

ICT & ITES INDUSTRY STATISTICS AND YEARBOOK

**JORDAN
2016**

Prepared by the Information and Communications Technology Association in Jordan- int@j in cooperation with Ministry of Information and Communications Technology - Jordan



int@j
Information and Communications
Technology Association - Jordan


وزارة الاتصالات وتكنولوجيا المعلومات
Ministry of Information and
Communications Technology

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List of Abbreviations

ICT	Information and Communications Technology
IT	Information Technology
ITES	IT Enabled Services
int@j	Information and Communications Technology Association
MoICT	Ministry of Information & Communications Technology
ISIC	International Standard Industrial Classification
OECD	Organization for Economic Co-operation and Development
UNSTATS	United Nations Statistics Division
FDI	Foreign Direct Investment

Introduction

Jordan's information and communications technology (ICT) and IT Enabled Services (ITES)¹ sectors have come a long way in the past years and have achieved a great deal of accomplishments in which we can all take great pride. Today, the ICT ecosystem in Jordan is considered as one of the most developed and robust in the region. With internet penetration rate exceeding 100% and the expansion of new technologies, ICT and ITES are listed amongst the government's highest priorities, and are expected to continue to contribute to the Jordanian economy.

In spite of the rising regional competition and slower economic growth coupled with regional instability, the ICT sector continues to stand as one of Jordan's greatest strengths. To demonstrate the sector's growth in terms of numbers and to determine the growth in market size, exports, investments, and employment, the Information and Communications Technology Association of Jordan (int@j) in cooperation with the Ministry of Information and Communications Technology (MoICT) have completed the ICT and ITES Sector Classification and Statistics for the year 2015 aiming to provide clear and accurate references on Jordan's ICT and ITES sectors.

Classical Framework

The International Standard Industrial Classification of All Economic Activities (ISIC) is the international reference classification of productive activities. Its main purpose is to provide a set of activity categories that can be utilized for the collection and reporting of statistics according to such activities.

ISIC is not a classification of goods and services but rather a classification according to the kind of productive activity. It is distinctively different in nature and purpose from the classifications of goods and services, ownership, institutional units or other types of classifications.

All the ICT and ITES Sector classifications in this report were mapped to the fourth revision of ISIC (ISIC, Rev.4) which is the outcome of a review process that spanned over several years and involved contributions from several classification experts and users around the world. The fourth revision of ISIC provides substantially more details at all levels than the previous versions of the classification. This increased detail responds to requests by both producers and users of statistics.

Methodology

The 2016 ICT and IT Enabled Services (ITES) Sector Classification and Statistics Survey conducted between September and November 2017 represents a holistic assessment of Jordan's Information and Communications Technology (ICT) and IT Enabled Services (ITES) industry.

The Survey was designed based on the International Standard Industrial Classification, Version 4.0 (ISIC 4.0) to provide information on the following topics:

- IT and ITES revenue domestic and export
- IT and ITES employment
- IT and ITES investments

¹ IT enabled services are the services that make extensive use of information and communication technologies.

The survey followed a secure mechanism that ensured data confidentiality, collected by authorized government body; *The Department of Statistics (DoS)*. Data disclosed only to authorized representatives to allow aggregation and analysis of the data provided by companies. Entered data is split into two separate databases making it virtually impossible to link companies' information to their numbers for confidentiality purposes.

Survey Methodology:

- The survey followed the Organization for Economic Co-operation and Development (OECD) definition of the ICT Sector, according to which the guiding principle for what constitutes an ICT enterprise is: "The production (goods and services) of a candidate industry must primarily be intended to fulfill or enable the function of information processing and communication by electronic means, including transmission and display"
- Based on the OECD definition of an ICT enterprise, ICT and ITES sector segments have been mapped to ISIC 4.0 sections.
- To ensure that the survey covers all ICT and ITES companies in Jordan (100% of the sector), comprehensive lists of companies with ICT and ITES related activities were obtained from the Ministry of Industry and Trade and all Industry and Trade Chambers in Jordan in order to identify ICT and ITES companies in Jordan (including int@j and non-int@j member companies)
- The survey was then launched and verified companies with ICT and ITES activities were visited to fill the questionnaire.
- During the survey, companies confirmed whether they are actually ICT and/or ITES related companies by examining a detailed list of activities and answering specific questions.
- The survey outcomes identified the companies considered as ICT and/or ITES companies.
- Companies are classified as part of the ICT and ITES Sector if their "principal" activities belong to ISIC 4.0 ICT and ITES classes, i.e. are within the ICT and ITES classification domain.
- According to UNSTATS "An activity that contributes most to the value added of the unit, or the activity the value added of which exceeds that of any other activity undertaken by the unit is called its "principal" activity. It is unnecessary that the principal activity account for 50% or more of the total value added of a unit".
- Remaining companies, which did not complete the questionnaire, were approached individually, and asked questions, in order to identify their activities based on (ISIC 4.0) classification and provide actual number of employees. Besides, relying on historical data for companies which were not approachable at all.
- The revenues for companies which didn't fill the survey were estimated by pro-rating total numbers based on the number of those who filled the survey compared to the total number of companies.
- For accuracy purposes, statistics of Telecommunications companies were obtained from the Telecommunications Regulatory Commission (TRC), the official organization in Jordan responsible for gathering and publishing Telecom statistics. IT & ITES numbers presented in this report are the results of analyzing the figures obtained from the 2016 survey.
- All monetary values expressed in this report are in US Dollars. USD 1 = JD 0.708 is the official conversion rate when publishing this report.

Survey Sample Population

Summary of Participants

Survey Participants Summary	
Category	Total
Initial Identified Companies	705
Suspended or Closed Businesses Identified Companies	61
Non-ICT/ITES or Not in Jordan Identified Companies	29
Total Targeted Companies to fill the questionnaire	545
Total ICT/ITES Identified Companies	545
Total Companies Completed the questionnaire	210
Total Companies Did Not Fill the questionnaire	335
New IT/ITES Companies in 2016	70

Table 1: Survey Participants Summary

Participations by Economic Activity

Companies Activities				
ISIC Code	ISIC Activity	Group A	Group B	Total
6110	Telecommunications wired services (6110)	8	2	10
6120	Telecommunications wireless services (6120)	11	2	13
6130	Telecommunications satellite services (6130)	1	0	1
4652010	Telecommunications equipment and telephones wholesale (4652010)	13	3	16
332001	Telecommunications equipment installation (332001)	5	16	21
951201	Telecommunications equipment maintenance (951201)	4	0	4
6190	Telecommunications voice over IP services (6190)	2	0	2
VAS-6311	Telecommunications value added services (VAS-6311)	11	6	17
6190	Other telecommunications services (6190)	7	1	8
182001	Reproduction of recorded media from master copies of software and data on discs and tapes (182001)	1	1	2
2610	Manufacture of electronic components and boards (2610)	1	1	2
465102	Wholesale of software (465102)	18	0	18
4651	IT Hardware & infrastructure wholesale (4651)	22	25	47
332002	IT Hardware & infrastructure installation (332002)	6	8	14
9511	Repair of computers and peripheral equipment (9511)	3	12	15
951202	IT Networking equipment maintenance (951202)	2	5	7
6201	Software development (6201)	55	162	217
4651	Software licenses sale (4651)	20	8	28
5820	Software licenses publishing (5820)	7	24	31
9511	IT Outsourcing (9511)	3	0	3
6202	ICT Consulting and Research (6202)	7	20	27
6209	Other IT activities (6209)	18	20	38
6311	Data processing and hosting related services (6311)	15	53	68

Companies Activities				
ISIC Code	ISIC Activity	Group A	Group B	Total
6201	Online applications development (6201)	10	0	10
6312	Online applications customization (6312)	1	1	2
6201	Mobile applications development (6201)	13	0	13
6312	Mobile applications customization (6312)	4	2	6
6312	Web portals (6312)	3	25	28
6311	e-Commerce business (6311)	7	2	9
6201	Games Development (6201)	1	0	1
8220	Call centers (8220)	2	2	4
8220	Knowledge process outsourcing (8220)	0	1	1
4741	Retail sale of computers, peripheral units, software and telecommunications equipment in specialized stores (4741)	6	0	6
ICT Training	ICT Training	5	5	10
Others		8	0	8
Total		300	407	707

Table 2: Companies Activities

Group A: Companies completed the survey & carried out this activity

Group B: Companies did not complete the survey

Note: Number of total activities is higher than total participating companies as companies have more than one activity.

2016 ICT/ITES Sector Statistics

IT & ITES Sector Statistics 2016			
	Domestic (USD)	Export (USD)	Total (USD)
Total IT/ITES Revenue	\$456,696,673	\$225,508,006	\$682,204,679
IT Revenue	\$450,715,178	\$207,418,148	\$658,133,326
ITES Revenue	\$2,975,746	\$17,924,059	\$20,899,805
ICT Training Revenue	\$3,005,750	\$165,798	\$3,171,548
Total Telecom Revenue	\$1,363,502,459		
IT Imports	\$189,512,373		
IT and ITES Sector Employment	13,187		
IT Employment	11,023		
ITES Employment	2,164		
Telecom Employment	4225		
ICT and ITES Sector Employment	17,412		

Table 3: IT & ITES Sector Statistics 2016

Note: Numbers presented in the table above for the ICT & ITES Sector based on the results of the 2016 Survey.

IT Growth (2002 – 2016)

Summary 2002 – 2006					
	2002	2003	2004	2005	2006
IT Export Revenue (USD)	\$40,038,000	\$69,728,000	\$79,410,743	\$162,619,518	\$191,520,379
Growth %	0.10%	74.16%	13.89%	105%	17.80%
% of Total Revenues	17.52%	24%	18%	28%	25.00%
IT Domestic Revenue (USD)	\$188,448,000	\$226,183,000	\$361,103,905	\$418,254,125	\$578,554,212
Growth %	44.96%	20.02%	59.65%	15.80%	38.33%
% of Total Revenues	82.48%	76%	82%	72%	75.00%
IT Total Revenue (USD)	\$228,486,000	\$295,910,000	\$440,514,648	\$580,873,643	\$770,074,591
Growth %	34.40%	29.51%	48.87%	31.86%	32.57%
IT Investment (FDI) Yearly	\$8,005,500	\$11,594,500	\$2,900,000	\$10,524,761	\$13,569,656
IT FDI Cumuli. (USD)	\$68,005,500	\$79,600,000	\$82,500,000	\$93,024,761	\$106,594,417
IT & ITES Emp.	8,000	8,117	8,523	10,032	10,712

