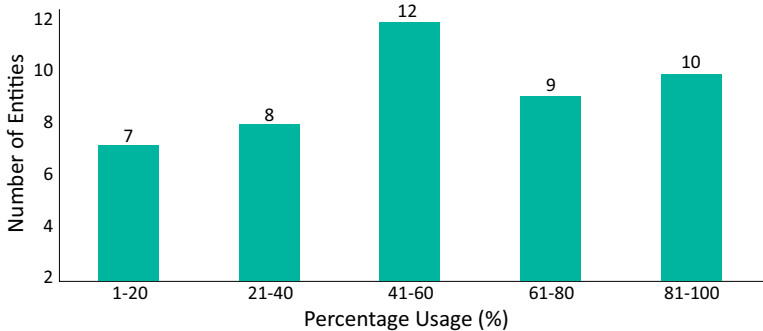
**Figure (6): Percentage of Government Entities by Type of Internet Access 2011**

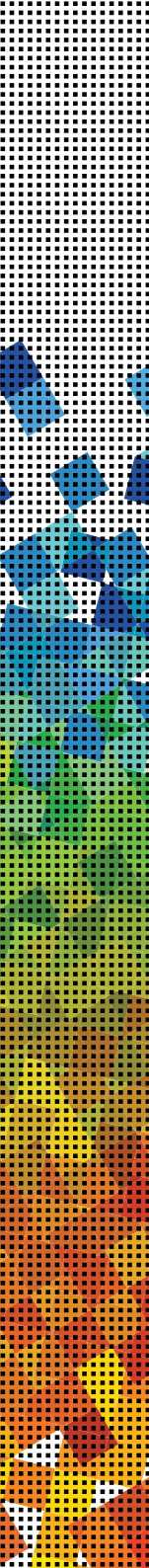


**Figure (7): Percentage of Staff Routinely Using PCs and Internet at Work**

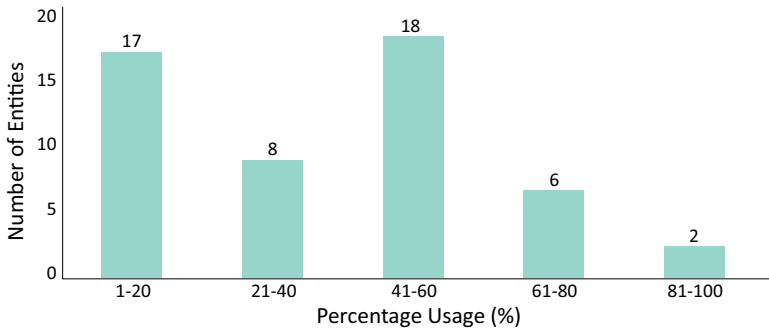


**Figure (8): No. of Government Entities who Use E-mail for Official Internal Communications by the Percentage of Usage 2011**

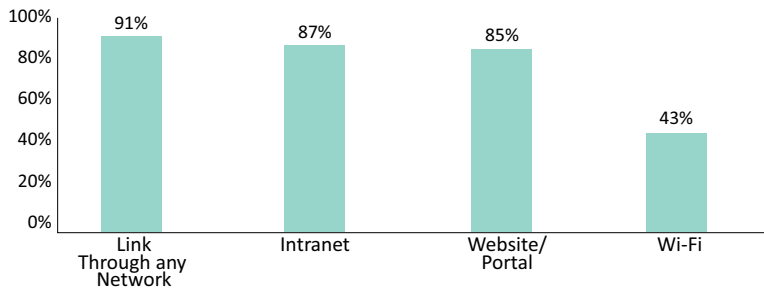




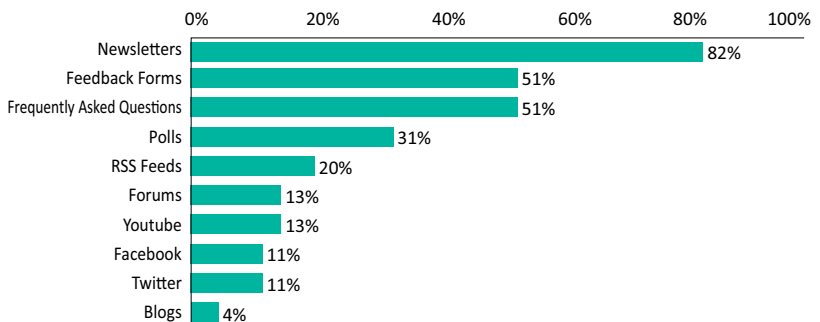
**Figure (9): No. of Government Entities who Use E-mail for Official External Communications by the Percentage of Usage 2011**



**Figure (10): Percentage of Government Entities Having the Following Information Technologies Tools 2011**

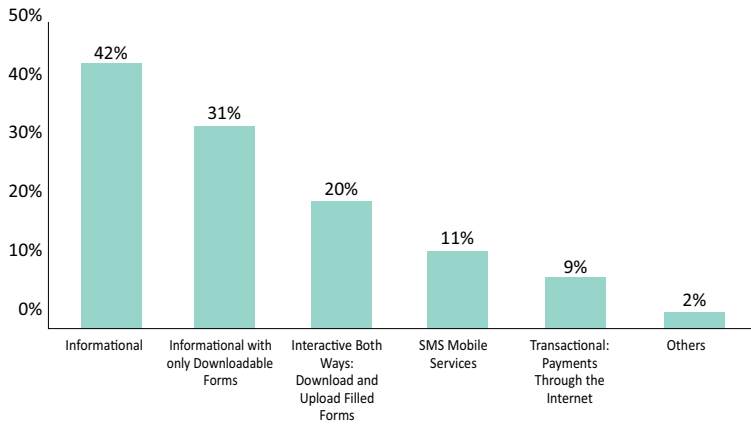


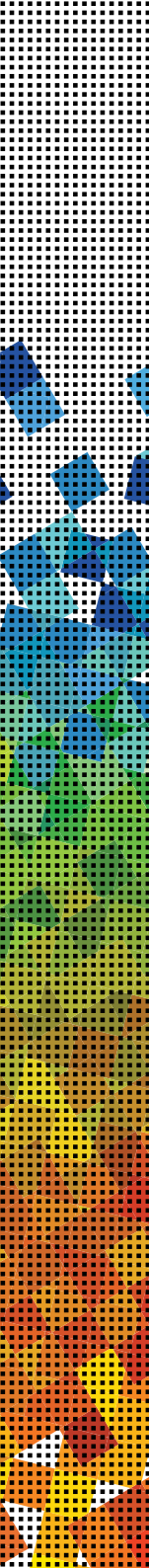
**Figure (11): Percentage of Government Entities Using the Following Communication Tools 2011**





**Figure (12): Percentage of Online Services by the Type of Service 2011**



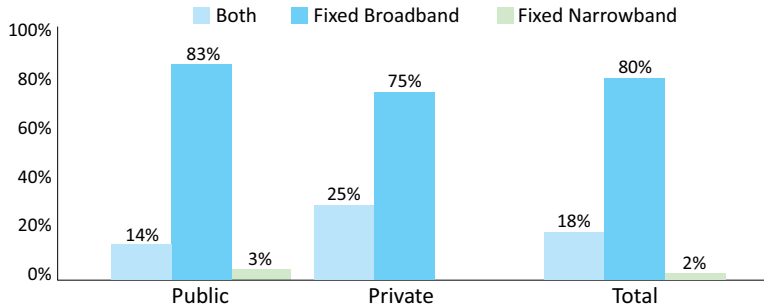


**INFORMATION AND COMMUNICATION  
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USAGE IN HIGHER EDUCATION SURVEY  
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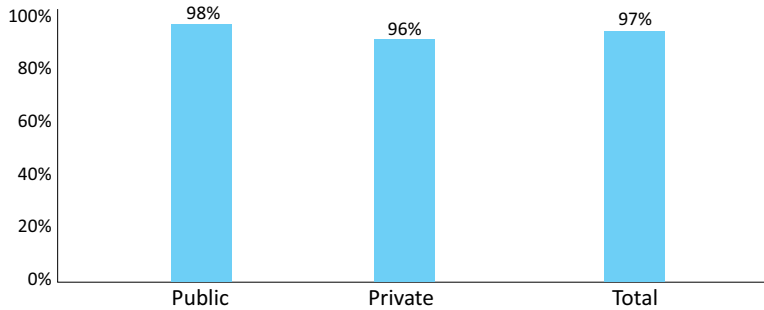
## SUMMARY RESULTS