Table 4: IT Growth Summary 2002 – 2006

Summary 2007 - 2011					
	2007	2008	2009	2010	2011
IT Export Revenue (USD)	\$196,907,691	\$226,863,27	\$209,526,864	\$202,275,754	\$230,528,961
Growth %	2.81%	15.21%	-7.64%	-3.46%	13.97%
% of Total Revenues	22.30%	23.57%	23.41%	27.64%	31.23%
IT Domestic Revenue (USD)	\$686,063,063	\$735,571,81	\$685,461,382	\$529,571,537	\$507,526,322
Growth %	18.58%	7.22%	-6.81%	-22.74%	-4.16%
% of Total Revenues	77.70%	76.43%	76.59%	72.36%	68.77%
IT Total Revenue (USD)	\$882,970,754	\$962,435,09	\$894,988,247	\$731,847,291	\$738,055,284
Growth %	14.66%	9.00%	-7.01%	-18.23%	0.85%
IT Investment (FDI) Yearly	\$3,070,791	\$1,690,141	\$16,231,326	\$14,944,209	\$1,384,181
IT FDI Cumuli. (USD)	\$109,665,208	\$111,355,39	\$127,586,675	\$142,530,884	\$143,915,065
IT & ITES Emp.	11,034	10,294	11,334	9,858	11,235

Table 5: IT Growth Summary 2007 – 2011

Summary 2012 - 2016					
	2012	2013	2014	2015	2016
IT Export Revenue (USD)	\$299,915,978	\$324,441,323	\$178,116,633	\$200,434,541	\$207,418,148
Growth %	30.10%	8.18%	-45.10%	12.53%	3.48%
% of Total Revenues	48.61%	50.86%	32.59%	32.66%	31.52%
IT Domestic Revenue (USD)	\$317,110,284	\$313,499,003	\$368,471,515	\$413,297,567	\$450,715,178
Growth %	-37.52%	-1.14%	17.54%	12.17%	9.05%
% of Total Revenues	51.39%	49.14%	67.41%	67.34%	68.48%
IT Total Revenue (USD)	\$617,026,263	\$637,940,326	\$546,588,148	\$613,732,108	\$658,133,326
Growth %	-16.40%	3.39%	-14.32%	12.28%	7.23%
IT Investment (FDI) Yearly	\$2,468,435	\$4,175,000	\$1,184,590	\$1,755,085	\$14,678,677
IT FDI Cumuli. (USD)	\$146,383,500	\$150,558,500	\$151,743,090	153,498,175	\$168,176,852
IT & ITES Emp.	11,360	11,637	12,080	12,634	13,187

Table 6: IT Growth Summary 2012 – 2016

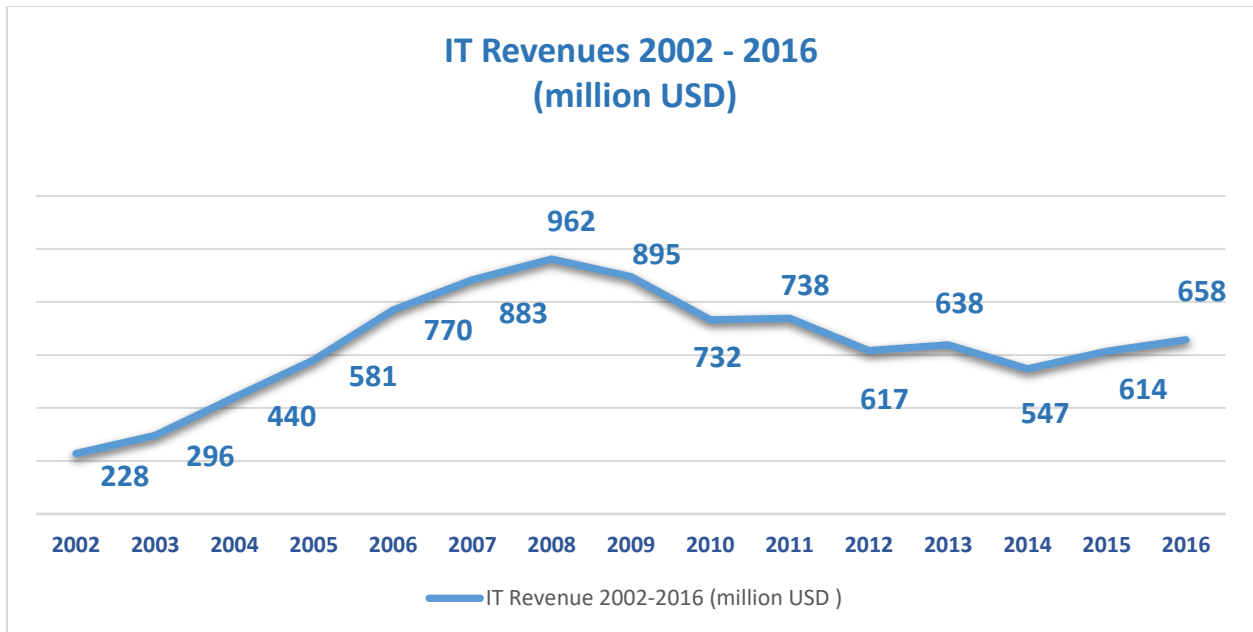


Figure 1: IT Total Revenues 2002 – 2016(million USD)

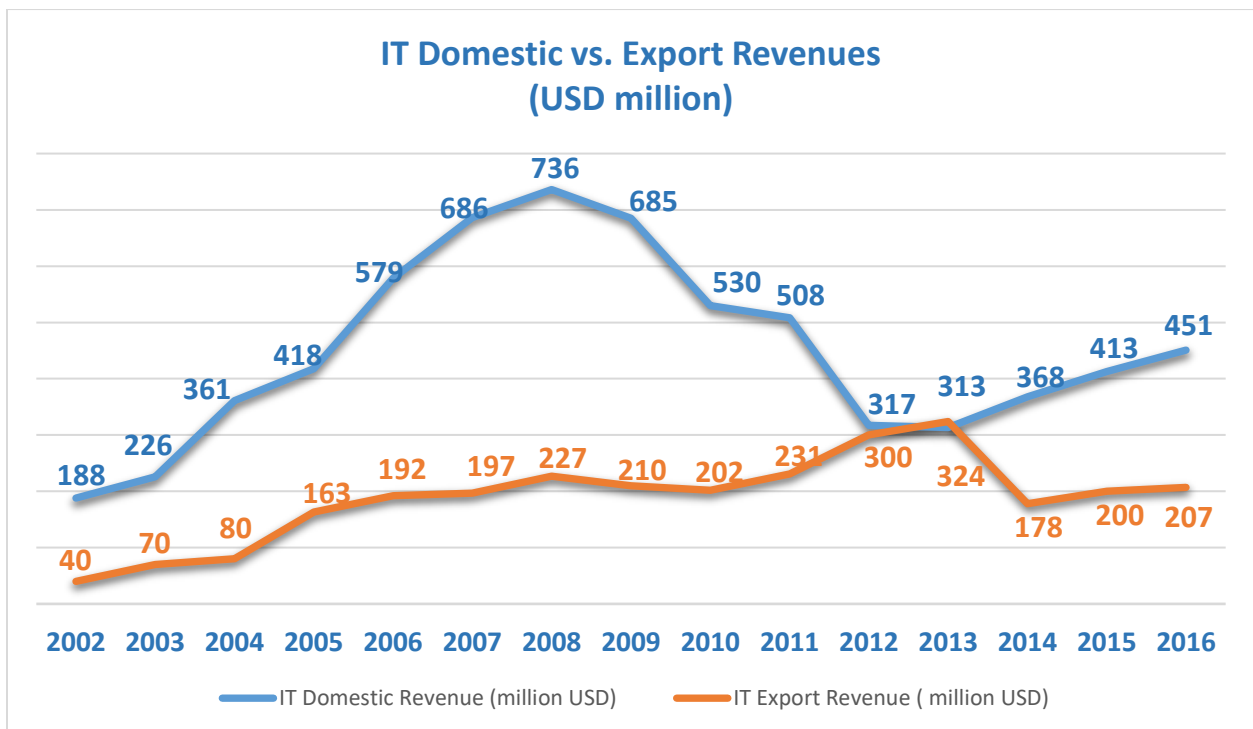


Figure 2: IT Domestic vs. Export Revenues 2002 – 2016 (Million USD)

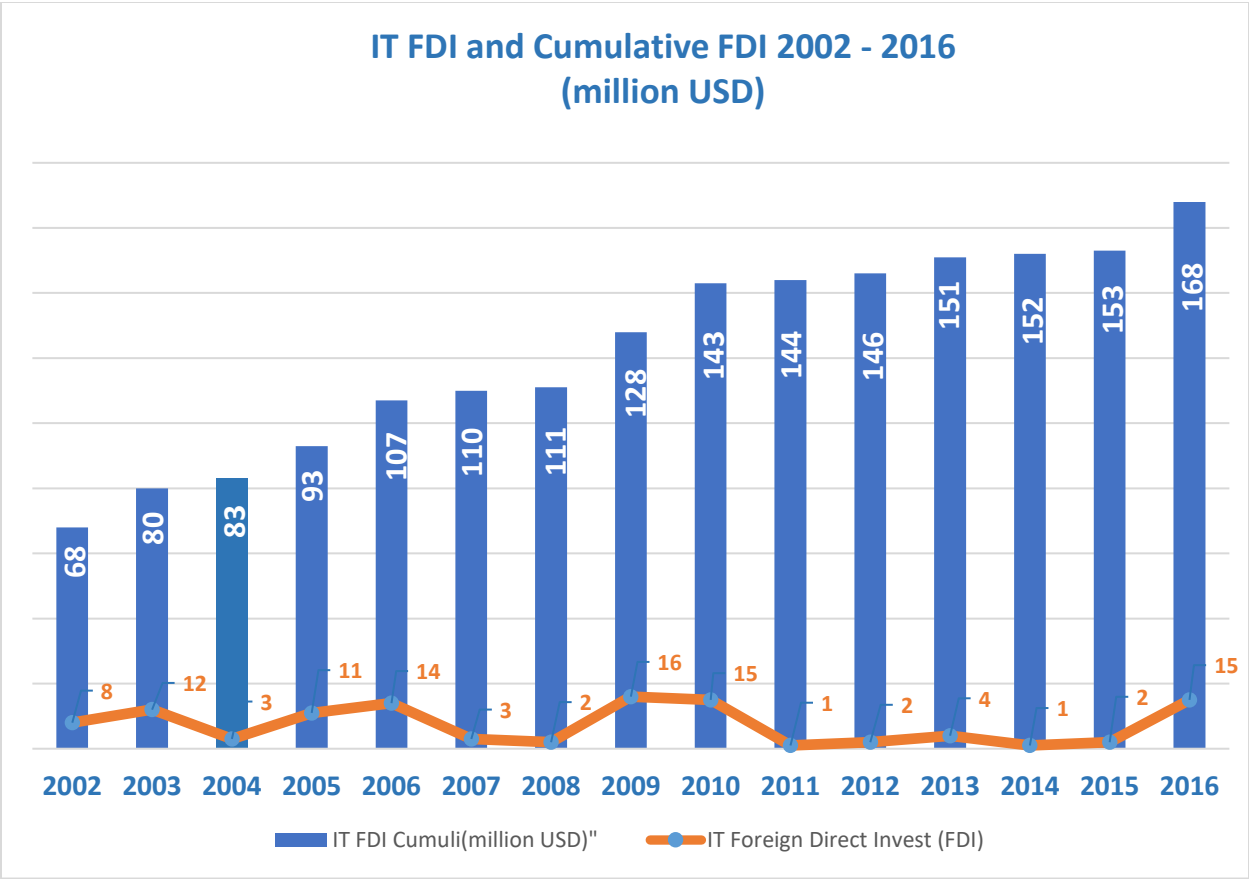


Figure 3: IT FDI and Cumulative FDI 2002– 2016 (million USD)

2016 Telecom Sector Statistics

Telecom Statistics 2016 ²					
PSTN (USD)	\$274,388,912				
Mobile (USD)	\$875,155,600				
Internet (USD)	\$101,866,095				
Other Revenues USD	\$112,091,852				
Total USD	\$1,363,502,459				
Annual Investment (million USD)	\$134,180,791				
Employment	4225				
Penetration and Number of Subscribers in 2016					
Fixed Line Subscribers	Fixed Line Penetration	Mobile Subscribers	Mobile Penetration	Internet Subscribers	Internet Penetration
356,000	3.6%	9,818,000	100%	10,129,351	103%

Table 7: Telecom Statistics 2016

Telecom Growth 2010 – 2016

Telecom Sector Statistics 2010 – 2016 ³							
Activity	2010	2011	2012	2013	2014	2015	2016
Total Revenues	\$1,571,181,525	\$1,629,190,101	\$1,669,919,468	\$1,547,420,471	\$1,462,801,223	\$1,353,482,283	\$1,363,502,459
PSTN (USD)	\$340,376,899	\$334,889,521	\$345,281,330	\$323,302,868	\$289,573,970	\$250,738,206	\$274,388,912
Mobile (USD)	\$977,947,900	\$1,002,357,206	\$1,009,096,545	\$941,229,130	\$902,406,696	\$861,501,333	\$875,155,600
Internet (USD)	\$102,193,097	\$126,384,027	\$121,305,277	\$121,945,640	\$120,780,044	\$111,541,097	\$101,866,095
Other	\$150,663,629	\$165,559,347	\$194,236,316	\$160,942,833	\$150,040,513	\$129,701,647	\$112,091,852
Penetration							
Fixed Line Subscribers	485,000	424,000	401,000	379,000	376,000	369,000	356,000
Fixed Line Penetration	8.00%	6.80%	6.30%	5.20%	5.00%	4.00%	3.6%
Mobile Subscribers	6,620,000	7,483,000	8,984,000	10,314,000	11,120,000	13,798,000	9,818,000
Mobile Penetration	108%	120%	140%	142%	147%	145%	100%
Internet Subscribers	2,324,000	3,137,000	4,260,000	5,300,000	5,650,000	7,900,000	10,129,351
Internet Subscribers Penetration	38%	51%	67%	73%	75%	83%	103%
Annual Inv. (MUSD)	162.4	179.4	139.8	218.9	403.9	406.7	134.2
Employment	5317	4600	4596	4212	4304	4159	4225

Table 8: Telecom Statistics 2010 – 2016

² Source: Telecom Regulatory Commission (TRC)

³ Source: Telecom Regulatory Commission (TRC)

Telecom Revenues

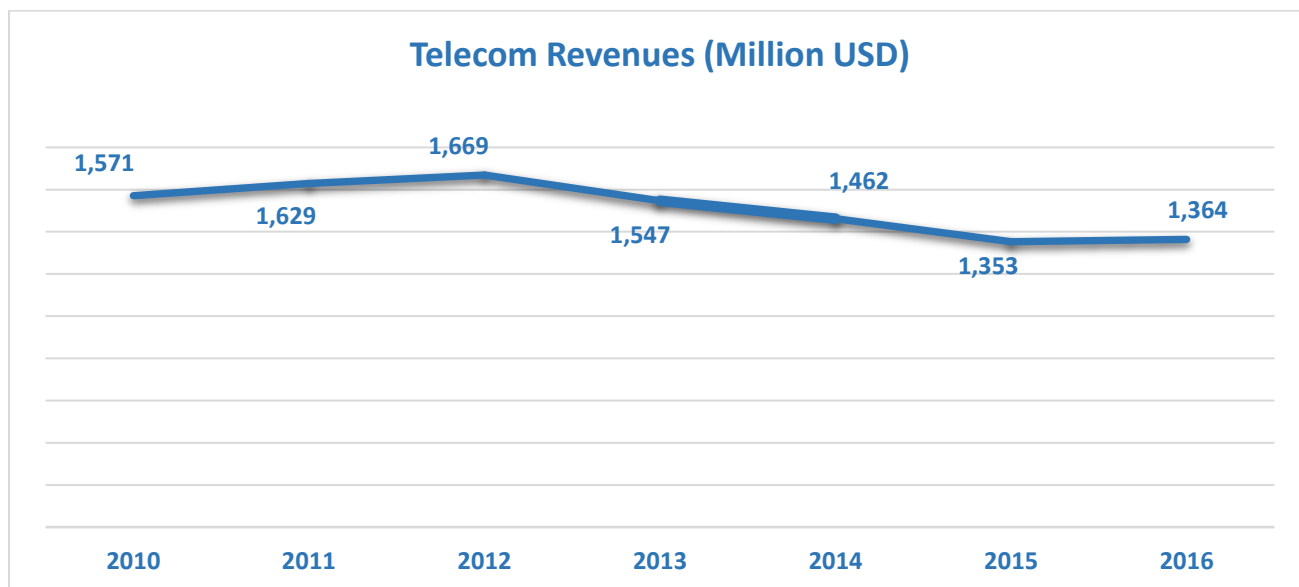


Figure 4: Telecom Revenues 2010 – 2016

Internet and Mobile Penetration

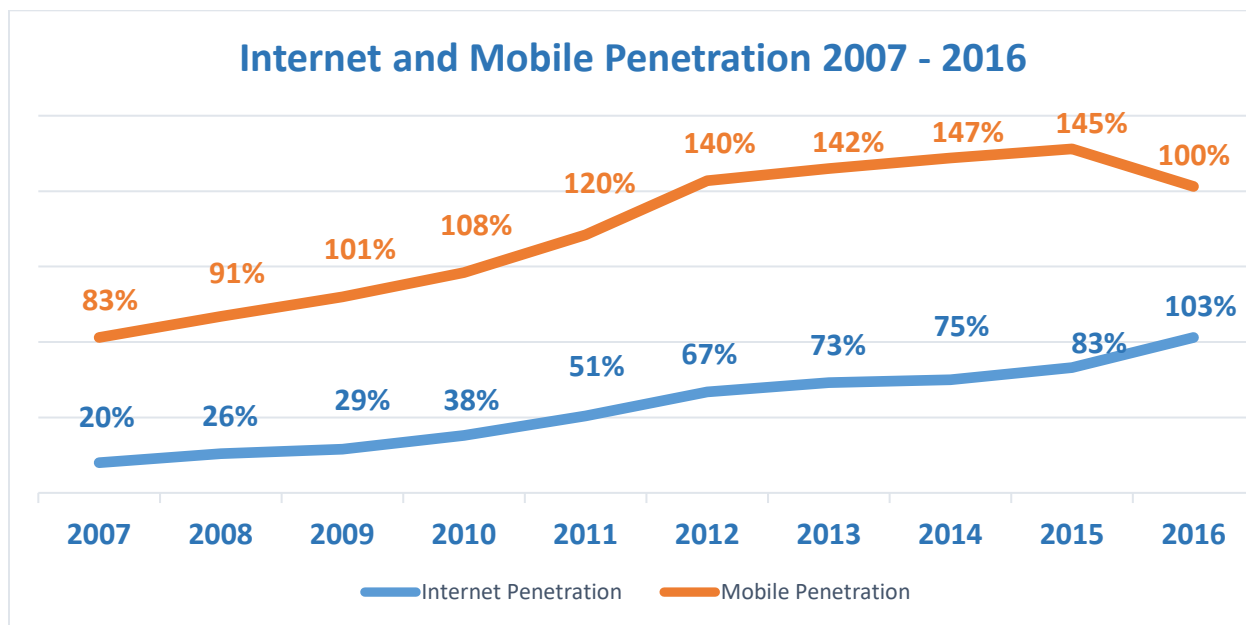


Figure 5: Internet and Mobile Penetration 2007 – 2016

***Note:** TRC, and due to inflated stats collected from operators, adopted a different criterion in data collection, analysis and calculation that reflect actual figures. This has caused in the sharp decline in mobile penetration.