Indicator	2011	2010
<b>Higher Education Institutions:</b>		
Percentage of Institutions with Website Presence	64%	100%
Percentage of Institutions Offer ICT Majors	60%	76%
Percentage of ICT Majors out of Total Majors	25%	15%
Percentage of Computers Connected to the Internet	97%	97%
Percentage of Institutions Provide an E-mail Accounts to:		
• Students	98%	44%
• Academic Staff	98%	92%
• Admin. Staff	89%	100%
<b>Staff:</b>		
Percentage of Staff with Information and Communication Technologies (ICT) Majors	17%	14%
Percentage of Staff with Information and Communication Technologies (ICT) Skills	78%	78%
<b>Students:</b>		
Percentage of Students Enrolled in Information and Communication Technologies (ICT) Related Majors	20%	17%
Percentage of Students Enrolled in Information and Communication Technologies (ICT) Related Majors by Gender:		
• Male	49%	47%
• Female	51%	53%

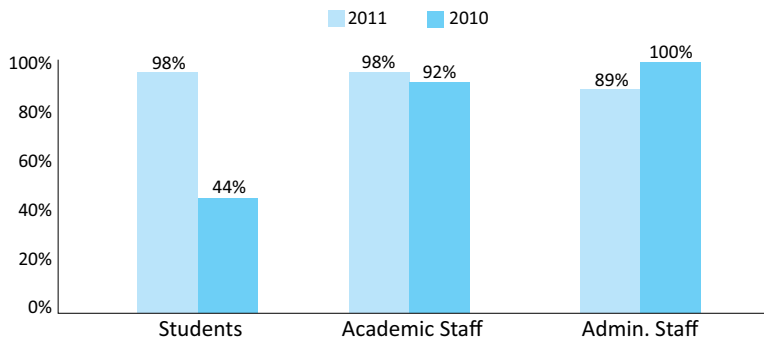
**Figure (13): Percentage of Institutions by Type and Type of Internet Access 2011**



**Figure (14): Percentage of PCs Connected to the Internet by Type of Institution 2011**

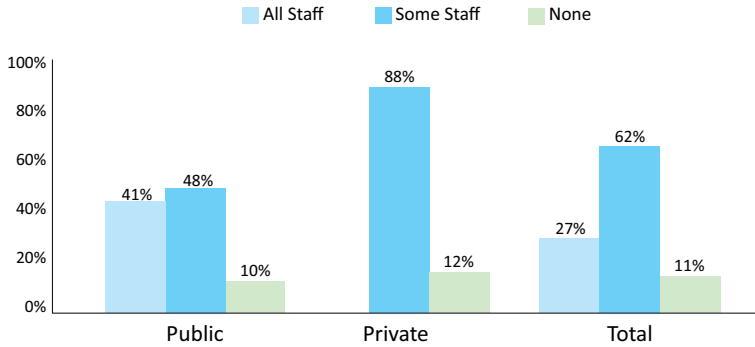


**Figure (15): Percentage of Institutions that Provide an Official E-mail Account to**

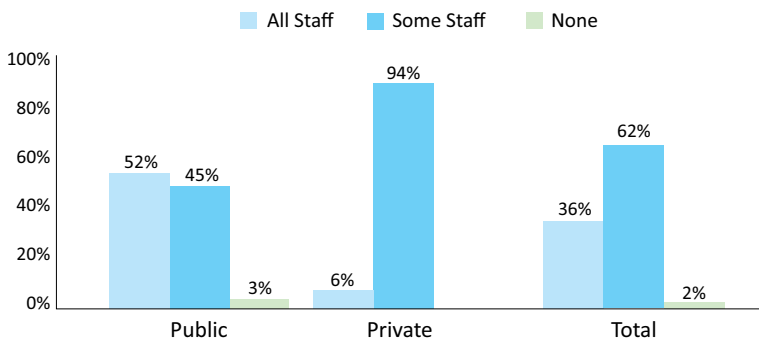


Around 11% of private institutions don't provide an official email account for administrative staff because of having an e-internal communication application.