Telecom Employment

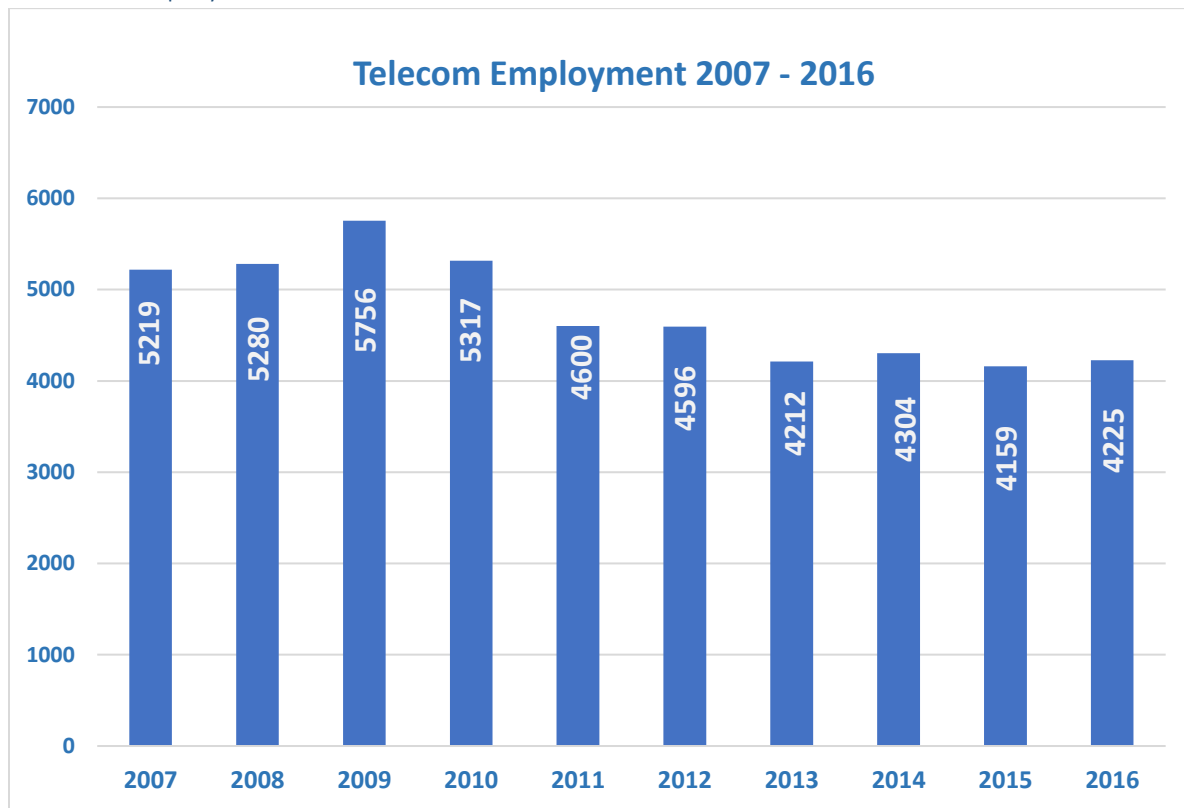


Figure 6: Telecom Employment 2007 – 2016

Investment in Telecom

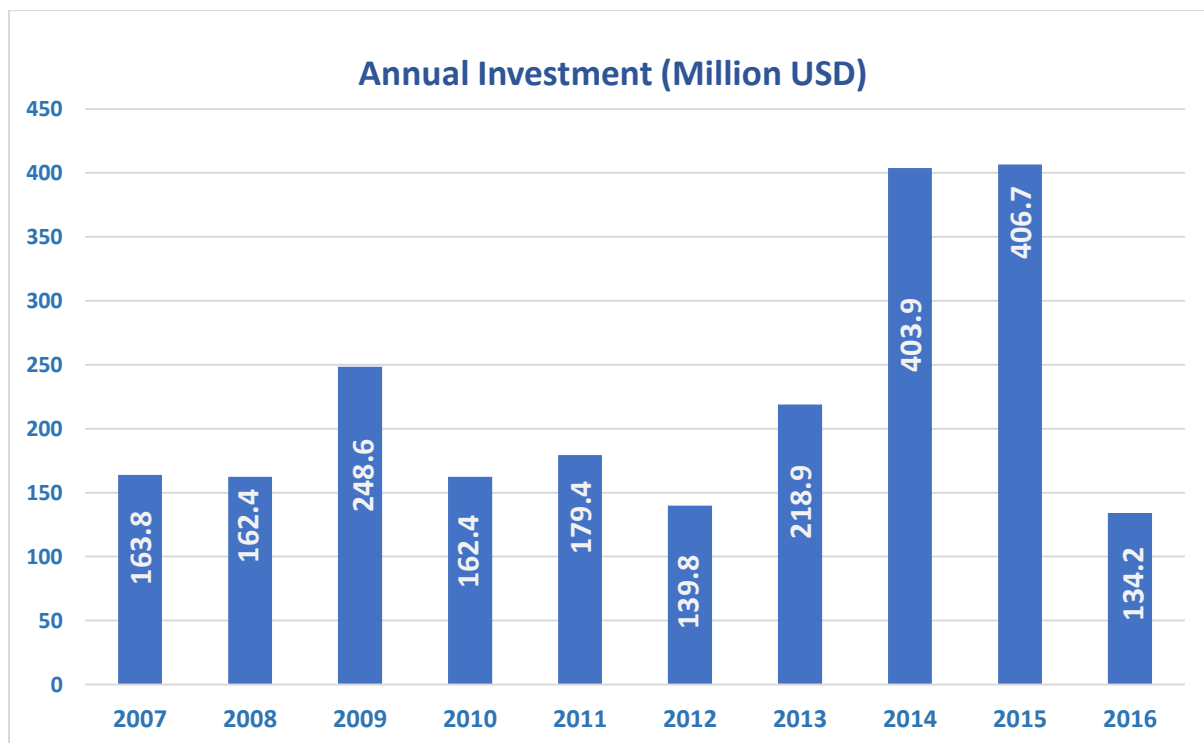


Figure 7: Annual Investment in Telecom 2007– 2016

IT and ITES Revenues by Economic Activity

IT & ITES Revenue 2016							
ISIC Activity	Final ISIC	Total Revenue \$	%	Domestic Revenue \$	%	Export Revenue \$	%
Telecommunications wired services	6110	\$8,341,149	1.22%	\$8,228,063	1.80%	\$113,086	0.05%
Telecommunications wireless services	6120	\$3,207,275	0.47%	\$2,713,067	0.59%	\$494,208	0.22%
Telecommunications satellite services	6130	\$84,876	0.01%	\$17,024	0.00%	\$67,852	0.03%
Telecommunications equipment and telephones wholesale	4652010	\$22,071,940	3.24%	\$19,078,114	4.18%	\$2,993,826	1.33%
Telecommunications equipment installation	332001	\$2,748,032	0.40%	\$2,748,032	0.60%	\$0	0.00%
Telecommunications equipment maintenance	951201	\$6,977,145	1.02%	\$6,146,969	1.35%	\$830,177	0.37%
Telecommunications voice over IP services	6190	\$5,369,484	0.79%	\$5,086,999	1.11%	\$282,486	0.13%
Telecommunications value added services	VAS-6311	\$28,154,447	4.13%	\$11,136,693	2.44%	\$17,017,754	7.55%
Other telecommunications services	6190	\$8,543,034	1.25%	\$4,036,057	0.88%	\$4,506,977	2.00%
Reproduction of recorded media from master copies of software and data on discs and tapes	182001	\$1,068,220	0.16%	\$1,068,220	0.23%	\$0	0.00%
Manufacture of electronic components and boards	2610	\$254,237	0.04%	\$254,237	0.06%	\$0	0.00%
Wholesale of software	465102	\$6,529,874	0.96%	\$3,257,476	0.71%	\$3,272,398	1.45%
IT Hardware & infrastructure wholesale	4651	\$144,264,351	21.15%	\$103,280,420	22.61%	\$40,983,932	18.17%
IT Hardware & infrastructure installation	332002	\$37,953,481	5.56%	\$37,783,989	8.27%	\$169,492	0.08%
Repair of computers and peripheral equipment	9511	\$6,754,802	0.99%	\$6,754,802	1.48%	\$0	0.00%
IT Networking equipment maintenance	951202	\$530,645	0.08%	\$530,645	0.12%	\$0	0.00%
Software development	6201	\$84,193,579	12.34%	\$38,056,088	8.33%	\$46,137,491	20.46%
Software licenses sale	4651	\$22,050,510	3.23%	\$13,265,424	2.90%	\$8,785,086	3.90%
Software licenses publishing	5820	\$41,141,022	6.03%	\$21,231,064	4.65%	\$19,909,958	8.83%
IT Outsourcing	9511	\$301,948	0.04%	\$262,400	0.06%	\$39,548	0.02%
ICT Consulting and Research	6202	\$135,294,171	19.83%	\$106,308,860	23.28%	\$28,985,311	12.85%
Other IT activities	6209	\$56,463,695	8.28%	\$26,143,473	5.72%	\$30,320,223	13.45%
Data processing and hosting related services	6311	\$8,268,123	1.21%	\$7,999,973	1.75%	\$268,150	0.12%
Online applications development	6201	\$1,753,079	0.26%	\$1,392,501	0.30%	\$360,578	0.16%
Online applications customization	6312	\$9,647	0.00%	\$1,708	0.00%	\$7,939	0.00%
Mobile applications development	6201	\$1,999,157	0.29%	\$697,203	0.15%	\$1,301,953	0.58%
Mobile applications customization	6312	\$261,771	0.04%	\$213,749	0.05%	\$48,023	0.02%
Web portals	6312	\$4,236,124	0.62%	\$4,236,124	0.93%	\$0	0.00%
e-Commerce business	6311	\$15,803,672	2.32%	\$15,649,718	3.43%	\$153,955	0.07%
Games Development	6201	\$299,951	0.04%	\$0	0.00%	\$299,951	0.13%
Call centers	8220	\$20,899,805	3.06%	\$2,975,746	0.65%	\$17,924,059	7.95%
Retail sale of computers, peripheral units, software and telecommunications equipment in specialized stores	4741	\$1,818,995	0.27%	\$1,818,995	0.40%	\$0	0.00%
ICT Training		\$3,171,548	0.46%	\$3,005,750	0.66%	\$165,798	0.07%
Others		\$1,384,887	0.20%	\$1,317,090	0.29%	\$67,797	0.03%
Total		\$682,204,679	100%	\$456,696,673	100%	\$225,508,006	100%

Table 9: IT & ITES Revenues 2016

IT & ITES Revenues 2016 (USD)

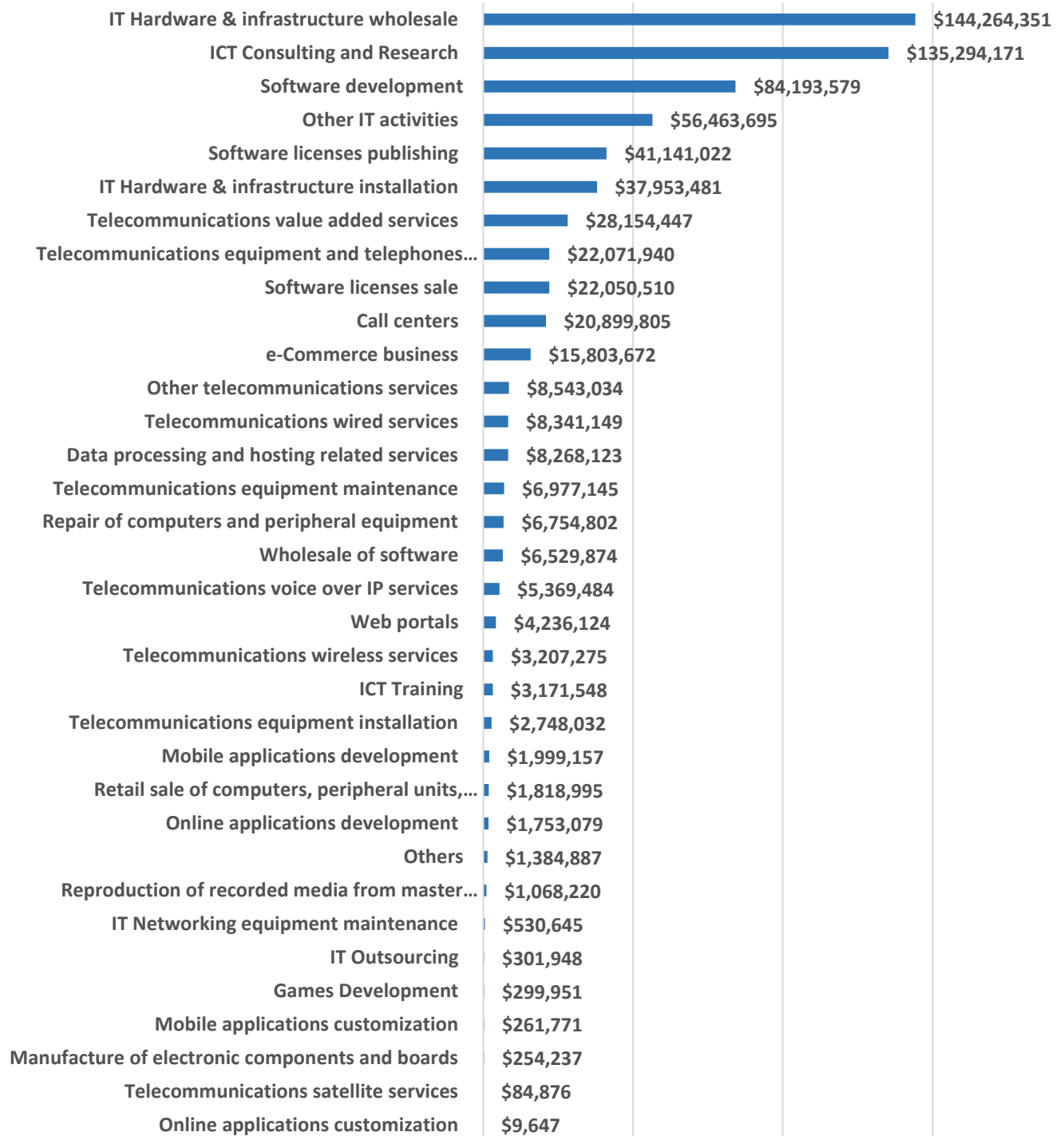


Figure 8: IT and ITES Revenues 2016 (USD)

IT & ITES Domestic Revenue 2016 (USD)

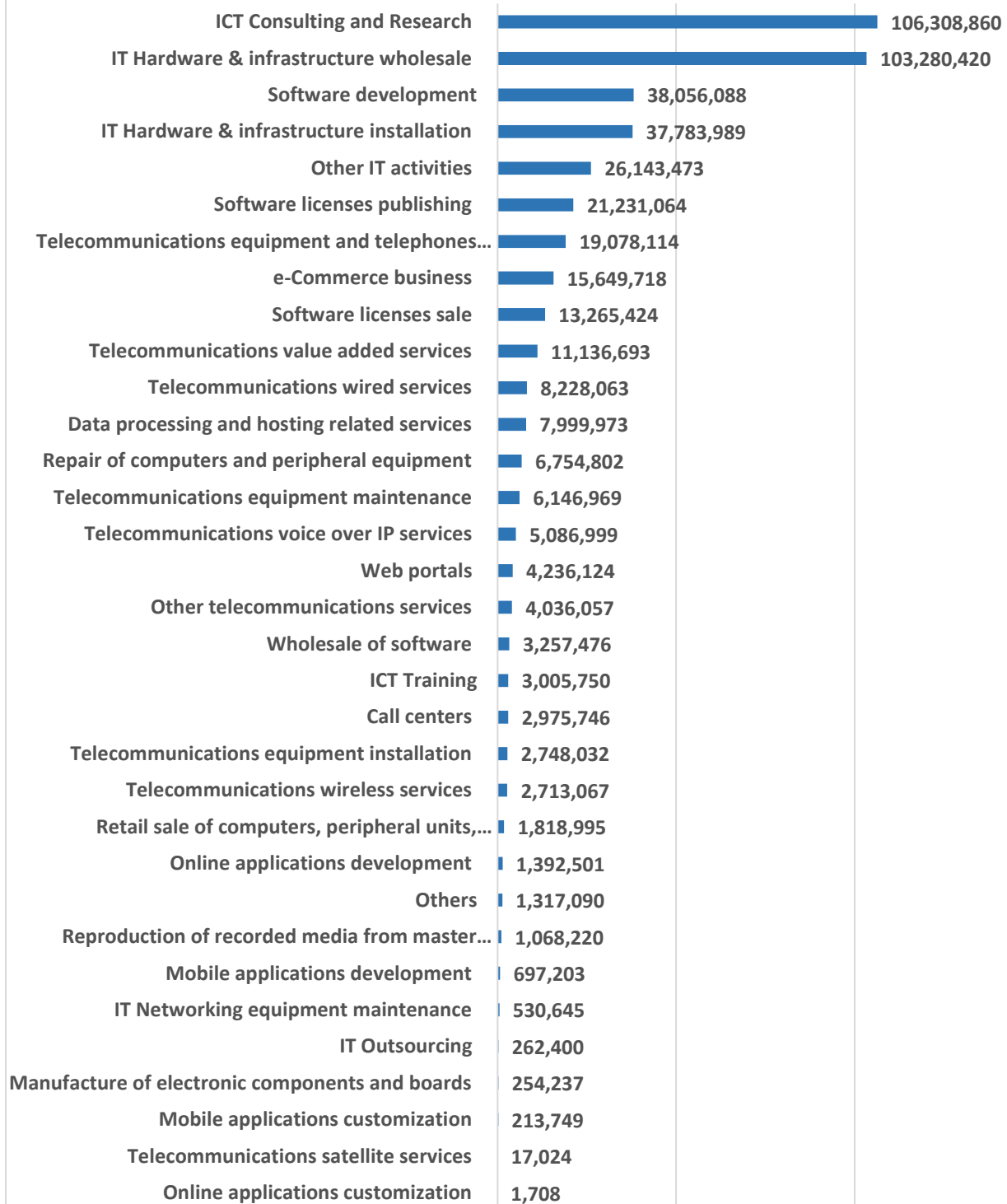


Figure 9: IT & ITES Domestic Revenue 2016 (USD)

IT & ITES Export Revenue 2016 (USD)



Figure 10: IT & ITES Export Revenue 2016 (USD)

ITES

ITES Revenue 2016							
ISIC Activity	Final ISIC	Total Revenue	%	Domestic Revenue	%	Export Revenue	%
Activities of call centers	8220	\$20,899,805	100%	\$2,975,746	100%	\$17,924,059	100%
Total		\$20,899,805	100%	\$2,975,746	100%	\$17,924,059	100%

Table 10: ITES Revenue 2016

ICT Training

ICT Training Revenue 2016							
ISIC Activity	Final ISIC	Total Revenue	%	Domestic Revenue	%	Export Revenue	%
ICT Training	ICT Training	\$3,171,548	100%	\$3,005,750	100%	\$165,798	100%
Total		\$3,171,548	100%	\$3,005,750	100%	\$165,798	100%

Table 11: ICT Training Revenue 2016

IT Value Added Revenue

A simple approach was followed to calculate the IT revenue generated from “value-added” activities. While most of the services under IT were considered “high value-added” activities, activities associated with “significant import input” and “slight domestic processing” were considered “low value-added” activities. Accordingly, the activities identified in table 12 below were excluded from calculating the IT revenue generated from “high value-added” activities.

IT Revenue – Low Value Added Activities	
ISIC Activity	ISIC
Telecommunications equipment and telephones wholesale	4652010
Wholesale of software	465102
IT Hardware & infrastructure wholesale	4651

Table 12: IT “Low Value Added” Activities Revenues

Table 13 below, shows the contribution of “high value-added” and “low value-added” activities to Total, Domestic, and Export IT Revenues.

	High Value Add	%	Low Value Add	%
Total IT Revenue (USD)	\$509,338,513	74.66%	\$172,866,166	25.34%
Domestic IT Revenue (USD)	\$331,080,663	72.49%	\$125,616,010	27.51%
Export IT Revenue (USD)	\$178,257,850	79.05%	\$47,250,156	20.95%

Table 13: IT Revenue Value-Add Breakdown

According to the figures above, while more than half (75%) of the total IT sector revenue is generated from “high value-added” activities, 79% of exports revenue results from “high value-added” IT activities, demonstrating that the IT industry brings high value to the Jordanian economy mainly in exports.

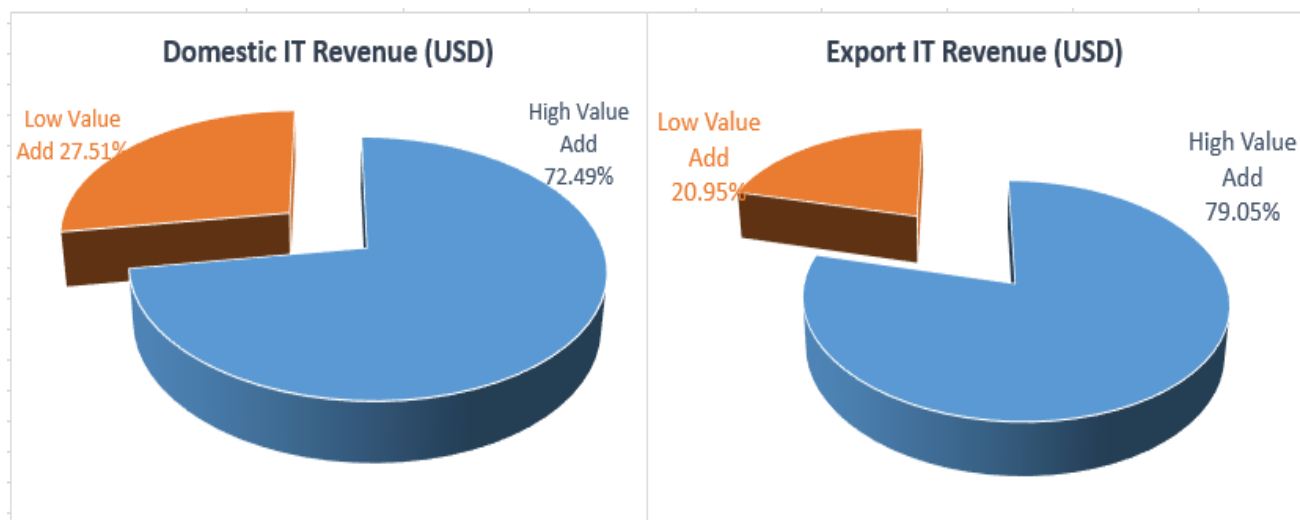


Figure 11 Contribution of Value-Added IT activities to Domestic and Export IT Revenues

IT Imports

IT Imports 2016		
Total Imports	Value (USD)	%
Hardware	\$137,238,949	72.42%
Software	\$38,947,984	20.55%
IT Services	\$5,741,356	3.03%
Licenses	\$7,315,295	3.86%
Others	\$268,788	0.14%
Total USD	\$189,512,373	100%