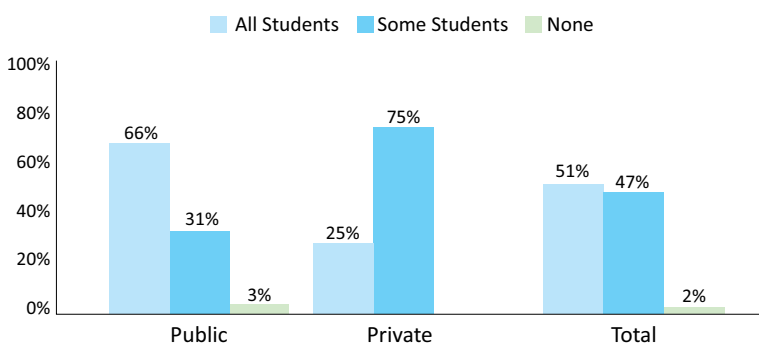
**Figure (16): Percentage of Institutions that Provide an Official E-mail Account to Admin. Staff by Type of Institution 2011**

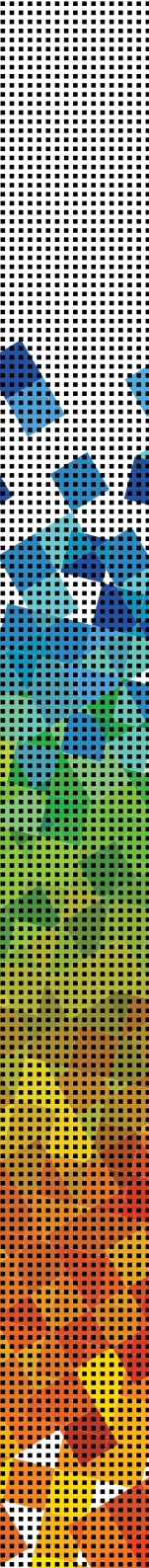


**Figure (17): Percentage of Institutions that Provide an Official E-mail Account to Academic Staff by Type of Institution 2011**

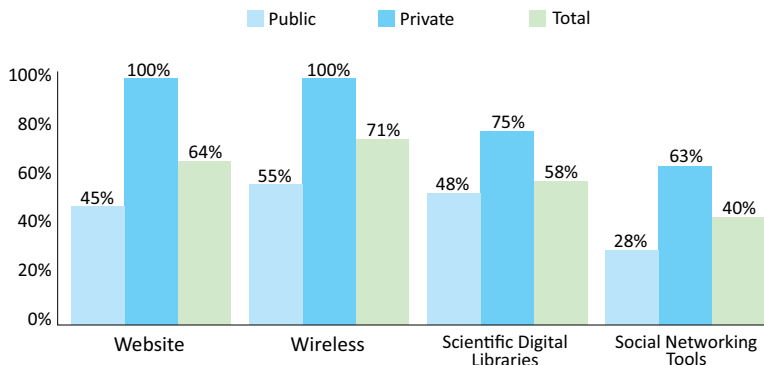


**Figure (18): Percentage of Institutions that Provide an Official E-mail Account to Students by Type of Institution 2011**

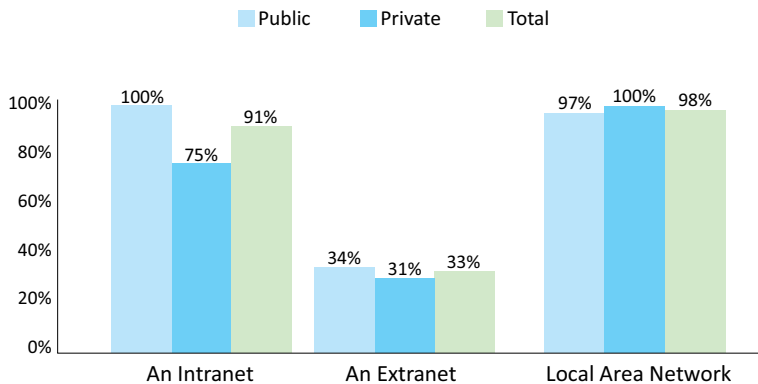




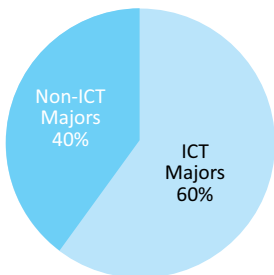
**Figure (19): Percentage of Institutions Having the Following Information Technologies by Type of Institution 2011**