Table 14: IT Imports 2016

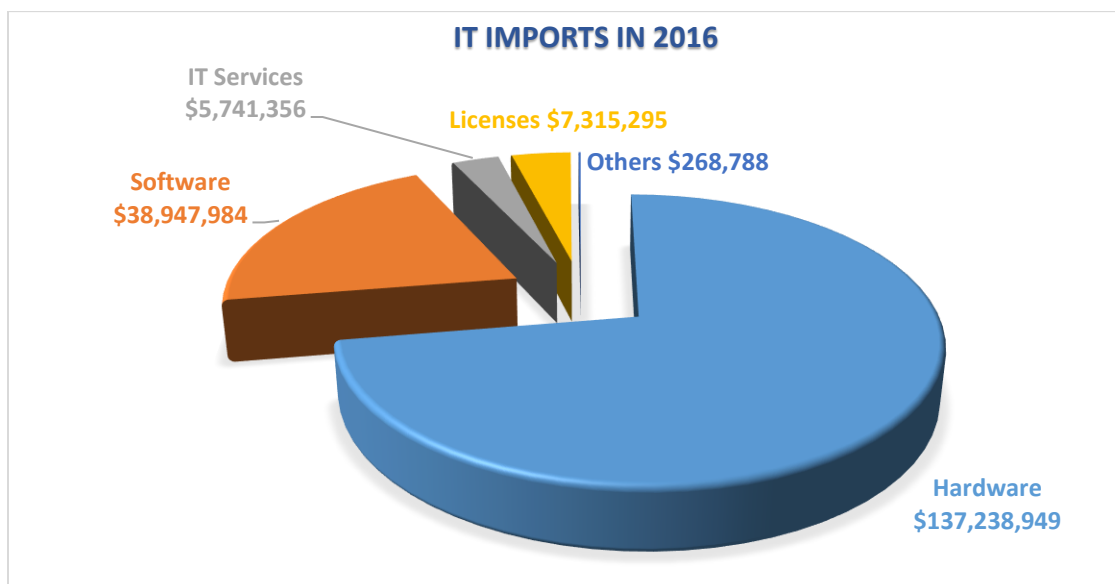


Figure 12: IT Imports in 2016

IT and ITES Exports

IT and ITES Exports Volumes by Country

IT and ITES Exports Volumes by Country in 2016		
Sale Region	Total Export Revenue Prorated in USD	%
United Arab Emirates	\$81,068,735	35.95%
Saudi Arabia	\$52,349,119	23.21%
Iraq	\$31,481,412	13.96%
United Kingdom	\$15,945,791	7.07%
United States of America	\$13,208,733	5.86%
Kuwait	\$7,631,566	3.38%
Palestine	\$4,461,818	1.98%
Oman	\$3,024,962	1.34%
Greece	\$2,214,293	0.98%
Bahrain	\$2,061,856	0.91%
Egypt	\$1,982,961	0.88%
Canada	\$1,880,396	0.83%
Far East	\$1,373,977	0.61%
Maldives	\$1,270,538	0.56%
Sudan	\$879,446	0.39%
Armenia	\$858,883	0.38%
Tanzania	\$768,675	0.34%
Qatar	\$634,712	0.28%
Lebanon	\$495,431	0.22%
Sweden	\$482,804	0.21%
Syria	\$453,158	0.20%
Germany	\$254,108	0.11%
South Africa	\$223,615	0.10%
Japan	\$127,054	0.06%
Austria	\$104,077	0.05%
Algeria	\$63,527	0.03%
Malta	\$55,294	0.02%
Netherlands	\$40,657	0.02%
China	\$33,288	0.01%
Turkey	\$30,823	0.01%
Tunisia	\$22,870	0.01%
Others	\$23,426	0.01%
Total	\$225,508,006	100%

Table 15: IT& ITES Exports Revenues by Country 2016

IT and ITES Exports Revenue by Country

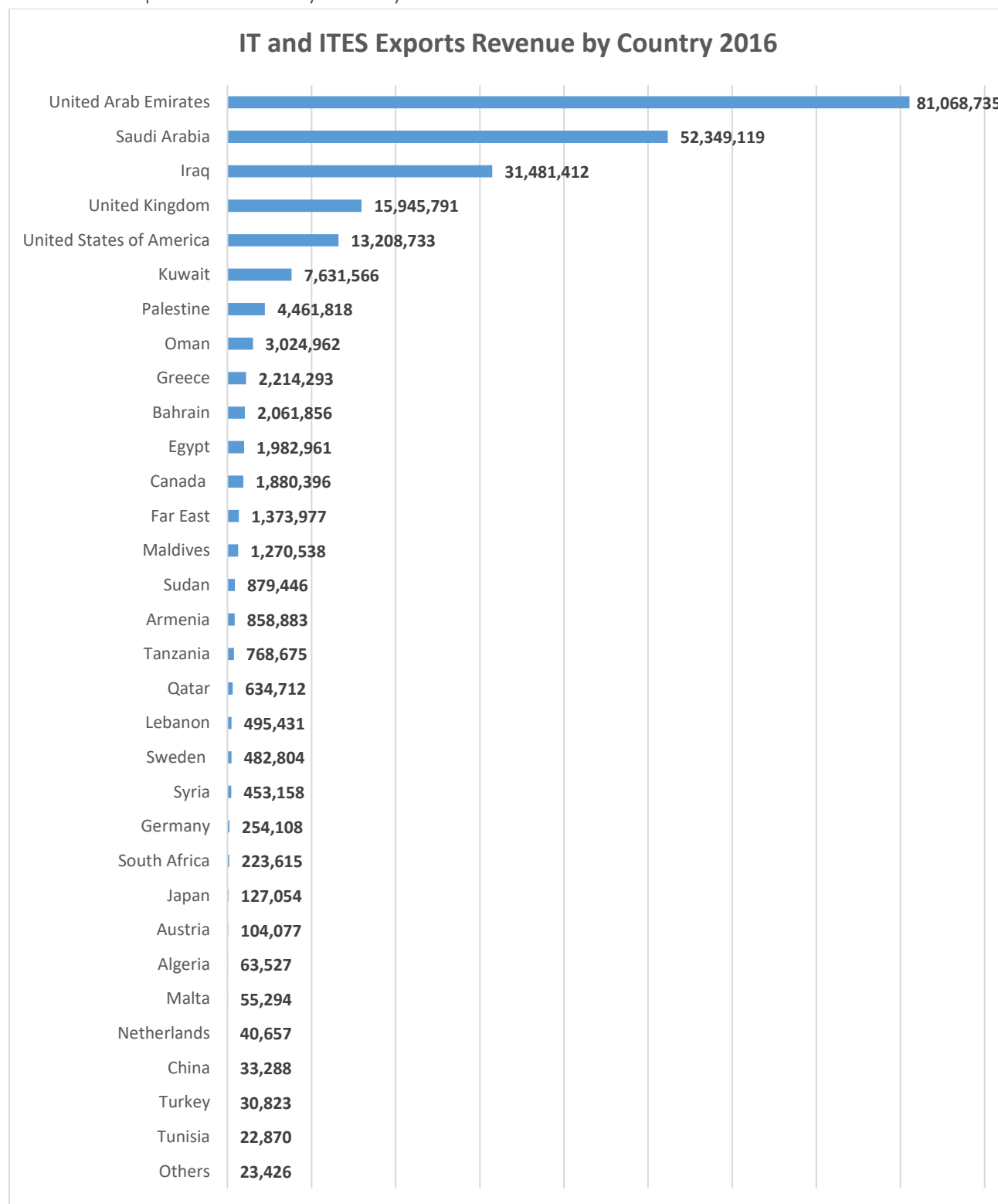


Figure 13: IT and ITES Exports Revenue by Country

IT Export Revenues 2002 – 2016

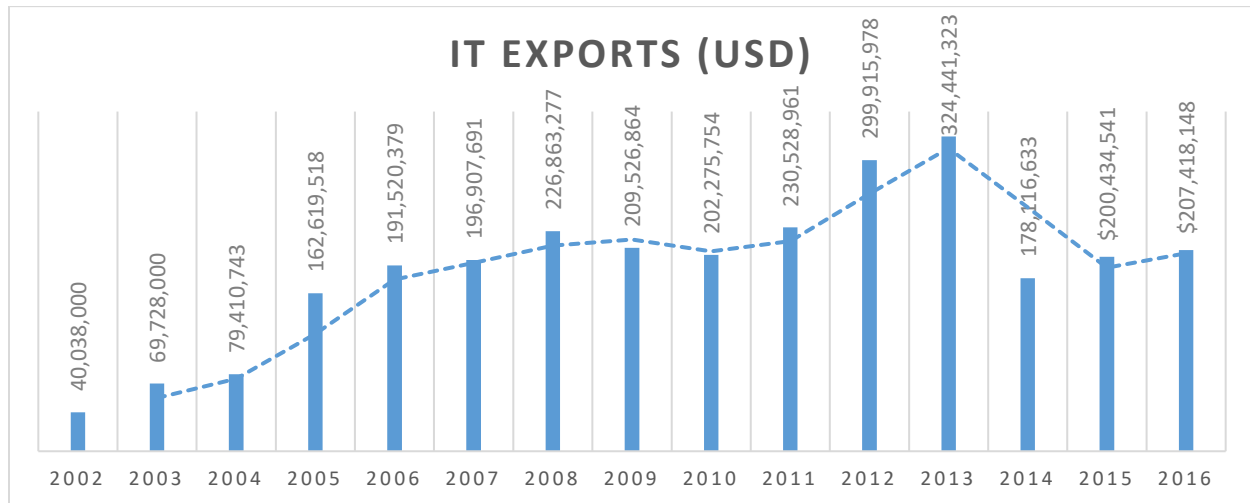


Figure 14: IT Exports Revenues 2002 – 2016

Top 10 Exports Markets 2016 vs. 2015

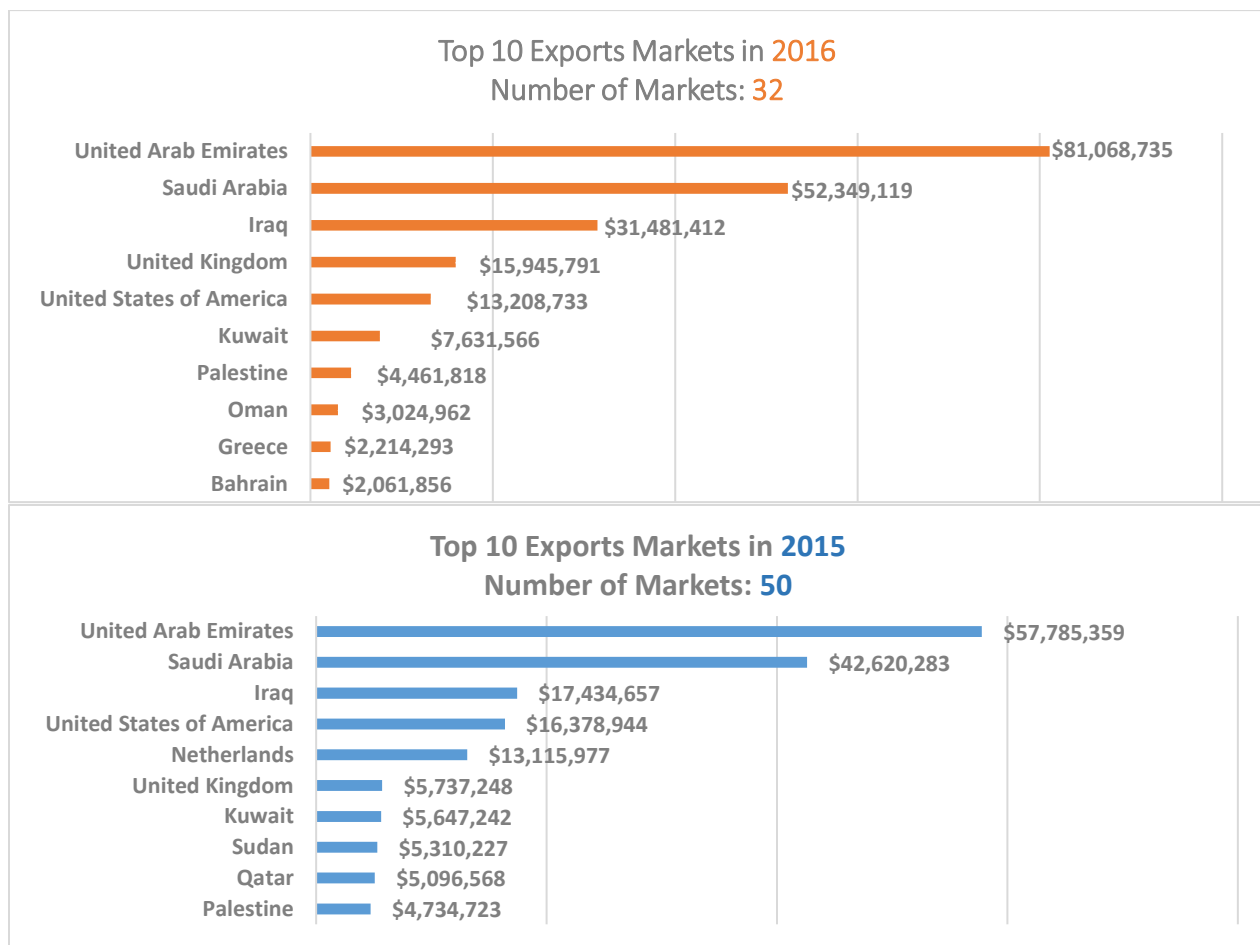


Figure 15: Top 10 Exports Markets and Number of Markets 2016 vs. 2016

IT and ITES Employment

IT & ITES Employment for companies completed/did not complete the survey			
Group	Total	IT	ITES
Employment of Companies who Completed the Survey	6,340	5,776	564
Employment of Companies who did not Complete the Survey	8,847	5,247	1,600
Total	13,187	11,023	2,164