**Figure (20): Percentage of Institutions by Type of Institution and Type of Network 2011**



**Figure (21): Percentage of Institutions Offering 2011**

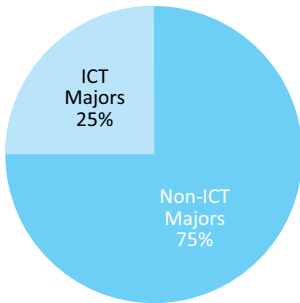


**ICT Majors and Non-ICT Majors by Type of Institution 2011**

	Public	Private
ICT Majors	*48%	81%
Non-ICT Majors	52%	19%

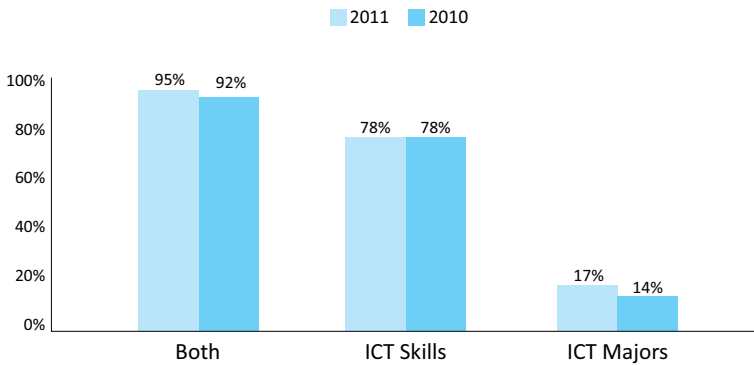
\* 15 out of 29 of the public institutions are health institutions, where they don't offer ICT majors but offer ICT subjects.

**Figure (22): Percentage of ICT Majors out of Total Majors 2011**

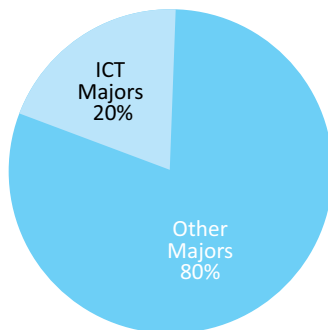


**ICT Majors:** a diploma degree or higher degree in ICT studies e.g. information technology, system analysts, programmers, developers, security specialists etc.

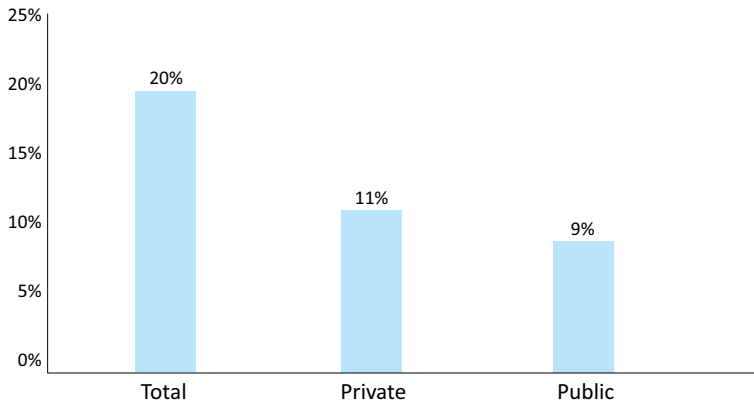
**Figure (23): Percentage of Staff with ICT Majors and Skills**



**Figure (24): Percentage of Students Enrolled in ICT Related Majors 2011**



**Figure (25): Percentage of Students Enrolled in ICT Related Majors by Type of Institution 2011**



**Figure (26): Percentage of Students Enrolled in ICT Related Majors by Gender 2011**