Table 16: IT & ITES Employment for Companies completed/did not complete the survey

Employment Breakdown

Category	Jordanian/Foreign	Local/Abroad	Male/Female	Total	%
Management	Jordanian Employees	Local	Male	1032	7.82%
	Jordanian Employees	Local	Female	293	2.22%
	Foreign Employees	Local	Male	33	0.25%
	Foreign Employees	Local	Female	2	0.02%
	Jordanian Employees	Abroad	Male	6	0.05%
	Jordanian Employees	Abroad	Female	0	0.00%
	Foreign Employees	Abroad	Male	2	0.02%
	Foreign Employees	Abroad	Female	0	0.00%
HR & Admin	Jordanian Employees	Local	Male	632	4.79%
	Jordanian Employees	Local	Female	352	2.67%
	Foreign Employees	Local	Male	35	0.27%
	Foreign Employees	Local	Female	4	0.03%
	Jordanian Employees	Abroad	Male	4	0.03%
	Jordanian Employees	Abroad	Female	0	0.00%
	Foreign Employees	Abroad	Male	4	0.03%
	Foreign Employees	Abroad	Female	2	0.02%
Marketing	Jordanian Employees	Local	Male	210	1.59%
	Jordanian Employees	Local	Female	179	1.36%
	Foreign Employees	Local	Male	4	0.03%
	Foreign Employees	Local	Female	0	0.00%
	Jordanian Employees	Abroad	Male	0	0.00%
	Jordanian Employees	Abroad	Female	0	0.00%
	Foreign Employees	Abroad	Male	0	0.00%
	Foreign Employees	Abroad	Female	4	0.03%
Sales	Jordanian Employees	Local	Male	643	4.87%
	Jordanian Employees	Local	Female	183	1.39%
	Foreign Employees	Local	Male	2	0.02%
	Foreign Employees	Local	Female	0	0.00%
	Jordanian Employees	Abroad	Male	15	0.11%
	Jordanian Employees	Abroad	Female	0	0.00%
	Foreign Employees	Abroad	Male	2	0.02%

Category	Jordanian/Foreign	Local/Abroad	Male/Female	Total	%
Software Development	Foreign Employees	Abroad	Female	2	0.02%
	Jordanian Employees	Local	Male	2477	18.79%
	Jordanian Employees	Local	Female	1221	9.26%
	Foreign Employees	Local	Male	15	0.11%
	Foreign Employees	Local	Female	2	0.02%
	Jordanian Employees	Abroad	Male	0	0.00%
	Jordanian Employees	Abroad	Female	0	0.00%
	Foreign Employees	Abroad	Male	4	0.03%
	Foreign Employees	Abroad	Female	0	0.00%
IT Support	Jordanian Employees	Local	Male	593	4.50%
	Jordanian Employees	Local	Female	135	1.03%
	Foreign Employees	Local	Male	10	0.08%
	Foreign Employees	Local	Female	0	0.00%
	Jordanian Employees	Abroad	Male	0	0.00%
	Jordanian Employees	Abroad	Female	0	0.00%
	Foreign Employees	Abroad	Male	0	0.00%
	Foreign Employees	Abroad	Female	0	0.00%
Network and Infrastructure	Jordanian Employees	Local	Male	320	2.43%
	Jordanian Employees	Local	Female	31	0.24%
	Foreign Employees	Local	Male	0	0.00%
	Foreign Employees	Local	Female	0	0.00%
	Jordanian Employees	Abroad	Male	0	0.00%
	Jordanian Employees	Abroad	Female	0	0.00%
	Foreign Employees	Abroad	Male	0	0.00%
	Foreign Employees	Abroad	Female	0	0.00%
Other Technical	Jordanian Employees	Local	Male	1038	7.87%
	Jordanian Employees	Local	Female	191	1.45%
	Foreign Employees	Local	Male	12	0.09%
	Foreign Employees	Local	Female	0	0.00%
	Jordanian Employees	Abroad	Male	0	0.00%
	Jordanian Employees	Abroad	Female	0	0.00%
	Foreign Employees	Abroad	Male	0	0.00%
	Foreign Employees	Abroad	Female	0	0.00%
Technical Operations	Jordanian Employees	Local	Male	1743	13.22%
	Jordanian Employees	Local	Female	730	5.54%
	Foreign Employees	Local	Male	10	0.08%
	Foreign Employees	Local	Female	0	0.00%
	Jordanian Employees	Abroad	Male	23	0.17%
	Jordanian Employees	Abroad	Female	0	0.00%
	Foreign Employees	Abroad	Male	0	0.00%
	Foreign Employees	Abroad	Female	0	0.00%

Category	Jordanian/Foreign	Local/Abroad	Male/Female	Total	%
Customer Care	Jordanian Employees	Local	Male	451	3.42%
	Jordanian Employees	Local	Female	512	3.88%
	Foreign Employees	Local	Male	6	0.05%
	Foreign Employees	Local	Female	2	0.02%
	Jordanian Employees	Abroad	Male	12	0.09%
	Jordanian Employees	Abroad	Female	0	0.00%
	Foreign Employees	Abroad	Male	0	0.00%
	Foreign Employees	Abroad	Female	0	0.00%
Total				13,187	100%

Table 17: Employment in the IT & ITES Sector

IT and ITES Employment by Category

IT and ITES Employment by Category			
Category		Total	%
Employment by Function	Management	1,369	10.38%
	HR & Admin	1,034	7.84%
	Marketing	397	3.01%
	Sales	847	6.42%
	Software Development	3,719	28.20%
	IT Support	738	5.60%
	Network and Infrastructure	352	2.67%
	Other Technical	1,242	9.42%
	Technical Operations	2,506	19.01%
	Customer Care	984	7.46%
Employment by Nationality	Jordanian Employees	13,027	98.79%
	Foreign Employees	160	1.21%
Employment by Location	Local	13,106	99.00%
	Abroad	81	1.00%
Employment by Gender	Male	9,341	71.00%
	Female	3,846	29.00%

Table 18: IT & ITES Employment by category

Employment by function

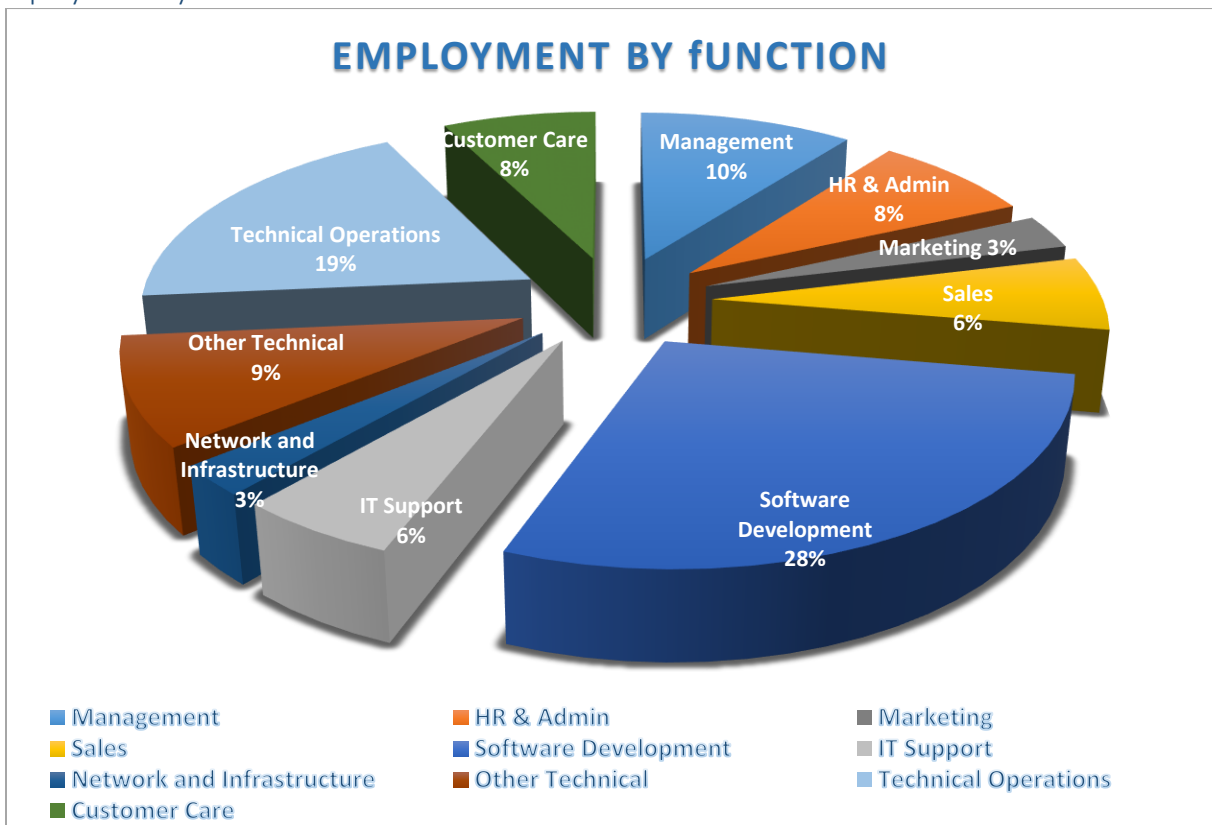


Figure 16: Employment by function

Employment by nationality



Figure 17: Employment by nationality

Employment by location

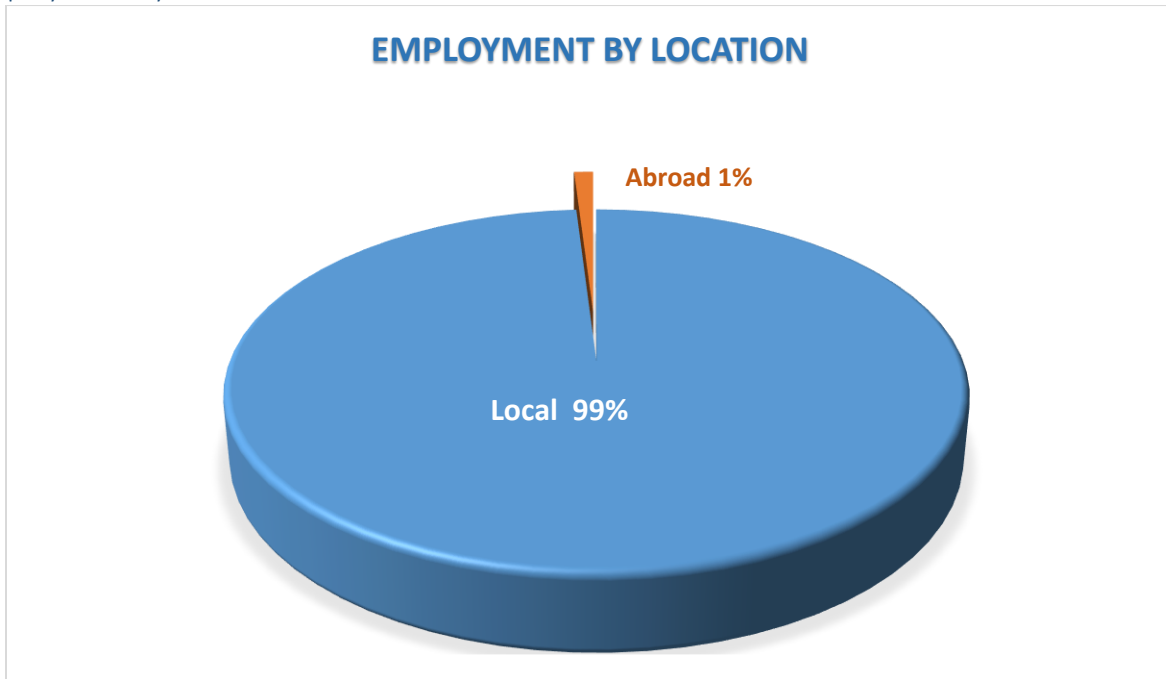


Figure 18: Employment by location

Employment by gender

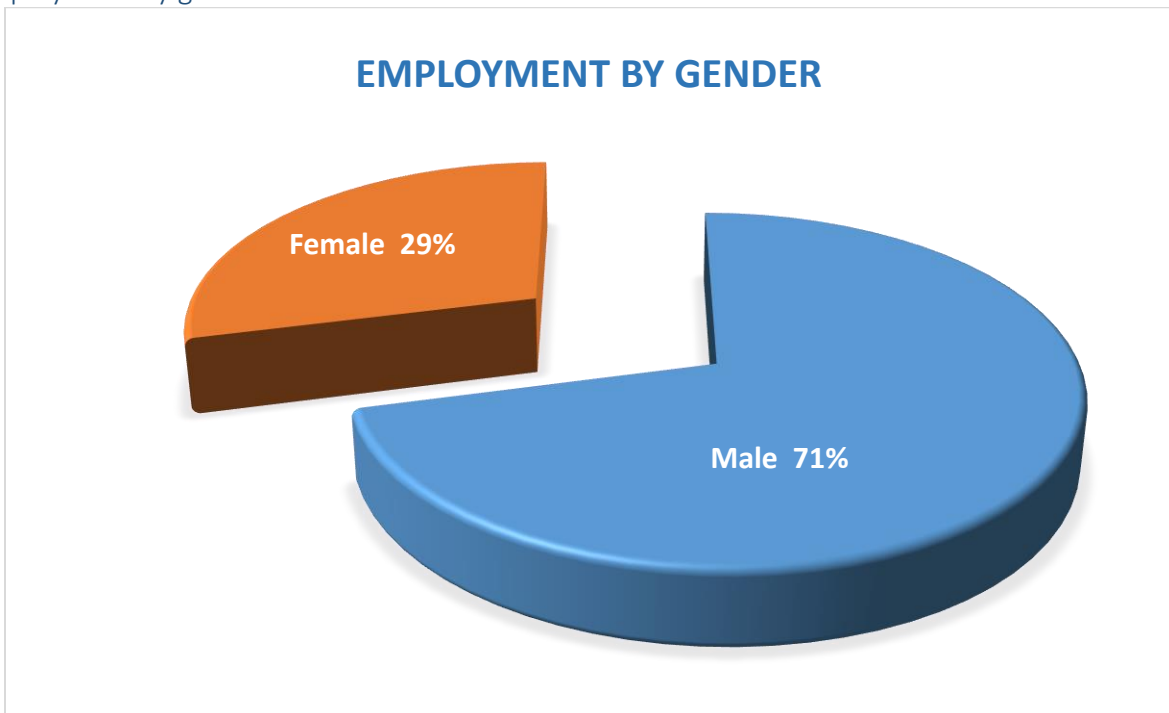


Figure 19: Employment by gender

Employment 2002 – 2016

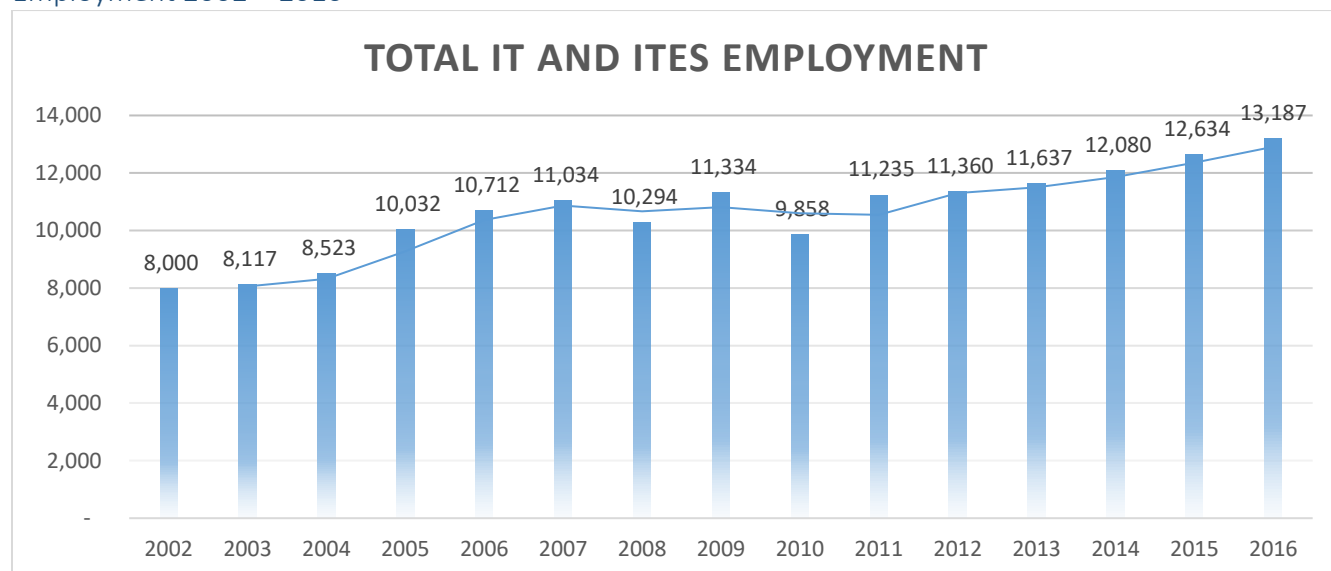


Figure 20: IT & ITES Employment 2002 – 2016

Direct Investment

All investment numbers in this section are based on actual numbers provided by the companies who participated in the ICT and ITES survey.

Investment		
Investment in IT and ITES 2016		
Country	Number of Companies	Amount (USD)
Local	9	\$3,353,864
Foreign	9	\$14,678,677
Total	18	\$18,032,541

Table 21: Direct Investment

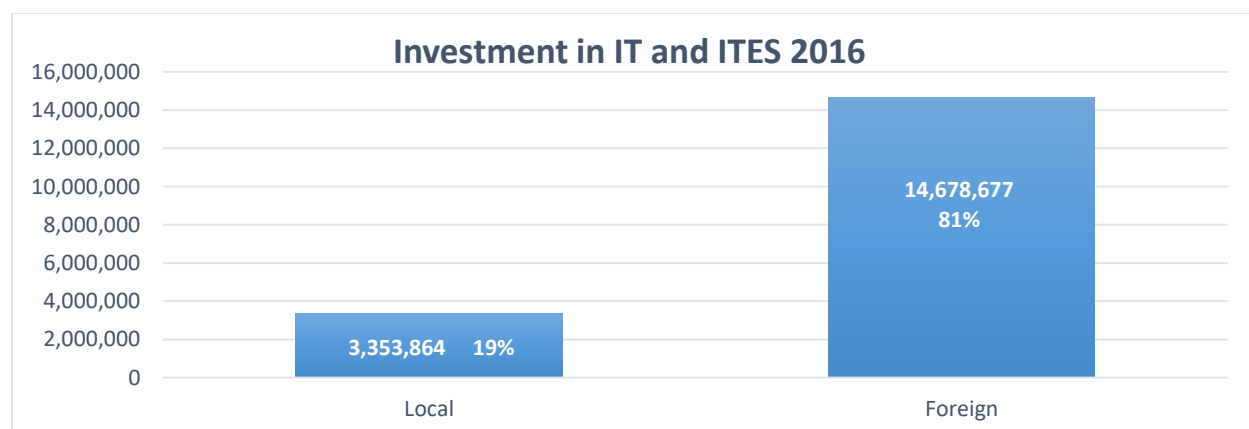


Figure 21: Investment in IT & ITES 2016

Appendices

Appendix A: ISIC 4.0 – ICT and ITES Economic Activities

ICT and ITES ISIC Definition		
Section	Code	Description
Section C - Manufacturing:	2610	Manufacture of electronic components and boards
	2620	Manufacture of computers and peripheral equipment
	263001	Manufacture of data communications equipment, such as bridges, routers, and gateways
	268001	Manufacture of hard drive media
	2731	Manufacture of fiber optic cables
	332002	Installation of communications equipment
	332002	Installation of mainframe and similar computers
	4651	Wholesale of computers, computer peripheral equipment and software
Section G – Wholesale & retail trade:	465201	Wholesale of telephone and communications equipment
	5820	Software publishing and deployment
Section J – Information & Communication:	6110	Wired telecommunications activities
	6120	Wireless telecommunications activities
	6130	Satellite telecommunications activities
Section J – Information & Communication:	6190	Other telecommunications activities
	6201	Computer programming activities
	6202	Computer consultancy and computer facilities management activities
	6209	Other information technology and computer service activities
	6311	Data processing, hosting and related activities
	6312	Web portals
	8220	Activities of call centers and business process outsourcing
Section N – Administrative & support service activities:	9511	Repair of computers and peripheral equipment
Section S – Other services activities:	951201	Repair of carrier equipment modems
	951202	Repair of communications transmission equipment (e.g. routers, bridges, modems)
	VAS-6311	Telecom value added services - VAS
	EC-6311	e-Commerce business

Table 19: ICT and ITES ISIC Definition